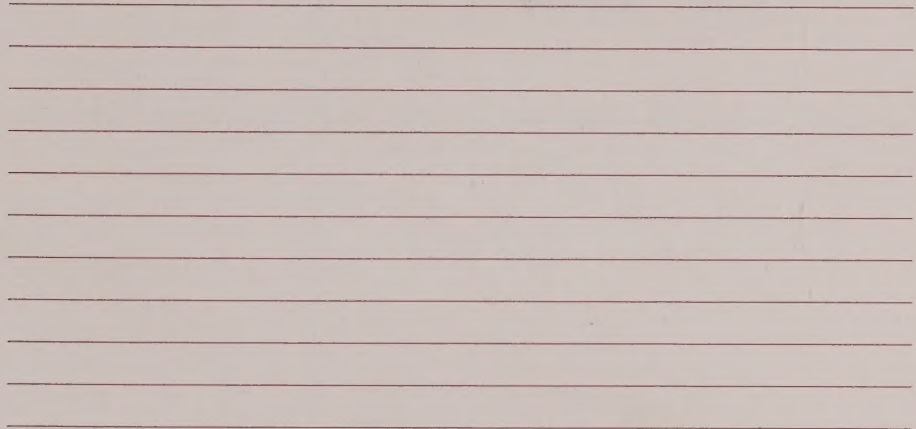




SYNERGETICS

DICTIONARY

The Mind of Buckminster Fuller



Compiled and Edited by E. J. Applewhite
With an Introduction and Appendices

Volume 3: N–Sp

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Synergetics Dictionary

<p>RbF DEFINITIONS</p> <p><u>N:</u></p> <p>"N = Prime Number</p> <p>"A capital N is a processed Z.</p> <p>"Z = Vector."</p> <p style="text-align: right;">- Cite RBF to EJA Beverly Hotel, New York 7 March 1971</p>	<p>MBF DEFINITIONS</p> <p><u>Naga to Eden:</u></p> <p>"I work on different books at the same time-- like a painter. Naga to Eden goes from a speculative prehistory to the stage of humanity gradually coming out of the Pacific onto the land. I've been exploring that side of history since I was in the Navy in World War I. This book will reconstruct history from the sailor's and shipbuilder's viewpoint."</p> <p style="text-align: right;">- Cite RBF to Australian journalist Jane Ram; Hongkong, 17 Oct '74</p>
<p>RBF DEFINITIONS</p> <p><u>Naga:</u> (1)</p> <p>"Goldy then introduces Naga, the sea serpent: god of the oceanic world of the ancients. Naga is the wave. Naga is a live tetrahelix. At sea the wavelinear profile of Naga's back always rims the horizon.</p> <p>"Influenced by the language of previous milleniums of long distance ocean-traveling sailors coming originally from the atolls of the South Pacific and Indian Oceans into the Arabian Sea to reach Mesopotamia, and by the subsequent tracing of those world-encircling, deep sea routes by the Phoenicians, the ancient Hebraic language of the earliest Biblical scripture came to contain the word nachash, which means 'serpent,' or 'whisper,' or 'divine,' (the ch being a guttural or 'g' sound); i.e., naga and nachashol (or nagashol) means the sea, and the root verb Nacha (=naga) means to lead, conduct, guide, and Nacha (pronounced naga) is also the name of the ancient seafarer N (O) (A) (CH-- Noah.</p> <p>"Nachan' (pronounced Nagan) is the word for copper or bronze alloy, the latter being the high-strength form of the nonrustable metal with which all ship fastenings, fittings and instruments have of necessity been fashioned since copper's first discovery,"</p> <p style="text-align: right;">- Cite GOLDYLOCKS, pp. I1,I2, 30 May'75</p>	<p><u>Naga: Naga Theme: Naga to Eden:</u> (1)</p> <p style="text-align: right;">See Rafts: Early World Drifting on Rafts Secrecy of Mathematical Knowledge</p>
<p>RBF DEFINITIONS</p> <p><u>Naga:</u> (2)</p> <p>"and its alloyed production as bronze by humans 5,000 years ago at Ban Chiang in Thailand, where the bronze age first took over from the stone age, in what was once a Venice-like complex of canals leading from the sea into all of the South-east Asian lowlands on the Indochina coast nearest to all the seafaring activities of the Southwest Pacific in the region where the Naga nation long ago came off the sea and out upon the mainland, and as yet lives, where Hanoi now exists.</p> <p>"Two thousand years ago there existed a place called Nganna.</p> <p>"This bronze age birth occurs at the final peak of the Austronesian civilization, of which there are evidences going back 16,000 years or more. These ancient water peoples' world embraced the Central and South Pacific, South Indian Ocean all the way westward to include Madagascar, and all the way eastward to include Easter Island, and all the way northward to include both Japan and the Hawaiian Islands, and southward to include New Zealand. This is the world of Naga, the 'na' prefix' being the 'na' of na-vy; na-tivity; na-vi-ga-tion; na-tion. 180 million of these Austronesians as yet are alive and many are as yet living with the same maritime and insular artifacts as those of"</p> <p style="text-align: right;">- Cite GOLDYLOCKS, p.I2, 30 May'75</p>	<p><u>Naga: Naga Theme: Naga to Eden:</u> (2)</p> <p style="text-align: right;">See Discovery, 11 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Naga:</u> (3)</p> <p>"their possibly millions-of-years-ago forbears.</p> <p>"When the god of the sea, Naga, tidally enters the river mouths of the land, as seen from the high mountain, his snake shape is clearly revealed by the river's shape. The Japanese word for river, 'Nagata,' indicates that the ancient water people looked upon the river's banks and bed as constituting the female organ of the land being sexually intruded by Naga, the god of the sea, as the oceanic tides pulsed inwardly and outwardly for great distances at the lower extremities of the rivers. The early humans sensed and revered the greater pattern events of Universe as manifesting an ever and everywhere presence of a knowing, life-giving, supporting and terminating competence vastly greater than that of humans. They saw themselves and all that they could see, including the Sun, Moon, and stars, as having only minuscule local parts in an organic whole whose shape and size transcended both the ranges of their vision and the scope of their imagining."</p> <p style="text-align: right;">- Cite GOLDYLOCKS, p.J1, 30 May'75</p>	<p><u>Nail:</u></p> <p style="text-align: right;">See Wind Stress & Housing, (1)</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Naivete:</u></p> <p>"Naivete means not knowing it all, not being a sucker about everything, not pretending to know about the safety razor in the pyramid. Too many people miss things because they dismiss them when they think they know all about them. Be as a child and a child is naive. Adults say young people must get over that sensibility but I say we must open it up again. I feel very much about life as I did as a child. Once I was blase about flowers as something for funerals but now I try to look at a flower as a child seeing it for the first time."</p> <p style="text-align: right;">- Cite RBF in videotaping session, Philadelphia, PA., 1 Feb'75</p>	<p style="text-align: right;"><u>Naive:</u> <u>Naiveté:</u> (2)</p> <p style="text-align: right;">See Tomorrow, Feb'67 Children as Only Pure Scientists, 28 Apr'77</p>
<p>RBF DEFINITIONS</p> <p><u>Naive:</u></p> <p>"I often think that the motto on the shield of Milton Academy-- "Dare to be True"-- ought really to have been "Dare to be <u>Naive</u>." In 1927 I tried to recapture what it was to be young, to recapture <u>naiveté</u> . . . which is innate; I wanted to recapture the innate.</p> <p>"Man cannot invent <u>naiveté</u>; it is innate.</p> <p>"Like Chris Morley's poem:</p> <p style="padding-left: 40px;">In your unstained, transparent eyes There is no conscience, no surprise Life's queer conundrums you accept Your strange divinity still kept.</p> <p>So I think that divinity and <u>naiveté</u> must be akin."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Washington DC, 23 Jan '72;</p>	<p style="text-align: right;"><u>Naked Girl on the Bed:</u></p> <p style="text-align: right;">See Ecology, 15 Feb'73 Anger, (1)(2)</p>
<p>RBF DEFINITIONS</p> <p><u>Naiveté:</u></p> <p>"Much of the most exciting and important part about tomorrow is not the technology or the automation at all, but that man is going to come into entirely new relationships with his fellow men. He will retain much more in his everyday relations of what we term the <u>naiveté</u> and idealism of the child. This will be completely justified and not exploited or exploitable in any way. I think then that the way to see what tomorrow is going to look like is just to look at our children."</p> <p style="text-align: right;">- Cite THE YEAR 2000, San Jose State College Mar'66</p>	<p>RBF DEFINITIONS</p> <p><u>Naked Universe:</u></p> <p>"Pure science events represent openings of windows through the wall of ignorance and fiction to reveal the only reality-- the behavior of the naked Universe that always was, is, and will be. True it is that the first glimpse may be hazy and imperfect, but the behavior itself is absolute and progressively clarified. Therefore, this comprehensive curve of the chronological rate of acquisition of knowledge concerning the pure science absolutes, separated out from all other events of history, may be inspected as the basic means of prediction of inherent technical and social events-- immediate or somewhat distant."</p> <p style="text-align: right;">- Cite Earth, Inc., Part II, Fuller Research Foundation, p.13, 1947 (Also cited at Science, 1947) - Citation & context at Science, 1947</p>
<p><u>Naive:</u> <u>Naiveté:</u> (1)</p> <p>See Creativity of Children Dare to Be Naive How Little I Know Invisible: Nothing so Invisible as the Obvious Spontaneous Truth of Childhood Unknowable</p>	<p><u>Naked Universe:</u></p> <p>See Reality, 1947</p>

Synergetics Dictionary

<p><u>Naked:</u> (1)</p> <p>See Helpless: Humans Born Helpless Naked Girl on the Bed Naked Universe Stark</p>	<p><u>Names:</u> "Named" Phenomena: Name-words: (1)</p> <p>See Angular Name for Tetrahedron Local Identifications Number: Names for Numbers Remembering Names Sound Name Untitled Sound Word Interrelatedness vs. Names</p>
<p><u>Naked:</u> (2)</p> <p>See Homosexuality, 1972</p>	<p><u>Names:</u> "Named" Phenomena: Name-words: (2)</p> <p>See Environment, 22 Sep'73 Etymology, Aug'71 Human, 22 Sep'73 Memory, 2 Jul'62 Noun, 1938 Rationalisation Sequence (6) Television, Feb'73 Trinity: Equation of Trinity, 1938 Thinking, 12 Mar'71*; 6 Nov'73 Iceland, 7 Oct'75 Democritus, 1970 Teleology, 1938 Subconscious, 20 Feb'77</p>
<p>RBF DEFINITIONS</p> <p><u>Names:</u></p> <p>"The brain has a limited number of memory cubbyholes for names, like a stack of magazines. When the Smith smithed and the Miller milled it was clear and easy to remember, but once 'Miller' becomes a sound word it has to be filed in the limited place for names."</p> <p>- Cite RBF videotaping Session Philadelphia, Pa., 20 Jan'75</p>	<p><u>Nameless:</u> (1)</p> <p>See Ineffable Pattern Integrity = Phenomenon Without Name Untitled Nonverbal Wordless</p>
<p>RBF DEFINITIONS</p> <p><u>Names:</u></p> <p>"Names don't have meaning. Therefore they are harder for our mental retrieval system to remember."</p> <p>- Cite RBF to WFA Beverly Hotel, New York 13 March 1974.</p> <p>- Citation & context at <u>Thinking</u>, 12 Mar'71</p>	<p><u>Nameless:</u> (2)</p> <p>See Conversation Sequence, (1)(2) Self-communicate, 8 Apr'75</p>

Synergetics Dictionary

<p>TEXT CITATIONS</p> <p><u>Narcotics as a Political Strategy:</u></p> <p>DSI Press Conference, NYC, p. 17, 28 Jun'72</p> <p>Playboy Interview (Barry Farrell), p. 200 - Feb'72</p>	<p><u>Nation:</u> <u>Nationality:</u> (1)</p> <p>See Countries</p> <ul style="list-style-type: none"> International Affairs Invented National Hates Local Identifications Overspecialization of Biological Species & Nations Sovereignty Transnationalism Transnationalism vs. Colonialism United States is Not a Nation United States Ethnic Race Homogenizing of Nations Settlements
<p><u>Narcotics as a Political Strategy:</u></p> <p>See China (A)</p>	<p><u>Nation:</u> <u>Nationality:</u> (2)</p> <p>See Invention, 9 Feb'64</p> <ul style="list-style-type: none"> Revolution by Inadvertence, 10 Oct'63 World Man, 10 Jun'71 World Pattern vs. Local Pattern, 29 Jan'75 Nags (2) Building Business, (2) Spaceship Earth, 21 Jan'77 Enough to Go Around, (2)
<p>RBF DEFINITIONS</p> <p><u>Nation:</u></p> <p>"All the customs, all the languages, all laws, all accounting systems, viewpoints, cliches, and axioms are of th old, divided, ignorant days. The corollary of 'divide and conquer' is 'to be divided is to be conquered.' To be specialized is to be divided. The specialization which humanity perseveres in was invented by yesterday's armed conqueror illiterates. The separation of humans into more countries made them easy to manage. <u>Nations</u> may unite, as at present, without success. Strife is proliferating. Not until specialization and <u>nations</u> are dispensed with will all humanity have a chance of survival. It is to be all or none."</p> <p>- Cite RBF Intro. to Gene Youngblood's EXPANDED CINEMA, P. 32. Oct'70</p>	<p>RBF DEFINITIONS</p> <p><u>Natural:</u></p> <p>"The child's book of ducks and pigs was as unfamiliar as a polio virus to our child Alexandra as an infant.</p> <p>"When people say something is 'natural' it means that's the way they found it when they checked in. Our parents' traditions are just no longer appropriate. What's natural for them is not natural for their children.</p> <p>"If you were a lily you might think you'd grow up as a seed and not be at all prepared to become a flower.</p> <p>"Unfamiliarity ≠ unnatural."</p> <p>- Cite RBF videotaping session, Philadelphia, Pa., 20 Jan'75</p>
<p><u>Nations As Inventions:</u></p> <p>See Inventions, 9 Feb'64</p>	<p>RBF DEFINITIONS</p> <p><u>Natural:</u></p> <p>"And people talk about artificial and we point out that if nature permits it, it's <u>natural</u>; if nature doesn't permit it, you can't do it."</p> <p>- Cite RBF to World Game at NY Studio School, 12 Jun-31 Jul'69, Saturn Film Transcript, Sound 1, Reel 1, pp.83-84.</p>

Synergetics Dictionary

RBF DEFINITIONS

Natural:

"If nature permits a formulation
It is natural.
If nature's laws of behavior
Do not permit the formulation
The latter does not occur.
Whatever can be done
Is natural,
No matter how grotesque, boring,
Unfamiliar, or unprecedented.
In the same way
Nature never 'fails.'
Nature complies with her own laws.
Nature is the law.

When man lacks understanding
Of nature's laws
And a man-contrived structure
Huckles unexpectedly,
It does not fail.

It only demonstrates that man
Did not understand
Nature's laws and behaviors. (Man's knowledge or estimating
was inadequate.)
Nothing failed.

- Cite HGW LITTLE I KNOW, Oct. '66, P. 55.

Natural Law:

(2)

See Generalization: Second Degree, 1959

Natural Education:

See Periodic Experience, (8)

Natural Time Increment:

See Heartbeat
Time Increment

RBF DEFINITIONS

Natural Law:

"... Those generalized principles constituting natural law."

- For citation and context see China, May '65

RBF DEFINITIONS

Nature:

"Nature doesn't have goods and bads. We must get away from
this idea of good and bad people."

- Cite RBF to EJA, Pagano's Rest., Phila., PA., 22 Jun'75

Natural Law:

(1)

See Relativity: Marriage of Social & Natural Law

RBF DEFINITIONS

Nature:

"Nature is never at a loss about what to do about anything."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 504.03,
6 Nov'73

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"N = Nature: The totality of both all that is known, U (Universe), and all that is unknown, O. N is the integral of all the integrities always manifest in the progressively discovered generalized eternal principles."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 105b.13, 13 May'73</p>	<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"Nature has a very basic pattern governing frequencies and energy event magnitudes."</p> <p style="text-align: right;">- Citation and context at <u>Universal Requirements of a Dwelling Advantage</u> (1), Dec'72</p>
<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"Nature is all that we think that we do know plus all that we don't know whether or not we know that we don't know. Whatever nature permits is natural. If nature does not permit it, it cannot and does not occur."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 105b.02, 13 May'73</p>	<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"How do you get <u>nature</u> to keep you going? You don't know why the little thing grows into the big things, but it does. And you've just got to take advantage of that fact."</p> <p style="text-align: right;">- Citation and context at <u>Fire</u> (B), 20 Apr '72</p>
<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"Nature is all that we think we do know plus all that we obviously don't know."</p> <p style="text-align: right;">- Citation and context at <u>Unknowable</u>, 8 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"Little man is not running this Universe. If nature permits it, it's natural. If it's unnatural, nature doesn't permit it."</p> <p style="text-align: right;">- Cite RBF to EJA recapitulation of a common theme, J200 Idaho, DC, 13 Feb. '72</p>
<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"Man does not recognize technology other than his own so he speaks of the rest as something he ignorantly calls <u>nature</u>."</p> <p style="text-align: right;">- Context and citation at <u>Technology</u>, 13 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"Man has invented the word 'failure.' <u>Nature</u> never fails; <u>nature</u> never goes backward."</p> <p style="text-align: right;">- RBF quoted by Lee Dembart, New York <u>Post</u>, 26 April 1971</p>

Synergetics Dictionary

RBF DEFINITIONS

Nature:

"Nature has mathematic behaviors."

~~--- Cite NEHRU SPEECH, p. 27
13 Nov '69~~

- Citation at Mathematics, 14 Mar'71

RBF DEFINITIONS

Nature:

"Nature always employs the most energy-economical tactics."

~~- Cite Carbondale Draft
Return to Modelability, p. V, 2~~

- Cite NASA Speech, p. 72, Jun'66

RBF DEFINITIONS

Nature:

"I am very eager to have humanists participate with me in my feelings about the phenomenon of technology-- a word that is bandied about constantly and often thought of as the cause of our troubles and pain. I do not see technology as something that is foreign to man. I hear the word 'natural' and I hear the word 'artificial' and I am convinced that those words are words of ignorance.

"I am convinced that whatever nature permits is natural, and that which nature does not permit, you cannot do. And if nature has this as a generalized principle, it has in it the option that man can employ to alter the environment to the advantage of his fellow man. There are ways in which you can alter the environment to decrease the freedoms of your fellow man. But you can also go very far in increasing his degrees of freedom and accelerating the rate at which he can comprehend, communicate, and be effective. That is what we are doing."

- Cite COMMITMENT TO HUMANITY, p. 32, May'70

RBF DEFINITIONS

Nature:

"Nature, which is ever pulsive and impulsive, refuses to get caught unrecoverably at the zero phase of energy. Therefore there will always be positive and negative sets which are ever interchangeably intertransformative with uniquely differentiable characteristics."

~~- Cite Carbondale Draft
Return to Modelability, p. V, 16~~

- Cite NASA Speech, p. 83, Jun'66

RBF DEFINITIONS

Nature:

"Nature never pauses her cycling at the equilibrium phase. She always closes her transformative cycles at the maximum positive or negative ~~asymmetry~~ asymmetry stages. See the delicate crystal asymmetry in nature."

- Cite NEHRU SPEECH, p. 27
13 Nov'69

RBF DEFINITIONS

Nature:

"We have vector equilibriums mildly distorted as nature goes positive and negative in respect to the equilibrium and everything that we know as reality has to be either a positive or negative condition."

~~- Cite Carbondale Draft
Return to Modelability, p. V, 16~~

- Cite NASA Speech, p.83, Jun'66

RBF DEFINITIONS

Nature:

"There is nothing in nature but structure."

- Citation and context at Trees (I), 7 Nov'67

RBF DEFINITIONS

Nature:

"Nature does not use rectilinear coordination in its continual intertransformings."

- Cite NASA Speech, p. 23, Jun '66

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Nature:</u></p> <p>"Nature always insists on being most economical. Nature 'triangles.' Nature accounts all of her structuring entirely <u>rational</u>ly when measuring with triangles."</p> <p style="text-align: center;">- Cite KBP68, Caption Fig. 8a, p.85 1965</p>	<p>RBF DEFINITIONS</p> <p><u>Nature in a Corner:</u></p> <p>"Getting nature into a corner--the windows of nothingness and the nuclear sphere--it all comes from getting away from the up-and-down language and bringing in all the in-out-and-aroundness in the language of frequency."</p> <p style="text-align: center;">- Cite RBF to EJA by telephone from Beverly Hotel, NYC; 17 Nov'75</p>
<p><u>Nature Comes Back on Itself:</u> (1)</p> <p>See Patterns of Experience Return Upon Themselves Returning Upon Itself: Systems Return Upon Themselves</p>	<p>RBF DEFINITIONS</p> <p><u>Nature in a Corner:</u></p> <p>"Getting nature into a corner is the essence of synergetics. It is the coordination of thought and physical action, the genesis of geometry, system and structure. Physics and metaphysics are resonantly integral: the integrity of their intertransformative mathematics into all the special case, variably enduring associabilities cognized by humans as structural design. The frequency rates are the separate static frame rates of inspection and are recognized by humans' brains as mechanics when the frequency of inspection by humans synchronizes with the cinema frames' running. The difference between structures and machinery is the same as the difference between "moving" and "static" pictures as both relate to human information comprehending. This is the grand strategy."</p> <p style="text-align: center;">- Cite SYNERGETICS, 2nd, Ed. at Sec. 261.01; 13 Nov'75</p>
<p><u>Nature Comes Back on Itself:</u> (2)</p> <p>See Congruence, 25 Jan'72</p>	<p>RBF DEFINITIONS</p> <p><u>Nature in a Corner:</u></p> <p>"The synergetic coordinate of nature and its hierarchy of ascending or descending components provides human mind with a means of resolving problems by bringing nature into a corner--a four dimensional corner of the four-dimensional planes of the tetrahedron. Only with the four-dimensional convergence and divergence of synergetics can the human mind resolve comprehension by minimum limit corners. The minimum polygon is a triangle; the minimum polyhedron is a tetrahedron: both of their structural behaviors are unique. Because humans think only in terms of parallel and rectilinear coordination, they tend to hold to the parallel conditions of their lives, seek to maintain the status quo, and fail despite birth and death and organic and biological manifests, to be able to take advantage of the cornerability and the positional fix provided by the four-dimensional synergetic convergent-divergent coordination."</p> <p style="text-align: center;">Cite SYNERGETICS, 2nd, Ed., at Sec. 260.42; 12 Nov'75</p>
<p>RBF DEFINITIONS</p> <p><u>Nature in a Corner:</u></p> <p>"Getting nature in a corner is a way of making a somethingness out of a nothingness."</p> <p style="text-align: center;">- Cite RBF to World Game Workshop'77; Phila., PA; 20 Jun'77</p>	<p>RBF DEFINITIONS</p> <p><u>Nature in a Corner:</u></p> <p>"You can never figure out what nature is up to if you are working in parallels and perpendiculars. You have to deal in convergence and divergence. That's the only way you can get nature into a corner. And when you have nature in a corner, then you don't need anybody to mark your paper."</p> <p style="text-align: center;">- Cite RBF to EJA, enroute Union Station, Wash. DC; 6 Nov'75</p>

Synergetics Dictionary

<p><u>Nature in a Corner:</u> (1)</p> <p>See Conceptual Genesis Omnidirectional Terminal Case Corner Minimum Limit Case Terminal Condition Starting Point Event Embryo</p>	<p><u>Nature is Neither Good Nor Bad:</u></p> <p>See Aesthetics of Uniformity, (1) Belief, 6 Jul'75</p>
<p><u>Nature in a Corner:</u> (2)</p> <p>See Polyhedra, 18 Jul'76 Tetrahedron, 22 Mar'76 Tetrahedron as Microsystem, 12 May'77 Convergence & Divergence, 1 May'77</p>	<p><u>Nature Modulates Probability:</u></p> <p>See Reality, 26 Sep'73</p>
<p><u>Nature Always Knows What To Do:</u> (1)</p> <p>See Coin Toss into the Air</p>	<p><u>Nature: What Nature Needs to be Done:</u> (1)</p> <p>See Doing What Needs to be Done Making the World Work</p>
<p><u>SEE DEFINITIONS</u></p> <p><u>Nature Always Knows What To Do:</u> (2)</p> <p>See Surf Poundings, Spring'66</p>	<p><u>Nature: What Nature Needs to be Done:</u> (2)</p> <p>See Individual Economic Initiative, 13 Jul'74 Rearrange the Scenery (1) Teleology, 15 Jun'74</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Nature Has No Separate Departments:</u></p> <p>"And wherever they came from The thoughts arranged in this book Are discoveries of its author Since he first came in 1913 To think that nature did not have Separate departments of Mathematics, Physics, Chemistry, biology, History and languages, Which would require Department head meetings To decide what to do Whenever a boy threw A stone in the water, With the complex of consequences Crossing all departmental lines. Ergo, I come to think that nature Has only one department-- And I set to discover its Obviously Omnirational Comprehensively co-ordinate system."</p> <p>- Cite BRAIN & MIND, p.171 May '72</p>	<p style="text-align: right;">(2)</p> <p><u>Nature Has No Separate Departments:</u></p> <p style="text-align: center;">See Mathematics, 18 Apr '63</p>
<p>RBF DEFINITIONS</p> <p><u>Nature Has No Separate Departments:</u></p> <p>"When I grew older I was intrigued with the geometry of mathematics and I kept thinking a lot about the alleged ineffability of the so-called fourth dimension. When I left Harvard and went into the Navy I remember saying to myself, "If nature has a department of physics, a department of chemistry, a department of biology, and a department of mathematics it would have to have meetings of all department heads in order to decide what to do when I throw an apple core into the water. The omni-departmentalization seems too awkward a system. I think nature has only one department and I think she has one comprehensive coordinate system to interaccommodate any and all events, and that system is probably rational as nature's chemical associating and disassociating is all done with whole, low order numbers."</p> <p>- Cite RBF marginalia in old Chap. 2, "Synergy," I.11, 18 Mar '69</p>	<p><u>Nature's Logistics:</u></p> <p style="text-align: center;">See Tensegrity: Unlimited Frequency of Geodesic Tensegrities, (8) Trees, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Nature Has No Separate Departments:</u></p> <p>"Now, in order to understand universal structure one must consider the fundamental coordinating system employed by nature. It occurred to me half a century ago that nature might have a coordinating system of her own-- which might not be the same system as that which man has arbitrarily invented, adopted, and applied to his measuring of nature. It also occurred to me that nature probably did not have separate departments of physics, chemistry, biology, mathematics, and sociology, etc. In formulating the quadrillions of bubbles per second in the waters of Niagara Falls, nature has no time in which to refer her structural formulation decisions to bureaucratic conventions of department heads of academic categorical states."</p> <p>- Cite Conceptuality of Fundamental Structures (Kapes) p.68, 1965</p>	<p>RBF DEFINITIONS</p> <p><u>Nature Has So Many Options:</u></p> <p>"I say: if nature permits it, it's natural. If nature doesn't permit it, you can't do it. And you can see that nature has so many options. And we're used to using only a few of the options and we think that the not-frequently-used options are unnatural. But they're just as natural."</p> <p>Soleri: "So the typewriter is a natural phenomenon?"</p> <p>RBF: "Absolutely."</p> <p>- Cite WATTS TAPE, 19 Oct '70, p.23</p>
<p><u>Nature Has No Separate Departments:</u> (1)</p> <p style="text-align: center;">See Bubbles in the Wake of a Ship Orderliness Operative in Nature</p>	<p>RBF DEFINITIONS</p> <p><u>Nature's Subvisibile Order:</u> (1)</p> <p>"Man talks carelessly and ignorantly of such words as 'chaos' ... 'turbulence'... 'turmoil'.. and (the popular, modern) 'pollution'... where nothing but absolute order is subvisibly maintained by nature and her transformation arrangements unfamiliar to man. Universe does not have any pollution. All the chemistries of Universe are always essential to the integrity of eternal intertransformation and eternal self-regeneration. Physicists invent nothing Chemists invent nothing. ... They find out what nature does from time to time and learn something of what her laws of rearrangement may be, and fortunate humans employ those rules to cooperate consciously with nature's evolution.</p> <p>"All humans, endowed at birth with a billion capabilities beyond the knowledge of the parents, evolve in ways that are utter mystery to them. The exquisite, myriadly endowed child employs that mysterious endowment and intuitively apprehends itself as inventor of ways of using the orderly laws of Universe to produce tools, substances, and service integrities, to communicate and allow humans to participate in Universe's ever-transforming"</p> <p>- Cite SYNERGETICS text at Secs. 1024.22 & 23; rewrite of 27 Dec '73</p>

Synergetics Dictionary

RBF DEFINITIONS

Nature's Subvisible Order: (2)

"evolutionary events in an as yet preposterously meager degree, which has given rise to a nature-permitted variety of little humans on tiny planet Earth each becoming Mr. Big, with a suddenly mistaken sense of power over environmental transformations-- participation in which permitted him to feel himself as a manager of inventories of logistical multiplicity which, at the most ignorant level, manifests itself as politically assured mandates and political-world gambling = gamboling= ideological warfare = national sovereignties = morally rationalizing public = body politic = individual nations as United Nations."

- Cite SYNERGETICS text at Secs. 1024.22 & .23; galley rewrite of 27 Dec'73

Nature Permits It:

See Nature, 13 May'73
Industrialization, (A)
Reduction to Practice, 29 Jan'75

RBF DEFINITIONS

Nature Permits Its Sequence: (1)

"Stress-producing metaphysical gas stretches and strains nature to yield into social-evolution conformations such as the gas-filled plastic tube of Universe. There is an a priori universal law in the controlled complexity that tolerates man's pressurized nonsense, as nature permits each day's seemingly new Universe of semifamiliarities, semiwonders and semimystery, what humans might think of as history unfolding on this little planet. There is the Game of Cosmic History, in which Universe goes on approximately unaware of human nonsense while accommodating its omnilocal game-playing. Flies have their game. Mosquitoes have their game. Microbes have their game. Lion cubs have their game. Whatever games they may be playing, positive or negative, realistic or make-believe, all the games are fail-safe, alternate circuits, omniconsequential to eternally regenerative Universe integrity. It's all permitted. It all belongs.

"Only humans play 'Deceive yourself and you can fool the world'; or 'I know what it's all about'; or 'Life is just chemistry'; and 'We humans invented and are running the world.' Dogs play 'Fetch it' to please their masters, not to deceive themselves. The most affectionate of dogs do not play 'Burial of our dead'--"

- Cite SYNERGETICS text at Secs. 1024.24 & .25; rewrite of 27 Dec'73

Nature = Scenario Universe:

See Cosmic Accounting, 20 Sep'76

RBF DEFINITIONS

Nature Permits Its Sequence: (2)

"'Chemistry is for real.' Only humans play the game of masks and monuments. Fictional history. Historical architecture. Crabs walk sideways; but only human society keeps its eyes on the past as it backs into its future. Madison avenue aesthetics and ethics. Comic strips and cartoons... truth emergent, laughing at self-deception... momentary, fleeting glimpses of the glory, inadvertently revealed through faithful accuracy of observation-- Lucid conception-- spoken of as the music of the stars, inadequate to the mystery of integrity...

All the poetry,
all the chemistry,
all the stars
... are permitted transformations of all the eternal integrity.

All the constants,
gravitational constant,
radiational constant,
Planck's constant,
... above all, mathematics, geometry, physics, are only manifests of the eternal mysteries, love, harmonic integrity beyond further words."

- Cite SYNERGETICS text at Secs. 1024.25, rewrite of 27 Dec'73

Nature Trying to Make Man a Success: (1)

See Man as a Function of Universe

RBF DEFINITIONS

Nature Permits Its Sequence: (3)

"The isotropic vector matrix yields to palm trees and jellyfish as a complex of mathematical integrities. As one will always be to one other. But no other: no one. Other is four-- but whereas one has no relations; two have only one interrelationship; three have three interrelationships; but four have a minimum of relationships synergetics. No insiderness without four. Without four, no womb; no birth: no life... the dawning awareness of the integrity of Universe. For humanity the only permitted infallibly predictable is the eternal cosmic integrity."

- Cite SYNERGETICS text at Sec. 1024.25, rewrite of 27 Dec'73

Nature Trying to Make Man a Success: (2)

See Desovereignization Sequence, (3) (4)
Doing What Needs to be Done, (B)

Synergetics Dictionary

<p><u>Naught:</u></p> <p>See How Little I Know, 13 May'73</p>	<p><u>Navigation vs. Probability:</u></p> <p>See Navigation, Sep'73</p>
<p><u>Navel:</u></p> <p>See Nose-to-navel Umbilical</p>	<p>TEXT CITATIONS</p> <p><u>Navinational Science:</u> Intuition, p.55 May '72</p>
<p>ABF DEFINITIONS</p> <p><u>Navigation:</u></p> <p>"Probability could not get you to a given port. Navigation can do so. Navigation is discrete and is a powerful tool."</p> <p>- Citation and context at <u>Probability</u>, Sep'73</p>	<p><u>Navigation:</u> (1)</p> <p>See Sea Technology Naga Theme Rafts: Early World Drifting on Rafts</p>
<p><u>Navigation to Faraway Places to Bring Back Miracle Objects:</u></p> <p>See Wizard, 18 Jul'72</p>	<p><u>Navigation:</u> (2)</p> <p>See Cartography: Conventional Projections, (2) Probability, Sep'73* Pretending, 8 Apr'75 Navy: Theory Of, 22 Dec'74 Navy Phonetic Sequence, 23 Jan'75 Halo, 1938 Naga, (2) Dymaxion Airocean World Map. (a)</p>

Synergetics Dictionary

<p><u>Navigator:</u> <u>Early Navigators:</u> (1)</p> <p>See Rafts: Early World Drifting on Rafts Secrecy of Mathematical Knowledge Naga Theme</p>	<p>RBF DEFINITIONS</p> <p><u>Navy Sequence:</u> (1)</p> <p>"... I look in various directions because I'm interested in big patterns is one reason why my intuition solves some big patterns... And my Navy experience brought me into celestial navigation. Goodness gracious! My navy experience brought me into...logistics, ballistics, controlling the trajectory of missiles. This brought me into the realization of variables where I realized I had never heard anybody say this, they didn't say this in the Naval Academy, the flight-- shooting from a fixed position to another fixed position is not in the same category as flying from a moving ship on a heaving sea against another moving ship on a heaving sea. And not on a planar base either but on a spherical base. It turns out that all the variables in the Universe in a spherical planet are in the latter base and not a fixed one. I find that really so much of man's thinking is on the fixed-position-to-fixed-position.</p> <p>"So I then got into the concept of what I call the <u>Theory of the Navy</u>, the theory of ships, of designing the ship itself, what its particular function was, then designing the blast furnace to make the steel... all of this just to get that platform out there and taking you 25 years before you get all the things done... and then the forward supply bases;"</p> <p style="text-align: right;">15 Jun'74</p> <p>- Cite Tape transcript #5, p.9; RBF to W. Wolf, Phila. Pa., [redacted]</p>
<p><u>Navigator:</u> <u>Early Navigators:</u> (2)</p> <p>See Death, 1970 Discovery, 11 Jul'62 Raft, 3 Apr'75</p>	<p>RBF DEFINITIONS</p> <p><u>Navy Sequence:</u> (2)</p> <p>"the industrial [redacted] fallout rebuild bases; ships of the train and ships of the line... finally the line then was in contact and we did all these things against possible contact and when contact came after 50 years then you had an obsolete battleship...</p> <p>"You have to have all this general industrial comprehensive anticipatory design science. Not a single thing in the Navy was there at the university until the principles discovered by man were actually reduced to practice and this extraordinary package could float all these things... Could float a fantastic power plant, to drive anything you wanted. So I realized that I'd really been trained in an extraordinary field where at that time there was nothing comparable to what was on land. We've put a lot on the land since that time. And I was really not just a passenger but was trained to know where everything was on that ship and how it worked. I got to know navigation dealing with the stars and the Universe. I got to understand the laws of storms. I learned to understand the social behaviors of peoples as well as the storms of humans and the ways they behave. These are great responsibilities and the line officer was a line officer because back then you were in line of command"</p> <p>- Tape transcript #5, p.10; RBF to W. Wolf, Phila., Pa., 15 Jun'74</p>
<p><u>Navigator:</u> (1)</p> <p>See Astrogator Fog-shrouded Navigator</p>	<p>RBF DEFINITIONS</p> <p><u>Navy Sequence:</u> (3)</p> <p>"immediately if your seniors were killed, you had to take over the ship. If the other seniors were killed you had to take over the fleet. You had to be trained this way. You might be young, but that's the kind of training given you to be a comprehensivist. ... Then came finally contact. And it was said that in the first and second world wars we would know who was going to run the world for the next 25 years. You knew what the other man's tonnage was but you wouldn't really know what he could do with the same, or more with less, until you came into contact. And the other one went to the bottom. So he didn't know either. And these were kept secrets. This was what was meant by classified information. Anyway, I was privy to all this...</p> <p>"And of all things, here I was in the Navy at an extraordinary moment of history where the masses of the water ocean world were running the world, the British Empire at that time, and they suddenly were about to lose if they couldn't get America in because the submarines had not been anticipated and they were sinking their great line of supply. If they couldn't keep up their line of supply the war would come from Europe on to the British Isles and whoever controlled the British Isles was"</p> <p>- Tape transcript #5, p.10; RBF to W. Wolf, Phila., PA, 15 Jun'74</p>
<p><u>Navigator:</u> (2)</p> <p>See Mark Your Own Paper, late'70</p>	<p>RBF DEFINITIONS</p> <p><u>Navy Sequence:</u> (4)</p> <p>"going to run the world. That was considered the unsinkable flagship that commanded all the harbors of the customers of Europe... where you cashed in everything you stole from the Orient.</p> <p>"The Navy at that time was very secondhand... This was before World War I. Our chief battleship was Admiral Dewey's flagship. Because of their enormous sinkings they had to be refurbished from America; enormous production, and they wanted all these ships, and many men brought across the ocean to fight; and above everything they needed to build up their naval strength. Therefore, they had to allow the American Navy to come to parity with the British Navy... And I was at the Naval Academy and they had to have the men that ran ships: That was the big show.</p> <p>"I want you to realize, then, how very different this whole complex of events is... And I'd become so familiar with my filing problem. In those days we didn't have a computer. The only thing we had was something called the Ford Range Keeper. And that became the property of the Sperry Corporation. We had it on the bridge of only the very biggest ships.. and we had to do everything longhand. And they had, down in the plotting room down in the bowels of the ship; it was really the command"</p> <p>- Tape transcript #5, p.11; RBF to W. Wolf, Phila., Pa., 15 Jun'74</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Navy Sequence:</u> (5)</p> <p>"position of the ship. It was the most armored of all and in that plotting room we had enormous charts with all the variables that went into the firing problem. And anything you could put in there... the logistics were broken down into two things: the internal and external ballistics. And the internal ballistics were all the things that happened before you fired the gun. And the external were all the things that happened to the missile after the gun was fired. You could get all the previous... temperature, what the wind was blowing, direction, speed of your ship, keeping track of the speed of another ship, all those things were in there. Suddenly then, we had to get this... and there was a spotting problem. You're only firing still at visible range in those days. Five thousand yards; you're talking about three miles, five miles, ten miles. Ten miles was a very long one.</p> <p>"Anyway, having learned what I just learned... immediately after World War I a series of things happened. We learned to scramble all the radio. We had never dared send messages by radio. But then we radioed information coded and ciphered, but you really didn't send any strategic ones. But the messages couldn't go any faster than the coding. For this reason the authority in"</p> <p>- Tape transcript #5, p.11; RBF to W. Wolf, Phila. Pa., 15 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Navy:</u> <u>Theory of the Navy:</u></p> <p>"In the Navy I became exposed to the really big patterns. It was unlike the maps of early man where you would go from flat empire → wildness → off the map → infinity.</p> <p>"All the law belonged to the land. Three-quarters of the Earth is covered with water and when you're out there on the water you soon learn that physical law is the <u>only</u> law!</p> <p>"The British Isles were simply the western terminal of the East India Company.</p> <p>"That's what the Theory of the Navy is: a generalized theory of all the variables as in general systems theory. This is how you develop those great forecasting capabilities in both ballistics and in navigation."</p> <p>- Cite RBF to State Dept. Senior Seminar, Rosslyn, Va., 22 Dec'74</p>
<p>RBF DEFINITIONS</p> <p><u>Navy Sequence:</u> (6)</p> <p>"the Navy remained in the Navy and the commander in the Navy had to make decisions way away from home. After Abraham Lincoln decisions were made by telegram: all the land controls went into central position. Only in the Navy were decisions made way out there. After the war we then learned to scramble messages and from this time on they no longer needed to have comprehensivists. ... They wanted specialists. Men became Naval aviators, or submarine, and so forth. I was the last of the breed of the comprehensivists being trained in that way. This is very relative to the problem you're up against now.</p> <p>"I was fascinated with the things that some people improved on the firing data. They introduced this and they introduced that and I said I wonder if some of these things aren't redundant. We put them all in to calculate. So I tried firing where you dropped this out; and if the answer was so badly altered that you could fire anywhere in the sky with equal success, then I put that one back in. When I found it really hardly varied at all, I said which one of these should be dropped out. And I could weed out. I feel that's what brought me down to Earth, (hmm - eja), down to what I called min-max-fam-fax-- the minimum-maximum family of facts."</p> <p>- Tape transcript #5, p.12; RBF to W. Wolf, Phila. Pa., 15 Jun'74</p>	<p><u>Navy:</u> <u>Theory of the Navy:</u></p> <p style="text-align: center;">See Navy Sequence (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Navy Sequence:</u> (7)</p> <p>"Now I did that in 1927 when I was out of the Navy and was trying to think how it could all be reestablished. But I had to start with the Universe. The Navy started with Universe. We're dealing in the celestial. It's important to realize that this long, long training had been in really a very different category. The Navy automatically looked on the whole Earth. You assume there's only one Navy. And the other ones go on the bottom so you have any resources of Earth. You didn't have to think in terms of the barriers the Army had. That was when the great war games were the world games. That's when I turned those into positives."</p> <p>- Tape transcript #5, p.12; RBF to W. Wolf, Phila. Pa., 15 Jun'74</p>	<p><u>Navy:</u> (1)</p> <p style="text-align: center;">See Sea Power Battle Ship Sea Technology</p>
<p>RBF DEFINITIONS</p> <p><u>Navy Phonetic Sequence:</u></p> <p>"Navy -- Na-tive -- Nativity -- Navigate..."</p> <p>- Cite RBF videotaping Penn Bell Studios, Phila., PA, 23 Jan'75</p>	<p><u>Navy:</u> (2)</p> <p style="text-align: center;">See Secondhand, 1946 Naga, (2) General Systems Theory, (1) Psychiatry, (3) Halfway-round-the-worlding, 12 May'77</p>

Synergetics Dictionary

<p><u>Near-miss:</u></p> <p style="text-align: center;">See Vectorial Near-miss</p>	<p><u>Necessity:</u></p> <p style="text-align: center;">See Need : Necessity</p>
<p>RBF DEFINITIONS</p> <p><u>Nebula:</u></p> <p>EJA: Is nebula a complementary of nucleus?</p> <p>RBF: "No. A nebula is a random aggregate of nuclei."</p> <p style="text-align: center;">- Cite RBF to EJA, 3200 Idaho, 29 Oct'72</p>	<p><u>Neck:</u></p> <p style="text-align: center;">See Stack the Neck Out</p>
<p><u>Nebula:</u> (1)</p> <p style="text-align: center;">See Nuclear & Nebular Zonal Waves</p>	<p>RBF DEFINITIONS (A)</p> <p><u>Necklace:</u></p> <p>"A necklace is unstable. The beads of a necklace may be superficially dissimilar, but they all have similar tubes running through them with the closed tension string leading through all the tubes. The simplest necklace would be one made only of externally undecorated tubes and of tubes all of the same length. As the overall shape of the necklace changes to any and all polygonal shapes and wavy drappings, we discover that the lengths of the beads in a necklace do not change. Only the angles between the tubes change. Therefore, stable refers only to angular invariability.</p> <p>"A six-edged polygon is unstable; it forms a drapable necklace. If we make a five-sided polygon, i.e., a pentagonal necklace, it is unstable. It, too, is a drapable necklace and is structurally unstable. Why? A necklace of three rigid tubes also has three flexible angle-accommodating tension joints. Here are six separate parts, each with its unique behavior characteristics which self-interfere to produce a stable pattern. How and why? We are familiar with the principle of lever advantage gained per length of lever arm from the fulcrum. We are familiar with the principle of the shears in which two levers share a common fulcrum, and the stronger and longer the shear arms,"</p> <p style="text-align: center;">- Cite SYNERGETICS text at Secs. 608.01-.02; galley rewrite 9 Nov'73</p>
<p><u>Nebula:</u> (2)</p> <p style="text-align: center;">See ^Gavity, (B) Mass, 29 Dec'58</p>	<p>RBF DEFINITIONS (B)</p> <p><u>Necklace:</u></p> <p>"the more powerfully do they cut. Steel-bolt cutters have long lever arms."</p> <p>"In every triangle each corner angle tension connector serves as the common interfulcrum of the two push-pull, rigid lever arms comprising two of the three sides of the triangle adjacent to their respectively common angular corners; each pair of the triangle's tubular necklace sides, in respect to a given corner of the triangle, represent levers whose maximum-advantage ends are seized by the two ends of the third, rigid, push-pull, tubular side of the triangle, whose rigidity is imposed by its command of the two lever arm ends upon the otherwise flexible opposite angle. Thus we find that each of the necklace's triangular rigid tube sides stabilizes its opposite angle with minimum effort by controlling the ends of the two levers fulcrumed by that opposite tension fastening of the triangle. Thus we find the triangle to be not only the unique pattern-self-stabilizing, multienergied complex, but also accomplishing pattern stabilization at minimum effort, which behavior coincides with science's discovery of the omni-minimum-effort behavior of all physical Universe."</p> <p style="text-align: center;">- Cite SYNERGETICS text at Sec. 608.03; galley rewrite 9 Nov'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Necklace:

(C)

"The six independent energy units of the triangle that interact to produce pattern stability are the only plural polygon-surrounding, energy-event complexes to produce stabilized patterns. (The necklace corners can be fastened together with three separate tension-connectors, instead of by the string running all the way through the tubes, wherefore the three rigid tubes and the three flexible tension connectors are six unique, independent, energy events.)

"We may say that structure is a self-stabilizing, pattern-integrity complex. Only the triangle produces structure and structure means only triangle, and vice versa.

"Since tension and compression always and only coexist with first one at high tide and the other at low tide, and then vice versa, the necklace tubes are rigid with compression at visible high tide and tension at invisible low tide; and each of the tension-connector has compression at invisible low tide and tension at visible high tide; ergo, each triangle has both a positive and a negative triangle congruently coexistent and each visible triangle is two triangles: one visible and one invisible."

- Cite SYNERGETICS text at Secss 608.05-.06; rewrite of 9 Nov '73

RBF DEFINITIONS

Necklace:

(1)

"Necklace flexibility is a function of angular tensions and not of the compressional islands or beads. Relative flexibility decreases as beads are progressively removed. When the numbers of beads are odd the waves in the necklace are blocked; when the number is even the waves are continuous.

"When the number of beads is reduced to six, continuous wave flexibility is permitted. When the number of beads is reduced to five the waves are blocked so the necklace is flexible. When reduced to four beads the necklace can be draped over human shoulders; one "V" in front and one "V" in back. When the beads of the necklace are reduced to three all flexibility ceases. Each angle is stabilized by the opposite side, exercising its push-pull effectiveness upon the two lever-ends of the angle's adjacent sides, as would a pair of scissors be held in fixed opening by a pencil with the pencil's two ends tied respectively to the two finger circle terminals of the scissors. (Drawing.)

"If we take out one more bead the scissors become closed; There is no opening or area between them. The opening

- Cite RBF dictation to Alexandra Snyder, New Delhi, Nov. '71

RBF DEFINITIONS

Necklace:

"A necklace has no pattern stability."

- Cite RBF to H.U.D. Engineers, Washington, 26 Jan '72

RBF DEFINITIONS

necklace:

(2)

"or area is always bound by push-pull energy actions and mass attraction interlinkages identical with the necklace in principle. The triangle is the only self-stabilizing polygon. By structural we mean energy patterns whose polygonal patterns are self-stabilizing; that is exhibiting inherent properties of the mass attractions and mass repulsions of the radiational and gravitational laws. We discover that the triangle is the only self-stabilizing polygonal pattern integrity."

- Cite RBF dictation to Alexandra Snyder, New Delhi, Nov. '71

RBF DEFINITIONS

Necklace:

"In a necklace the angles between the pieces are transformable until you reduce them to a triangle. The triangle is then not transformable."

- Cite RBF to EJA, 3200 Idaho, DC, 23 Jan '72

RBF DEFINITIONS

Necklace:

"A necklace is unstable. The lengths of the beads in the necklace do not change. Only the angles between them change. Stable refers only to angular invariability. By structure we mean self-stabilizing. The triangle is the only self-stabilizing polygon."

- Cite NLRHU SPELCH, p. 14. 13 Nov '69

TRIANGULATION - SEC 611-4

RBF DEFINITIONS

Necklace:

"Chain-linkage necklace structures take advantage of the triangulation of geodesic lines and permit us to encompass relatively large volumes with relatively low logistic investment. Slackened necklace geodesic spheres can be made as compactable as hairnets and self-motor-opened after being shot into orbit."

- Cite SYNERGETICS text at Sec. 608.07; Nov '71

RBF DEFINITIONS

Necklace:

"I have a very crude necklace. What is unique about the necklace is its flexibility, so it can be draped over the shoulders. . . . Looking closely to see how and why it can flex, we find that the individual pieces of wood here are not changing their length at all. . . . What is changing are the angles. All the flexing is in the terms of the angular change and not linear. . . . In other words an angle is an angle independently of the length of its edges. So these are angular behaviors. I'm going to take several pieces out of the necklace. It's still very flexible so we take another one out. Still very flexible. Take out another piece. Still very flexible. Now I'll take out one more piece-- we're down to four pieces and it's still very flexible. This we'll drape over my shoulders with a triangle in front and a triangle in back. I can call this a square, but we see this square as completely unstable. I became extremely interested in this when I was young, the fact that the square does not have any structural integrity of its own. It only behaves the way it did because the teacher put it on a rigid blackboard, and it couldn't ~~change~~ change there. Now I'm going to take out one more piece. . . and for the first time it will no longer flex."

- Cite RBF at SIBS Seminar UMass, Amherst 22 July '71, p. 17

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Necklace Structure:</u></p> <p>"...Tube-and-cable '<u>necklace</u>' <u>structure</u> . . . takes advantage of triangulation of geodesic lines <u>and</u> entitles us to the encompassment of relatively large volumes with relatively low logistic investment. . . Slackened necklace geodesic spheres, compactible as tight as hairnets, may be shot to the moon and tensibly self-motor opened."</p> <p style="text-align: right;">-Cite PREVIEW, I&I., Pp. 222,223 1 Apr'49</p> <p><u>TRIANGULATION - SEC. 608.07</u></p>	<p>RBF DEFINITIONS</p> <p><u>Need: Necessity:</u></p> <p>"Anything man <u>needs</u> to do he can afford to do."</p> <p style="text-align: right;">- RBF quoted by Lee Dembart, New York <u>Post</u>, 26 April 1971</p> <p style="text-align: right;">- Citation at <u>Afford</u>, 26 Apr'71</p>
<p>TEXT CITATIONS</p> <p><u>Necklace:</u></p> <p>Synergetics text was rearranged at galley stage, 9 Nov'73: New citation for Necklace is Sec. 608.00 ff.</p>	<p><u>Need: Necessity:</u> (1)</p> <p>See Doing What Needs to be Done Nature: What Nature Needs to be Done Determinism Spherical Necessity</p>
<p><u>Necklace: Necklace Structure:</u> (1)</p> <p>See Chain Linkage String-connected Polyhedra</p>	<p><u>Need: Necessity:</u> (2) </p> <p>See Fuller, R.B: <u>Crisis</u> of 1927, 26 Sep'68</p>
<p><u>Necklace: Necklace Structure:</u> (2)</p> <p>See Transformable, 23 Jan'72 Stable & Unstable Structures, 7 Jun'72 Cube & VE as Wave Propagation Model, 23 Feb'72</p>	<p><u>Needham, Joseph:</u></p> <p>See Synergetic Hierarchy, 5 May'74</p>

Synergetics Dictionary

RBF DEFINITIONS

Needle:

"... The point of a needle is a pile of oranges."

- Cite SYNERGETICS draft at Sec. 1009.41, 10 Feb'73

RBF DEFINITIONS

Negative:

"Each vector is reversible having its negative alternate."

* Cite SYNERGETICS Corollaries, Sec. 240. 1971

Needle Floating on Water:

See Fourth Dimension, 6 May'48

RBF DEFINITIONS

Negative:

"Science is remiss and unnecessarily prejudicial in calling one of a pair of complementary behaviors negative. There are always much better descriptive terms."

- Citation and context at Complementarity, 2 Mar'68

Needle:

(1)

See Rowing Needles
Knitting Needles

RBF DEFINITIONS

Negative:

"The negative is never the mirror-image of the positive."

- Citation and context at Complementarity, Spring'66

Needle:

(2)

See Crystallography, 17 Aug'70

Negative Accounting:

See Wealth, (E)(F)

Synergetics Dictionary

<p><u>Negative Entropy:</u></p> <p style="text-align: center;">See Antientropy Syntropy</p>	<p>RBF DEFINITIONS</p> <p style="text-align: center;"><u>Negative Tetrahedron:</u></p> <p style="text-align: center;">"Entropy is not random; It is always one negative <u>tetrahedron</u>."</p> <p style="text-align: right; margin-top: 20px;">* Cite OMNIDIRECTIONAL HALO, p. 157, 1960</p>
<p>RBF DEFINITIONS</p> <p><u>Negative Matter:</u></p> <p>"Negative Matter is coequal with positive matter."</p> <p style="text-align: center; margin-top: 20px;">- Cite NO MORE SECONDHAND GOD, p. 36, 9 Apr'40</p>	<p><u>Negative Tetrahedron:</u> (1)</p> <p style="text-align: center;">See Antitetrahedron Invisible Tetrahedron Inside-outing Tetrahedron</p>
<p><u>Negative Matter:</u> (1)</p> <p style="text-align: center;">See Antimatter Matter & Antimatter Matterlessness</p>	<p><u>Negative Tetrahedron:</u> (2)</p> <p style="text-align: center;">See Tetrahedron: One Tetrahedron, 1960 Black Holes & Synergetics, 1 Mar'77</p>
<p><u>Negative Matter:</u> (2)</p> <p style="text-align: center;">See Antientropy, 10 Oct'63</p>	<p>RBF DEFINITIONS</p> <p><u>Negative Universe:</u></p> <p>"The star tetrahedron may explain a whole new phase of energetic Universe such, for instance, as the <u>Negative Universe</u>."</p> <p style="text-align: right; margin-top: 20px;">- Cite SYNERGETICS draft "Antitetrahedron," 8 Oct. '71, p. 10.</p> <p style="text-align: center; border: 1px solid black; display: inline-block; padding: 2px;">SYNERGETICS - UNIVERSE - SEC. 353</p>

Synergetics Dictionary

RBF DEFINITIONS

Negative Universe:

"Negative Universe is the complementary but invisible Universe."

- Cite RBF to EJA, Bear Island, 25 August 1971.

SYNERGETICS UNIVERSE SEC. 351

Negative Universe:

(2)

See Discontinuity, 22 Apr'71
Ninety-two Elements, 10 Dec'64
Thinkability, 6 Nov'73
Wave, 22 Apr'71
Transuranium Elements, 23 Feb'72

RBF DEFINITIONS

Negative Universe:

"Physics finds only waves. Some are of exquisitely high frequency, but inherently discontinuous because consisting of separate event packages. They are oscillating to and from negative universe, that is to say, in pulsation."

~~- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971~~

- Citation & context at Wave, 22 Apr'71

Negative Vectors:

See Twelve Universal Degrees of Freedom, Feb'72

RBB DEFINITIONS

Negative Universe:

"Those subsequently isolated elements beyond the 92 prime chemical elements constitute super atomics; they are the non-selfregenerative chemical elements of negative Universe."

(Rearranged and amplified.)

* Cite MUSIC, p. 45. 10 Dec'64

SYNERGETICS - UNIVERSE - SEC 352

RBF DEFINITIONS

Negative Vector Equilibrium:

"The non-mirror imaged complementary [Star Tetrahedron] is not a negative vector equilibrium. The vector equilibrium has its own integral negative."

(Sec. 636.01, footnote)

- Cite SYNERGETICS draft "antitetrahedron," 8 Oct. '71, Footnote, p.6.

Negative Universe:

(1)

See Black Hole
Superatomics
Mite: Positive & Negative Functions
Stars: Implosive Forces Of
Star Tetrahedron
Inside-out Universe
Invisible Universe

Negative Vector Equilibrium:

See Star Tetrahedron & VE

Synergetics Dictionary

<p><u>Negative Weight:</u> See Zero Weight</p>	<p><u>Neighbor: Neighborhood:</u> (1) See Proximity ≠ Neighborliness</p>
<p><u>Negative:</u> (1) See Degenerative Negative Limits Integral Negative Positive & Negative Positive ≠ Negative Againstness De-structures = Inside-out Trap of Dismay, Fear & Negativism Anti- Prohibition Invisible ≠ Negative</p>	<p><u>Neighbor: Neighborhood:</u> (2) See Community, (1)-(2)</p>
<p><u>Negative:</u> (2) See Complementarity, Spring'66* Electron, 18 Aug'70 Radiation, 1959 Entropy, (p.157) 1960 Optimism: I Am Not an Optimist, 26 Apr'77</p>	<p><u>Neo-Platonism:</u> See Fuller, R.B: His Neo-Platonism</p>
<p><u>Negentropy:</u> See Antientropy Syntropy</p>	<p><u>Nerve Circuit:</u> See Sensings & Eventings, 28 Apr'77</p>

Synergetics Dictionary

RBF DEFINITIONS

Nestable: Nestability:

"There are in closest packing, we find, always alternate spaces that are not being used so that triangular groups can be rotated into one position or 60 degrees to an alternate nestable place. . . In other words you take the vector equilibrium , rotate it 60 degrees to the next nestable position and suddenly it is polarized."

- ~~Cite Oregon Lecture #2, pp. 234-235.~~ 11 Jul'62
Citation at Sixty Degreeeness

Nest:

See Bird'sNest as a Tool

Nestable: Nestability:

(1)

See Closest Packing
Innestible
Internestability
Basic Nestable Configurations: Hierarchy Of

Net Hat:

See Corporation, (2)

Nestable: Nestability:

(2)

See Octahedron, 16 Dec'73
Sixty-degreeeness, 11 Jul'62*
Vector Equilibrium: Polarization, (1)(2)

Net Sat:

See Radome Sequence, (4)

Neat in Part of the Bird:

See Industrialization, (A)

Net:

See Balloon

Synergetics Dictionary

<p><u>Network:</u> (1)</p> <p>See Absolute Network Dwelling: World-around Network Dwelling Service Electrical Network Industrial Network Tool Networks Wave Network</p>	<p><u>Neuron-transistored:</u></p> <p>See Brain's TV Studio, 22 Nov'73</p>
<p><u>Network:</u> (2)</p> <p>See Boats at Anchor Retard the River's Flow, 1960 Satellite: World Satellite Sensing, 25 Jan'73</p>	<p><u>Neuron:</u></p> <p>See Brain Bank: Brain's Neuron Bank</p>
<p><u>Neumann, John von:</u> (1903-1957)</p> <p>See World Game, (T)</p>	<p>RBF DEFINITIONS</p> <p><u>Neutral:</u></p> <p>"Everything should be neutral until muted. A piano, like a house, or like fog, should be neutral. I found in building that the grays of aluminum were not neutral enough. Brown Earth is what the human eye is most accustomed to; it is the best color for floors and walls. Seek first for the neutral tones, but arrange them so that the human occupant can change things."</p> <p style="text-align: right;">- Citation & context at <u>Harmonics</u>, (1), 1 Feb'75</p>
<p>RBF DEFINITIONS</p> <p><u>Neuron:</u></p> <p>N.Y. Times, 15 May'72, H.M. Schmeck, Jr., "Immunology: A Code Spelling Life or Death": "And some scientists see links between the brain and the immunologic system as possibly highly rewarding to study."</p> <p>R.B.F. Marginalia: "<u>Neurons</u> are tetra structures."</p> <p style="text-align: right;">- Cite RBF marginalia presumably 15 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Neutral Angle:</u></p> <p>"... The spherical excess of 6° (one quantum) may be apportioned totally to the biggest and smallest corners of the triangle, leaving the 60-degree, vector equilibrium, neutral corner undisturbed. As we have discovered in the isotropic vector matrix nature coordinates crystallographically in 60° and not in 90°. Sixty degrees is the vector equilibrium <u>neutral angle</u> relative to which life-in-time aberrates."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 905.64, 16 Dec'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Neutral Axis:

"Every system has a neutral axis with two polar points (vertexes - fixes). In synergetics topology these two polar points of every system become the constants of topological inventorying. Every system has two polar vertexes which function as the spin axis of the system. In synergetics the two polar vertexes terminating the axis identify conceptually the abstract-- supposedly nonconceptual-- function of nuclear physics' 'spin' in quantum Theory."

- Cite SYNERGETICS, 2nd. Ed. at Sec. 1007.29, 1 Jan'75

Neutral Corner:

See Neutral Angle, 16 Dec'73

Neutral Axis:

(1)

See Additive Twoness
Plus Two

Neutral Phase:

See Invisible Quantum as Tetrahelix Gap Closer,
23 May'75
Octahedron as Conservation & Annihilation Model, (4)

Neutral Axis:

(2)

See Axis of Spin, (2)
Brouwer's Theorem, 1960; 1 Jan'75
Centers of Equilibrions Symmetry, May'72
Euler, 11 Jul'62
Sphere, 1971; 2 Mar'68; 15 Oct'64
Two, (1)

Neutral:

(1)

See Cosmic Neutral
Nine: Nineness
Sixty Degreeeness
Zone of Neutral Resonance
Medio: Macro-medio-micro
Middle: Middleness: Midway

Neutral Center:

See Interrelationship Twoness, 27 Dec'74

Neutral:

(2)

See Precession & Degrees of Freedom, (1)
Sixty Degreeeness, 8 Dec'72
Vector Equilibrium, 18 Sep'69
Hole in the Victrola Disc, 24 Jan'75
Information Transmitting & Nontransmitting Model,
27 May'75

Synergetics Dictionary

<p><u>Neutron:</u> (1)</p> <p>See Electron & Neutron Nucleon Proton & Neutron</p>	<p>TEXT CITATIONS</p> <p><u>New Forms vs. Reforms:</u> WDSU Doc. #1, p.54, 1963</p>
<p><u>Neutron:</u> (2)</p> <p>See Modules: A & B Quanta Modules, Apr'72</p>	<p><u>New Forms vs. Reforms:</u></p> <p>See Robin Hood Sequence (2)</p>
<p><u>Never-never land:</u></p> <p>See Perfect, 1938</p>	<p><u>New Life:</u> (1)</p> <p>See Continuous Man Old Life Young World Young & Elders</p>
<p>RBF DEFINITIONS</p> <p><u>New:</u> "Society only takes on the new when nothing else will work."</p> <p>- Cite RBF at Penn Bell videotaping, Philadelphia, 28 Jan'75</p>	<p><u>New Life:</u> (2)</p> <p>See Environment Events Hierarchy, (2) Evolution: Man as Evolution Modifier, May'49 Poets, 1970</p>

Synergetics Dictionary

<p><u>New:</u></p> <p style="padding-left: 20px;">See Adoption of the New Only as Last Resort Emergence Future</p>	<p>RBF DEFINITIONS</p> <p><u>News & Evolution:</u> (3)</p> <p>"This historically unpredicted, swiftly emergent, world embracing classless democracy is both evolutionary and revolutionary. Unlike all past revolutions which were accomplished by destroying the successful few, this total emancipation of humanity and the integrity of its sustainability is being realized instead only by increasing the physical and metaphysical advantages of all humanity. This greatest of history's evolutions inadvertently makes obsolete the technical effectiveness and relevance of the older cultures' artifacts and value structures, and thus painlessly and spontaneously abandons the privileges enjoyed exclusively by the few in yesterday's class-stratified and selfishness-rationalizing society...."</p> <p>"As of 1977, human evolution on planet Earth has attained enough know-how to operate this planet to the enduring high physical advantage of all; but nature's checks and balances of human fear, ignorance, and ill-conditioned reflexes have the scales of human fate in dynamic balance. They may readily tip in the negative to terminate human occupation of the planet. Preponderant hope for tipping the scales to the lasting living advantage of humans lies in the world of"</p> <p>- Cite RBF Ltr. to Yasuji Fujita re Ruth Asawa; 15 Mar'77</p>
<p>RBF DEFINITIONS</p> <p><u>News:</u></p> <p>"Today's news consists of aggregates of fragments. Anyone who has taken part in any event that has subsequently appeared in the news is aware of the gross disparity between the actual and reported events. The insistence of reporters upon having advance 'releases' of what, for instance, convocation speakers are supposedly going to say, but in fact have not yet said, automatically discredits the value of the largely prefabricated news. We also learn frequently of prefabricated and prevaricated events of a complex nature purportedly undertaken for purposes either of suppressing or rigging the news, which in turn perverts humanity's tactical information resources. All history becomes suspect. Probably our most polluted resource is that of the tactical information to which humanity spontaneously reflexes."</p> <p>- Cite SYNERGETICS text at Sec. 'Introduction,' p.12, 25 Jul'72</p>	<p>RBF DEFINITIONS</p> <p><u>News & Evolution:</u> (4)</p> <p>"children. Each child is born in the presence of less misinformation than were their predecessors. Each is born in the presence of a vastly greater amount of reliable information. Each child is born free of the mis- and ill-conditioned reflexes of the older humans. Each child is born with the innate artistry and imagination capable of realizing new and increased advantage for the many. Evolution seems intent upon giving humanity every opportunity to win successful continuance. Clearly, all of our hope lies in the hands and minds of the young."</p> <p>- Cite RBF Ltr. to Japanese Deputy Consul General in San Francisco, Yasuji Fujita in support of nomination of Ruth Asawa Lanier for Japan's Medal of Honor; 15 Mar'77</p>
<p>RBF DEFINITIONS</p> <p><u>News & Evolution:</u> (1)</p> <p>"Daily news is a major ingredient of human evolution. Advertising alone provides the economic sustenance of the western world's news media. The magnitude of paid-for advertising received by each news media is directly proportional to the number of its buying readers. News media management searches for the type of news that sells the best. Year after year the publishers find that 'bad' news attracts the most paying readers--possibly because the readers can congratulate themselves on not being the unfortunate ones. Whether or not this is the right explanation, it is a demonstrable fact that powerful economic sustenance for negative voices exists. Though the majority of humans are born positivists, popular acknowledgement of the effectiveness of their expressions is difficult to come by, and has little or no economic support. Positivist poets are proverbially poor."</p> <p>"While there are many positively committed institutions--religious, academic, and political--we are considering here only the few independently thoughtful, positive individuals alive today whose work has come to be generally recognized in this era of billions of humans integrating into a common world culture, in contradistinction to the few millions of"</p> <p>- Cite RBF Ltr. Yasuji Fujita re Ruth Asawa; 15 Mar'77</p>	<p><u>News & Evolution:</u> (1)</p> <p style="padding-left: 20px;">See Communications & Culture Invisible News World-around Communication Transcends Politics</p>
<p>RBF DEFINITIONS</p> <p><u>News & Evolution:</u> (2)</p> <p>"Individuals of yesteryears who were physically deployed in a myriad of small local cultures."</p> <p>"One needs to know nothing in order to be negative. One need only be clever with words or cartoon to become famous as an amusingly consistent sceptic or a dramatically devastating cynic. To be creditably positive, not just optimistic, one needs to know a great deal as learned only by direct experience. To be productively positive, one must also have great vision and the confidence of proven technical accomplishments manifest as physical products that work. To be effectively positive and also to inspire others to envision and realize humanity's constructive options is to be a great artist."</p> <p>"In the 20th century's unprecedented and utterly unforeseen transformation from a local to a universal culture, Ruth Asawa Lanier's over earthly pure, exquisitely ephemeral sculptures, sculptural murals, paintings, drawings, and her innumerable other exploratory formulations are probably the most embracing and exciting arts and artifacts of an emerging, world-around, classless democracy."</p> <p>- Cite RBF Ltr. to Yasuji Fujita re Ruth Asawa; 15 Mar'77</p>	<p><u>News & Evolution:</u> (2)</p> <p style="padding-left: 20px;">See Impossible: Only the Impossible happens, (A)-(B)</p>

Synergetics Dictionary

<p><u>News Ignores Invisible Reality:</u></p> <p style="text-align: center;">See Generalization & Special Case, 12 May'75</p>	<p><u>Newspaper: Newsprint:</u></p> <p style="text-align: center;">See Rolls, 14 Mar'72; 20 Apr'72 Individuality & Degrees of Freedom, (3) Wood Technology, (1)</p>
<p><u>News:</u> (1)</p> <p style="text-align: center;">See Common Sense: Official News Tactical Information Invisible News</p>	<p><u>Newton's Cosmic Norm of "At Rest":</u> (1)</p> <p style="text-align: center;">See Instant Universe Norm of Einstein as Absolute Speed Instant Universe vs. All-motion Universe Immobility: Immobilized</p>
<p><u>News:</u> (2)</p> <p style="text-align: center;">See Metabilical Cord, (1) Myopia: Incasting vs. Broadcasting, 22 Jan'75 Television, Feb'73 Telegraph, 8 Jun'75 Transnational Capitalism & Export of Know-how, (2)(3) Propaganda, 29 Mar'77</p>	<p><u>Newton's Cosmic Norm of "At Rest":</u> (2)</p> <p style="text-align: center;">See Invisible Architecture, (1) Omnimotions, May'72 Dictionary, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Newspaper:</u></p> <p>"It isn't really very important what we read in the newspaper because all the very extraordinarily rapid evolution is going on in the invisible spectrum and the press and TV are really missing the big show. What I'm saying is that right now all of humanity is really breaking through to a completely different way of looking at Universe."</p> <p style="text-align: center;">- Citation and context at <u>Cosmic Fish Sequence</u> (1), 16 Oct'78</p>	<p><u>Newton vs. Einstein:</u></p> <p>"Isaac Newton discovered the celestial gravitation interrelationship and expressed it in terms of the second power of the relative distance between the different masses as determined by reference to the radius of one of the interattracted masses. The gravitational relationship is also synergetically statable in terms of the second power of relative frequency of volumetric quanta concentrations of the respectively interattracted masses. Newton's gravitational constant is a radially (frequency) measured rate of spherical surface contraction, while Einstein's radiational constant is a radial (frequency) rate of spherical expansion."</p> <p style="text-align: center;">- Cite RBF rewrite of SYNERGETICS galley at Sec. #052,21, 9 Jan'74</p>

Synergetics Dictionary

RBF DEFINITIONS

Newton vs. Einstein:

(1)

"Beginning in 1917 I determined to make myself a guinea pig in a life-long research project, documenting the life of an individual born in the '90's... having his boyhood during the turn of the century and maturing during humanity's epochal graduation from the inert materialistic 19th into the dynamic, abstract 20th century.

"Had I the perceptivity at the time equal in magnitude to the scale of my intuitive prospecting of forward events this case-history era might have been more accurately identified as that which terminated Sir Isaac Newton's normal at rest and myriadly isolated hybrid world cultures to which change was anathema on the one hand, and on the other, opened Einstein's normally dynamic, omniintegrating world culture to which change has come to seem essential and popularly acceptable....

"The experience pattern of my generation was not to be just one more duplicate generation in a succession of millions of generations of humanity within an approximately imperceptible degree of environmental change as compared to the immediately previous generation. I was convinced that unannounced by any authority a much greater environmental and ecological change"

- Tape transcript #6, Side A, pp.12-13; RBF to Barry Farrell; Bear Island, 16 Aug'70

Newton Was a Noun:

See Quick & the Dead: Song Of, Oct'66

RBF DEFINITIONS

Newton vs. Einstein:

(2)

"was beginning to take place in my generation's unfolding experience than had occurred between my father's and grandfather's and my great grandfather's and great great grandfather's successive generations. It was clearly an environment that was changing; and though the environment changes might not alter man's genes, changes in his external conditions might permit man to realize many more of his innate capabilities. Dwellings are environment modifying machines; so are automobiles. Automobiles are little part-time dwellings on wheels. Both autos and dwellings are complex tools within the far vaster tool complex of world-embracing industrialization. Life continually alters the environment and the altered environment in turn alters the potentials and realities of life. The environment is basically a complex of nonsimultaneously occurring but omniintegrating or interstimulating, and therefore interregenerating, mutations of man's integral, internal metabolic regeneration organism, -- on the one hand; on the other is his external, invention-realized, metabolic regeneration organism, which we think of and speak of as industrialization."

- Tape transcript #6, Side A, pp.13-14; RBF to Barry Farrell; Bear Island, 16 Aug'70

RBF DEFINITIONS

Newton's First Law of Motion: RBF Restatement Of:

"Ask Newton what gravity is and he will answer, 'It is a covarying interrelationship of two or more bodies inherently nondisclosable by any one of the bodies considered separately.'"

- Cite RBF Tribute to Josef Albers; Dec'77

RBF DEFINITIONS

Newton Vs. Einstein:

(1)

See Pendulum Model vs. Scenario Model
Instant Universe vs. All-motion Universe
Universal Integrity: Principle Of

Newton's First Law of Motion: RBF Restatement Of:

"I have attempted a new generalized statement of a 'First Law of Acceleration,' which goes as follows:

All local event systems (Newton's 'bodies') are in relevant continuity of frequency accelerations with a plurality of local and comprehensive patterning consequences, and all other local systems of macro and micro degrees affect all other local systems of Universe in varying degrees of angle and frequency modulation; and the effect of all the local systems of events upon any and all other systems of local events is precessional."

- Citation and context at Tetrahedral Dynamics (1), 4 May'57

Newton vs. Einstein:

See Immobility, 4 May'57
New York, 1970; (2)(3)(12)
Radiation-gravitation: Harmonics, 3 Jan'75
Time, 2 Jul'62

Newton's First Law of Motion: RBF Restatement Of:

See Intereffects, 23 Sep'73
Interference (2)
Precession (1); 6 Jul'62
Otherness Restraints & Elliptical Orbits, (2)(3)
New York City, (2)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"The astrophysical chain of events altogether compounded to permit Newton's discovery of the only-metaphysically-statable gravitational law which showed that the intensity of the interattraction of any two celestial bodies is initially proportional to the product of their masses and varies at a rate of the second power of the arithmetical distances progressively intervening--double the distance and reduce the interattraction to one-quarter of its previous intensity."</p> <p>- Cite RBF tribute to Josef Albers, Dec'77</p>	<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"Gravity... is the variable interattractiveness of nonmagnetic bodies, which interattractiveness varies at a second-power rate inversely proportional to the relative distances intervening the masses, as those distances vary only at an arithmetical rate of change."</p> <p>- Citation at <u>Gravity</u>, 31 May'74</p>
<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"Synergy... is a part of the great mystery which always remains unexplained By such discoveries as Newton's Of the first-power arithmetical Vs. the second-power augmentation Rates of constantly intercovarying Gravitational interattractiveness Of separate bodies in Universe..."</p> <p>- Cite WHAT I AM TRYING TO DO, p.2 revised, 10 Sep'74</p>	<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"The relative interattraction increases as the second power of the rate at which the interdistances diminish."</p> <p>- Citation & context at <u>Hammering Sheet Metal</u>, (2), 30 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"Isaac Newton discovers The rational geometrical rate of change Characterizing the interattractiveness Of any two celestial bodies While their relative distance apart Vary only at an arithmetical rate Which attractiveness itself Let alone its inverse Second power rate of gain Is not manifest In any of the physical characteristics Of either of the celestial bodies When either is considered only separately And only in terms of its Integral dimensions, mass, chemistry And independent electromagnetic properties..."</p> <p>- Cite WHAT I AM TRYING TO DO, p.1., 4 Aug'74</p>	<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"Gravity is omnidirectional mass interattraction which, as Newton discovered, is directly interproportional relative to the respective mass involved, and varies as the second power relative to the interproximities of the respective bodies considered: Halving the distance between any two will fourfold their interaction."</p> <p>- Citation & context at <u>Radiation-gravitation Sequence</u>, (1), 5 Jun'73</p>
<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"Acceleration is second power, multiplying the number times itself. As a hypothetical arrangement, when you doubled the distance apart you decrease the interattraction fourfold. You have this increase in fourfold, which is second power."</p> <p>- Cite tape transcript RBF to W. Wolf, Gloucester, Mass., p.12, 2 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Newton's Second Law of Motion: RBF Restatement Of:</u></p> <p>"...As one energy event comes into critical proximity with any two, the mass attraction fourfolds every time the distance between them is halved."</p> <p>- Citation & context at <u>Critical Proximity</u>, 10 Feb'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>New Universe:</u> <u>Disclosure of Entirely New Universe in Next Decade:</u></p> <p>"Since Earthians' astronomical measurements have only been conducted for a few thousand years, and nine-tenths of the information has been accumulated in the last five centuries, to be conservative, we can say that 11,000 years exploration has brought in data covering 11 billion years.</p> <p>"The ratio $\frac{11,000}{11 \text{ billion}} = \frac{1}{1 \text{ million}}$ clearly manifests a high-order experiential acceleration in the rate of information gaining. Thus we take note of how ████████ really little we know and alert ourselves to the probability that the next decade will disclose what in effect must seem an entirely <u>new Universe</u>-- so much more of the cosmically eternal a priori mystery will have been vouchsafed to us."</p> <p>- Cite HEARTBEATS AND ILLION, World Mag. p.23, 27 Mar'73</p>	<p>RbF DEFINITIONS</p> <p><u>New York:</u></p> <p>"New York is a continual evolutionary process of evacuations, demolitions, removals, temporarily vacant lots, new installations and repeat. This process is identical in principle to the annual rotation of crops in farm acreage-- plowing, planting the new seed, harvesting, plowing under, and putting in another type of crop....</p> <p>"Most people think of the building operations blocking New York's streets as temporary annoyances, soon to disappear in a static peace. They still think of permanence as normal, a hangover from the Newtonian view of the Universe. But those who have lived in and with New York since the beginning of the century have literally experienced living with Einsteinian relativity."</p> <p>(Original citation & context at <u>New York City</u>, (1)(2), 1964)</p> <p>- RBF quoted by Alvin Toffler in FUTURE SHOCK, p.51, 1970</p>
<p>RBF DEFINITIONS</p> <p><u>New York City:</u></p> <p>"The appropriate metaphor for New York City is that of a ship. All of the equipment and the data are there. The ship is not sunk. The pumps all work.</p> <p>"The people of New York could take one of several routes:</p> <ul style="list-style-type: none"> -- U.S. Army; they could turn it over to the Army to run it, but this would be fascist. -- Communist; to go communist would be equally unthinkable. -- Unions; they could accept the leadership of the unions. <p>"The union heads with all their talent and leadership could decide to operate the city. The confrontation of the unions has not been so much with the city itself as it has been with the banks, the bankers, and their paper money game. The union leaders should issue their own paper money scrip and enlist the support of all the other union leaders in the country. It is a game of paper money; they might as well play their own."</p> <p>- Cite RBF via telephone from Djakarta to EJA; revised statement for N.Y. Times, 31 Jul'75</p>	<p>RbF DEFINITIONS</p> <p><u>New York City:</u> (1)</p> <p>"Viewed from a ship entering New York harbor or from a plane coming in over the city, New York appears as an enormous complex of hard, permanent towers--crystalline asparagus. But these 'permanents' are as impermanent as women's hairdos. New York City's permanent-wave architecture is in fact a progressively rotating dynamic wave system. The last half-century has seen three successive replacements of would-be-permanent New York City buildings.</p> <p>"New York is a continual evolutionary process of evacuations, demolitions, removals, temporarily vacant lots, new installations, and repeat. This process is identical in principle to the annual rotation of crops in farm acreage--plowing, planting the new seed, harvesting, plowing under, and putting in another type of crop.</p> <p>"New York's dynamic pattern of continually accelerating transformation was entirely unpremeditated by its static-minded, permanence-intending designers and their patrons. Up to the time when its earliest skyscrapers were built (the first was the Tower Building at 50 Broadway, completed in 1889 and demolished in 1914), its stone buildings, fine"</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>
<p>RBF DEFINITIONS</p> <p><u>New York City:</u></p> <p>"The city physically will stay there, but New York is obsolete. Factories, harbor, warehouses-- all these have gone elsewhere. They only way to make New York work would be if the people decided to make it work. If everybody said, 'My life is involved, my family is involved,' and started to work cooperatively, it could be made to work. I don't know any other way."</p> <p>*Cite RBF in reply to query from Israel Shenker about the economic crisis of New York: N.Y. Times, p.31, 30 Jul'75</p>	<p>RbF DEFINITIONS</p> <p><u>New York City:</u> (2)</p> <p>"Residences, banks, and commercial structures were thought of by architects, owners, and the public as 'permanent' monuments of their conceiver's era. And the building arts being the most laggard of all men's activities, this conception of buildings as 'permanent' still persists in most men's minds. Most people look upon the building operations blocking New York's streets--the piles of sand and brick, the huge cranes fishing steel girders from curb-parked trucks--as temporary annoyances, soon to disappear in a static peace. They still think of permanence as normal, a hangover from the Newtonian view of the Universe. But those who have lived in and with New York since the beginning of this century have literally experienced living with Einsteinian relativity.</p> <p>"Said Newton, in the first phase of his first law of motion, 'A body persists in a state of rest' (and then as an afterthought, 'or in a line of motion') except as it is affected by another body. This Newtonian norm of 'at rest' which means without change, has long been the base line of all our economic charts. From this point of view all events and"</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>
<p>RBF DEFINITIONS</p> <p><u>New York City:</u></p> <p>"When I was young the architects and their patrons assumed, and in fact hoped, that their great buildings would be permanent contributions to the world scene. Though the architects... thought of their buildings in this way, I have seen three separate sets of permanent buildings in New York City pulled down to be replaced by another set of assumedly permanent buildings, with the whole unexpected evolutionary displacement phenomenon repeating itself again. I have, in effect, seen three permanent waves of architecture forsaken and replaced by other permanent waves as the waves flowed northward on Manhattan Island. In the last 15 years I have seen two- and three-story-high cities of the world transformed into identical-building type skyscraper cities."</p> <p>- Cite RBF Foreword to "Great Architecture of the World," 13 Mar'75</p>	<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (3)</p> <p>"their growth curves are abnormal. On such charts the curves of industrial and economic performance rise abnormally above, or more normally fall back to, or parallel with, the base-line norm of 'no change.' The would-be conservators of peace and of economic health have throughout history sought to 'iron out' the abnormal humps, to 'return to normal,' to 'no change.</p> <p>"Einstein's relativity theory, evolved early in the century, made the static verities of Newtonian mechanics untenable. But it took almost a half-century for the dynamics of Einstein's relativity to emerge in the daily papers as the atomic bomb, followed by a pattern of dynamic events clearly demonstrating that accelerating change is normal--just as normal as the human appetite for news of the accelerating accomplishment of breakthroughs that swiftly expand man's domain in the Universe.</p> <p>"To the Newtonian conservative, the deliberately accelerated obsolescence of structures and equipment, such as we see everywhere about us in contemporary New York, constitutes waste. To the Einsteinian conservative, obsolete structures and equipment are a new mine of selectively concentrated chemical elements--a fundamental resource of the industrial"</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (4)</p> <p>"commonwealth. The materials from this mine are the means of realizing ever more advanced design out of our improving scientific potentials. As a consequence, metal scrap and plastic scrap now recirculate increasingly.</p> <p>"New inventions increase our productive capacity per man-hour and per pound of resource--our 'performance capability', as it is called. Every time we mine obsolete structures or equipment for metal or plastic to use in improved designs, we get increased performance out of the same tonnage of fundamental chemical resources. Which suggests, for instance, that we should take all the obsolete two-ton automobiles off the road, melt them up, and produce from the resulting scrap twice as many one-ton automobiles, each of higher capability than the former cars in terms of performance per passenger and of fuel gallons per safely accomplished higher-velocity mile.</p> <p>"All the world's great cities that grew up prior to New York were products of the Newtonian 'no change' norms. Their romance lies in their preoccupation with man's historical-bastioned past. What makes New York City 'the most important something' in all history is that long before the atomic"</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. GUIDEBOOK, 1964</p>	<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (8)</p> <p>"Only the old-time New Yorkers can know the great transforming dynamics and, more importantly, the city's myriad of rich abstract resources. Because pure abstractions such as love, hate, happiness, and inspiration are as invisible as they are nonmerchandiseable, all the real meaning of New York is both invisible and nonmarketed. The lucky few millions who are old-time New Yorkers usually love New York passionately for they know not why specifically.</p> <p>"While the statistical voices warn us that the world population threatens to crowd itself off the Earth, it is comforting to discover that New York City's buildings could contain the whole population of the Earth with no more crowding than that she experienced at a cocktail party--not room for anyone to lie down but all under cover. New York is so knit together with underground wires, tubes, cables, and pipes--that in effect Manhattan Island could be lifted in one piece and stood upon end, its roadways and tunnels acting as its supporting columns with Battery Park on top and Harlem as its base. In such a position its subways would become elevators and its elevators subway shuttles."</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>
<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (5)</p> <p>"bomb hit the front page, this city had become the first Einsteinian reality. Its romance is its living manifestation of history continually in the making. Its streets and districts gradually grow, swell, transform, and disappear altogether. In the 'gay '90s' New York's great exhibition and sports building on Madison Square was known as Madison Square Garden. In 1924, the owners of that building built a new modern Madison Square Garden 1 1/2 miles north of Madison Square on Eighth Avenue. New York's Bowery, now the deadbeat's lingering threshold to death, was once the most splendid of growing New York's districts and boasted its Bowery Savings Bank. The Bowery Savings Bank now has its main office five miles north of the Bowery on East 42nd Street. The Madison Avenue of the 'gay '90s' meant the area between Madison Square and 42nd Street, dominated by the J. P. Morgan residence at 38th and Madison. Madison Avenue of the first half of the 20th century referred to shopping section from 42nd Street to 72nd Street, dominated at its base by Brooks Brothers, the Biltmore Hotel, and the Roosevelt Hotel. So attractive did the Madison Avenue vantage appear to so many corporate newcomers that they, in effect, have pulled down all the old"</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>	<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (9)</p> <p>"Its street level is not the bottom level of New York. Legal statutes adopted by early Knickerbocker burghers required that when the utility companies dug up its streets and inserted pipes, cables, and subways, they should thereafter put all the same earth back where they found it and the city would then resurface it. This the public utilities have done to the letter. The earth tucked back into the street is no more the Earth's natural top crust than is the earth tucked into the flower pots high above in Manhattan's skyscraper apartments. The concrete and steel intrusions, below the streets and buildings, have become so multitudinous and penetrate at so many levels that they reach hundreds of feet below the theoretical surface. Like an iceberg, structural and mechanical Manhattan is now chiefly below the surface.</p> <p>"Old-time New Yorkers remember the unique commercial districts--the leather district around Gold Street; the tea and spice districts along Water, Front, and Pearl Streets; the cotton and linen district on White Street; the machinery exchanges of Lafayette Street; and the great Gansevoort, Washington, and Manhattan market districts. These districts have been almost wholly diffused into uptown invisible districts. The real"</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>
<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (6)</p> <p>"buildings and thus terminated all the old enterprises that constituted Madison Avenue. They have built a new canyon in the Universe, whose preoccupation with the abstract function of shaping men's conditionable reflexes, through advertising, has caused the words 'Madison Avenue' to hold an entirely new meaning--having nothing to do with a physical avenue itself, but with their 'corporate image'--the collective archpropagandist, proselytizer, inducer, and seducer.</p> <p>"Propaganda, like most of New York's manufactured products, has little weight or physical substance. Pittsburgh produces steel; Chicago warehouses wheat, steel, and cattle. New York manufactures pattern abstractions. London's stock market, the Paris Bourse, and other world exchanges long predate New York in the exchange of abstract enterprise equities, but New York today centralizes all the world's anticipatory discounting of forwardly reckonable values.</p> <p>"The United Nations' world headquarters came naturally to New York as the most concentrated pattern-processing and exchanging center. New York is today the world's chief publishing"</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>	<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (10)</p> <p>"The real long-time New Yorker knows, however, that nothing has gone from New York and that its interests have multiplied a thousandfold. The unique vortexes continually transform and interchange.</p> <p>"Old-world church and cathedral spires were originally conceived and built to reach high above the surrounding houses and stores. In New York one can look down from on high into a deep valley wherein minuscule spires reach up from the bottom like fine jewelry spicules, for, unlike business enterprises, the churches have usually been unable to move and have been swallowed by the commercial avalanche, being no longer the centers of their parish dwellings. But their spires as yet inspire when, in our thoughts, our eyes wander down into those New York depths wherein approximately all that is physically left of yesterday is wedded with the physical of today, and we remember that we are as yet 'quick' and not dead, and that yesterday only the dead were normal, and that New York City is now being synchronized with the dynamism of the quick whose norm is Einstein's c^2, that is 186,000 times 186,000 miles per second, the normal rate at which we see."</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>
<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (7)</p> <p>"headquarters, its leading drama and art market. One Oklahoma stockyard, last year, collected and sent forward to the slaughter house a nose-to-tail chain of cattle 550 miles long. New York's two million typewriters and calculating machines last years produced rows of letters and figures long enough to run 20 ribbons between the planets Earth and Venus when these two are in closest proximity.</p> <p>"The ideas in which New York traffics emanate from all around the Earth. It is the world's greatest import-export idea exchange. New York is not an idea factory, nor an idea mine, nor an idea garden, but it is the world's point of highest velocity in idea exchanging. As such, New York is the world's greatest traffic center in hopes and fears, valid or invalid.</p> <p>"There are but relatively few native New Yorkers. Its population is transient. The average residence is three years. Visitors to New York from around the world frequently assert antipathy to New York's coldness and bigness. They have not seen the New York we have been describing. They have seen one frame of a moving picture. It looks static."</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>	<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (11)</p> <p>"I lift up mine eyes unto the hills from whence cometh my help"--possibly because of all our faculties, it is only our eyes that can apprehend the distant presence of the high hills--a presence of which we are informed by radiation from the Sun, reflected from the hills to our eyes at 186,000 miles per second, all of which seems so instantaneous that we mistakenly say that we 'lift our eyes.' And we know that no man--no mere human being--invented that velocity, nor its reliable regularity throughout the full spectrum range of all electromagnetic wave phenomena, nor the regularity of its ultra-high-frequency inter-trafficking.</p> <p>"Men of yesterday looked outwardly self-helplessly to the macrocosm, praying for miraculous salvation; today they look inwardly self-disciplinedly to the nuclear microcosm for vast sources of reliable physical power. What men thought they understood yesterday of their local experiences seemed regular, orderly, and logical; what they did not comprehend, extending outward to the macrocosm and inward to the microcosm, they thought of as turbulent, random, and chaotic."</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>New York City:</u> (12)</p> <p>"Men of the Einstein Age are discovering the universal orderliness of constant, comprehensive transformation, utterly transcendental in the exquisite and magnificent orderliness of its wavelength and frequency when compared to the crude, disorderly, conscious thinking and articulation of mere humans.</p> <p>"And as the bees intent upon their honey-commerce are utterly unaware of the pollination-function of their humbling tails, which inadvertently and unbeknownst to the bees service the organization of tomorrow's flowers and honey sources, so are the little, local real-estate manipulators and separate venture builders who redot the New York City map utterly unaware of their part in the--only retrospectively scannable-- comprehensive orderliness of New York City's transformative growth. That growth is an invisible function of all men's experience of all history, translated now into the world-surrounding, dynamically functioning industrial network-system in which New York City is, for the moment, the most radiant communication-relaying center on Planet Earth."</p> <p>- Cite WAVE TRANSFORMATION OF THE CITY, N.Y. Guidebook, 1964</p>	<p><u>Niagara Falls:</u></p> <p>See Nature Has No Separate Departments, 1965</p>
<p>RBF DEFINITIONS</p> <p><u>New York City:</u></p> <p>"New York City! A one-piece dormitory, work, and play shop 300 square miles in the horizontal plane and 30 to 1,000 feet in thickness."</p> <p>- Cite NINE CHAINS TO THE MOON, p.2, 1938</p>	<p>RBF DEFINITIONS</p> <p><u>Nice:</u></p> <p>"Nice means comprehensively adequate and of incisive fit."</p> <p>- Cite RBF to Ron Goodfellow; Philadelphia, PA: 29 Jul'76</p>
<p><u>New York City:</u> (1)</p> <p>See Population Density: Manhattan Cocktail Party Population Density: Manhattan Jet Dispersal University: New York City as a Vast University Dome Over Manhattan</p>	<p><u>Night:</u></p> <p>See Nothingness of Night Rotation of Night as a Shadow Undimensional Night</p>
<p><u>New York City:</u> (2)</p> <p>See City, (B); (3) City as Center of Abstract Intercourse (1)(2) Everybody's Business, (1) North-south Mobility of World Man, (1) Fortress Mentality, 12 May'77</p>	<p>RBF DEFINITIONS</p> <p><u>Nine:</u></p> <p>"Each prime structural system in Universe has nine separate and unique states of existence-- four positive, four negative, plus one schematic unfolded nothingness state... the same schematic 'game' set-up as that of physics' quantum mechanics with four positive and four negative quanta as we go from a central nothingness equilibrium to first one, then two, then three, then four, high-frequency, regenerated, alternate, equi-integrity, tetrahedral quanta."</p> <p>- Citation & context at Geometrical Functions of Nine, (3)(4), 16 May'75</p>

Synergetics Dictionary

Nine Chains to the Moon:

"Remember the original subtitle of 'Nine Chains to the Moon' was 'an Adventure Story of Thought.' Not very different from the subtitle of 'Synergetics.'"

- Cite RBF to EJA, 28 May '75

RBF DEFINITIONS

Nine: None: Zero:

"There is an octave pattern in every system and every time we come to nine-- whether it be 3 + 6, 2 + 7, or 8 + 1-- it is zero. Waves are octave and one reason they do not interfere with each other is because of the zero...."

- Cite SYNERGETICS, "Numerology," pp. 11-12. Oct. '71.

RBF DEFINITIONS

Nine Chains to the Moon:

"The title Nine Chains to the Moon was chosen to encourage and stimulate the broadest attitude toward thought. Simultaneously, it emphasizes the littleness of our Universe from the mind viewpoint. A statistical cartoon would show that if, in imagination, all the people of the world were to stand upon one another's shoulders, they would make nine complete chains between the earth and the moon. If it is not so far to the Moon, then it is not so far to the limits-- whatever, whenever, and wherever they may be."

"Limits are what we have feared. So much has been done to make us conscious of our infinite physical smallness that the time has come to dare to include the complete universe in our rationalizing."

- Citation and context at Nationalization Sequence (5), 1938

RBF DEFINITIONS

Nine = None = Zero:

"Nine is zero
 Nine is none
 None (Lat.) is none
 N-one = not one = none."

- Cite RBF holograph at Table of Indigs, 2 Mar '73

Nine Chains to the Moon:

(1)

See Continuous Man

RBF DEFINITIONS

Nine = None = Zero:

"Indigs can be played only with one through nine. Nine is zero = nein = none = nothing. Zero effect."

"'Casting out nines,' means working only with the energy left over after the nines have been taken out."

- Cite RBF to EJA, Ches H. Wolf, Fairfield, Conn., 18 Jun '71

Nine Chains to the Moon:

(2)

See Local vs. Comprehensive (1)

Nine: Nineness:

(1)

See Eightness: 'Begeted' Eightness
 Interweave behavior of Number
 Nucleus = Mine = Nothing
 Octantation
 Zero-ninness
 Geometrical Function of Nine

Synergetics Dictionary

<p><u>Nine</u>: <u>Nineness</u>: (2)</p> <p>See Cube: Volume-3 Cube, 16 Dec'73 Indig, 3 Mar'73 Synergetic Constant, Jul'57 Zero Wave, 9 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Ninety Degreeeness</u>:</p> <p>"Gradually humanity as a whole is beginning to realize that it is not just a matter of idealistic 'unselfishness' but a synergetic effect of all the great generalized principles governing the Universe that the Universe and its evolving transformations are cooperative only in 90 degrees, or orbitally interlinking, directions; that is, circumferentially. 'I go for my honey' is linear, specialized, disintegrative. Ideologies, sovereign states, corporations, bureaucracies, bureaucrats-- all are linearly programmed, biased, and competitive."</p> <p>- Citation and context at <u>Ecology Sequence</u> (E)(F), 5 Jun'73</p>
<p><u>Nineteen Twenty-seven</u>: 1927:</p> <p>See Fuller, R.B.: Crisis of 1927</p>	<p><u>Ninety Degreeeness vs. 180-degreeeness</u>:</p> <p>See Critical Proximity, May'71</p>
<p><u>Nineteen Seventy-two</u>: 1972: <u>History's Most Critical Year</u>:</p> <p>See Economic Accounting System: Human Life-hour Production, (1) Gross World Product Sequence, (2)(3)</p>	<p><u>Ninety Degreeeness</u>: (1)</p> <p>See Charts: We Need Only Rotate Our Charts 90 Degrees Normal to Universe Rectilinear Right Angle Trigonometric Limit XYZ Coordinate System Precession & Degrees of Freedom Precession of Side Effects & Primary Effects Primary vs. Side Effects Sixty Degreeeness vs. Ninety Degreeeness</p>
<p><u>Nineteen</u>:</p> <p>See Closest Packing of Spheres, 29 May'72 Tetrahedroning, (2)(3) Twenty, (1)</p>	<p><u>Ninety Degreeeness</u>: (2)</p> <p>See Distaff, 22 Jul'71 Ecology Sequence (H)(I); (E)(F)* Octahedron: One-eighth Octahedron (2) Spherical Octahedron, Aug'72; 29 Nov'72 Precession (a)(b) Compression, 19 Jun'71 Triacntrahedron, 31 Jul'77</p>

Synergetics Dictionary

RBF DEFINITIONS

Ninety-two Elements:

"...The chemical elements are not things, they are behaviors...."

- Citation & context at Communication, 21 Jun'77

RBF DEFINITIONS

Ninety-Two Elements:

"Each of the chemical elements are pattern integrities formed by their self-knotting, inwardly processing, periodically synchronized self-interferences."

- Citation at Pattern Integrity, 25 Aug'71

~~- Cite RBF Insert Synergetics Draft Sec. 416.4, Res. Island, 25 August 1971~~

RBF DEFINITIONS

Ninety-two Elements:

"Nature does not have any pollutants. She has only chemical elements. The eternally regenerative Universe depends very heavily on the very valuable total inventory of those chemical elements. They are not things; they are behaviors, all the reciprocal behaviors of the regenerative Universe having their innate frequencies."

- Tape #2, transcript p.5; RBF to W. Wolf, 15 Jun'74

RBF DEFINITIONS

Ninety-Two Elements:

"Unique pattern evolution constitutes elementality. What is unique about each of the 92 self-regenerative chemical elements is their nonrepetitive pattern evolution which terminates with the third layer of 92."

- Citation at Elementality, 25 Aug'71

~~- Cite RBF Insert Synergetics Draft, Sec 416.4, Res. Island, 25 August 1971~~

RBF DEFINITIONS

Ninety-Two Elements:

"All the fundamental nuclear simplexes of the 92 inherently self-regenerative physical Universe elements are a priori to human mind formulation and invention and are only discoverable by mind."

- Citation and context at Design: Apriori Design vs. Deliberate Design, 13 Mar'73

RBF DEFINITIONS

Ninety-Two Elements:

"... Planets, stars, galaxies, and their contained behaviors such as the periodic regularities of the chemical elements are all design-accomplishments."

- Citation and context at Design (1), 9 Apr'71

RBF DEFINITIONS

Ninety-Two Elements:

"The 92 regenerative chemical elements themselves are only non-dissipatable and are only re-circulatable."

- Cite World Game, 29 Jun'72

RBF DEFINITIONS

Ninety-Two Elements:

"...The 92 regenerative chemical elements of associative energy or of the various radiations of energy in its disassociative phase."

- Citation and context at Optical Motion Spectrum (1)(2), 4 Mar'69

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements:</u></p> <p>"What is unique about each of the 92 regenerative chemical elements is their unique behavioral-- or <u>energetical</u>-- characteristics."</p> <p style="text-align: right;">* - Cite HOW TO MAINTAIN I&E AS A SUCCESS, Utopia or Oblivion, p. 216, 18 Mar'65</p>	<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements:</u></p> <p>"The original chaotic disposition of (the) ninety-two regenerative chemical elements is gradually being converted by the industrial principle to orderly separation and systematic distribution over the face of earth in structural or mechanical arrangements of active or potential leverage-augmentation."</p> <p>"... the aspect of energy as <u>mass</u>, inventoried as the ninety-two regenerative chemical elements which constitute earth and its enclosing film of alternating liquid-gaseous sequence."</p> <p style="text-align: right;">- Cite COMPREHENSIVE DESIGNING (I&I), P. 177, 1 Jun'49 Date undetermined</p>
<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements:</u></p> <p>"Each of the chemical elements are pattern integrities in the form of local self-interferences."</p> <p style="text-align: right;">- Cite OREGON Lecture #5 - p. 164, 9 Jul '62</p>	<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements:</u></p> <p>"Unique behavior constitutes elementality."</p> <p style="text-align: right;">- Cite I&I, p. 187 "Design For Survival - Plus" Date undetermined</p> <p>- Citation & context at <u>Science</u> (2), Jan'49</p>
<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements:</u></p> <p>"No longer do I want to talk about the chemical elements as things, but as pattern integrities. Each one is a unique pattern integrity and each one of them is in a sense a form of knots. So we get where there are chemical compounds and the knots tend to be interlinkable and they will catch on one another. This one is holding together all right, but this ball of twine and this ball of twine, suddenly one weaves into the other every so often and associates."</p> <p style="text-align: right;">- Cite Oregon Lecture #5 - pp. 164-165, 9 Jul '62</p>	<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements:</u></p> <p>"All the first ninety-two chemical elements are the finitely comprehensive set of purely abstract 'physical' principles governing all the fundamental cases of dynamically symmetrical vectorial geometries and their systematically self-knotting precessionally regenerative in-shunting events."</p> <p style="text-align: right;">- Cite Comprehensive Anticipatory Design Science (Ltr. to Jonas Salk.) - Cite HOW TO MAINTAIN SECOND HAND GOD, p. 103 9 Apr'40</p>
<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements:</u></p> <p>"The 92 regenerative chemical elements are the basic inventory of Cosmic Absolutes."</p> <p style="text-align: center;"><u>[OF PRIME ELEMENTS]</u></p> <p>"The family consists of 92 unique sets from 1 to 92 electron-proton counts inclusive, and none other."</p> <p>"Those subsequently isolated elements beyond 92 constitute <u>super atomics</u>; they are the nonselfregenerative chemical elements of negative universe."</p> <div style="background-color: black; width: 100px; height: 15px; margin: 10px auto;"></div> <p style="text-align: right;">- Cite MUSIC Pp 45-50, 10 Dec'64</p>	<p><u>Ninety-two Elements as Cargoes of Energy:</u></p> <p style="text-align: center;">See Wealth, 1947</p>

Synergetics Dictionary

RBF DEFINITIONS

Ninety-Two Elements: Chart of Rate of Acquisition: (1)

"I have sought fundamental information on the experiences of man on earth which might govern the shape of all developments men are experiencing. Charts of inventions, for example, are not satisfactory as the list is open-ended and is difficult to assess in terms of the relative importance of specific inventions. The significant area of information is the rate at which scientists have successively isolated the chemical elements.

"This is the most important pattern of discovery with which man deals, embracing, as it does, all physical phenomena. The rate at which man found chemical elements seems to be the key controlling the development of the application of science to technology, and following from this, the application and effect of that technology on economics and, ultimately, the effect of the new technology on society itself."

"The chart... 'Profile of the Industrial Revolution,' begins"
 - Cite THE YEAR 2000, San Jose State College, Mar'66
 - Cite THE YEAR 2000, reprinted in AD, Feb'67

RBF DEFINITIONS

Ninety-Two Elements: Chart of Rate of Acquisition: (5)

"Alloys. Most of the important rates and patterns of change cannot be apprehended by him directly in a sensorial manner. Not only does man have a very narrow range of tunability in the electromagnetic spectrum where he can actually see, but he also has a very narrow spectrum of motion apprehension. He cannot see the hands of the clock moving, or the stars, or any of the atoms in motion."

- Cite THE YEAR 2000 reprinted in AD, Feb'67

RBF DEFINITIONS

Ninety Two Elements: Chart of Rate of Acquisition: (2)

"begins with the year A.D. 1200 going up to A.D. 2000. We begin with a list of nine elements: carbon, lead, tin, mercury, silver, copper, sulphur, gold, and iron, which were known to man at the opening of our history. We do not know when they were first isolated or knowingly used. The first known isolation of a chemical element is arsenic, in 1200. Following this, there is a 200-year gap and we come to antimony; another 200-year gap and we come to phosphorus. Then the gap narrows to 75 years and we have cobalt. From here on we average an isolation of an element every two years. It is an extraordinary period in history that the rate begins to accelerate.

"If you check the date 1730, not long before the American Revolution, you will notice that there are some separate shoulders or plateaus, appearing on the chart. Those shoulders are slowdowns when we have major wars-- the American Revolution, various civil wars, and World War I. They show that pure science does not prosper at the time of war-- which is contrary to all popular notions. Scientists are made to apply science in wartime, rather than look for fundamental information.

"We can also see that in 1932, which was thought to be the"
 - Cite THE YEAR 2000, reprinted in AD, Feb'67

RBF DEFINITIONS

Ninety-two Elements: Chart of Rate of Acquisition:

"This comprehensive curve of the chronological rate of acquisition of knowledge concerning the pure science absolutes separated out from all other events of history may be inspected as the basic means of prediction of inherent technical and social events-- immediate or somewhat distant."

- Citation and context at Science, 1947

RBF DEFINITIONS

Ninety-Two Elements: Chart of Rate of Acquisition: (3)

"depth of the depression, man made his 92nd isolation of a chemical element. This completed the element table representing the full family now mastered by man-- in the sense of his ability to repeat element isolation and to rearrange elements, as fundamental ingredients of physical environment, in preferred patterns of use. From this point on we may notice something strange. Previous to completion of the table, element isolation occurred irregularly-- for example, element number 19 would be the 43rd element isolated; the 45th isolation would number 30, etc. With the post-uraniums the isolations show an absolute regularity of increase-- they come in by number. Man begins to control consciously the rate of development of his capability.

"We must note this in reviewing the contiguous developments in environment control (as shown at the top of the chart). Just as man is able to go into cold climates by putting on fur skins, or into hot by taking off clothes, he enters more hospitable environments by having more control devices. The development of these devices is a fundamental measure of man's degree of advantage over his environment. The first time, to our knowledge, that he goes around the world in an invention was, as"

- Cite THE YEAR 2000 reprinted in AD, Feb'67

Ninety-two Elements: Chart of Rate of Acquisition: (1)

See Industrialization: Curve Of
 Industrial Revolution: Profile Of

RBF DEFINITIONS

Ninety-Two Elements: Chart of Rate of Acquisition: (4)

"shown on the chart, in a wooden sailing ship. It comes after the second isolation. Then there is a gap of 350 years and he now goes around the world in a steel steamship. This is an entirely new magnitude of control, no longer dependent on the wind. Upon this, there swiftly follows the world journey in an aluminum airplane, then in an exotic metals rocket. There is a very great contraction in time between these developments. The wooden ship takes two years to circumnavigate the Earth; the steamship, two months, the airplane two days, and the orbiting satellite just over an hour. We have at least three accelerations of accelerating accelerations involved here.

"The consequence of what we have considered then, in relation to our charting is that the next point for a significant new chapter would be around 1975, nine years from now. What that will be we can only guess at-- sending ourselves around the world by radio?

"The key realization is the degree of acceleration of change, and that better than 99 percent of all important technologies affecting such change are invisible. Man cannot see what is going on. He cannot 'see' the chemistries; he cannot see the"

- Cite THE YEAR 2000 reprinted in AD, Feb'67

Ninety-two Elements: Chart of Rate of Acquisition: (2)

See Science, 1947
 Science: Pure & Applied, 8 Sep'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements: Periodic Regularities of:</u></p> <p>"The omni-interorderliness, per se, characterizing the chemical elements' component periodicities, as well as the electromagnetic wavelength and frequency regularities of the 92 regenerative chemical elements, which hold true-- and exploratorily reliable-- throughout the macro and micro-cosmic behaviors of energy-- as radiation or matter-- is consistent throughout the thus-far explored multibillion light-year ranges of the astrophysical, symphonic scenario Universe."</p> <p style="text-align: right;">- Cite RBF Ltr. to Prime Minister Indira Gandhi, 4 Jan '70, p.1.</p>	<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements: Periodic Regularities Of:</u> (4)</p> <p>"The originally unknown Uniquely recombining Synergetic behaviors-- in structural groupings-- Of those ninety-two regenerative elements, Thereby attaining utterly surprising Structural, mechanical, Chemical and electromagnetic characteristics, which have enormously increased The relative advantage Of ever-increasing numbers of humans To cope with the challenges of life By accomplishing ever more difficult tasks, Previously considered impossible to do; With ever less Time, weight and energy investments, Augmented exponentially By ever-greater investment of unweighables Of the metaphysical resources-- Of hours of thoughtful reconsiderations, Anticipations, conceptualising, Searchings and researchings Calculations and experiments."</p> <p style="text-align: right;">- Cite INTUITION, p.20, May '72</p>
<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements: Periodic Regularities Of:</u> (1)</p> <p>(The generalized laws first disclosed by Avogadro, compounded with Boyle's chemical law, to informedly inspire Mendeleev...)</p> <p>"To differentiate out and predict The existence of a closed family Of ninety-two Regenerative chemical elements. These elements, when found, They said would display Such-and-such Unique and orderly characteristics, And they mathematically identified in advance The respective constituent quantities Of the as yet undiscovered discrete characteristics Of the as yet undiscovered elements. All the members of this interregenerative Information relay team Did not know one another personally. Their accumulatively inspired prediction occurred At the historical moment When, a century ago-- Only fifty-two</p> <p style="text-align: right;">- Cite INTUITION, p.18, May '72</p>	<p><u>Ninety-two Elements: Periodic Regularities Of:</u> (1)</p> <p style="text-align: center;">See Periodicity</p>
<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements: Periodic Regularities Of:</u> (2)</p> <p>"Of the ninety-two Of those heretofore unexpected chemical elements Had as yet been discovered And physically isolated By humans on Earth-- . . .</p> <p>Mendeleev, attempting scientifically To find an order In which to set The first fifty-two chemical elements Inadvertently uncovered A previously unknown System of regularities Common to all fifty-two, Which, if their implied generalization Proved in due course To hold true, Would require the presence in Universe Of the additional unknown forty To fill in the membership vacancies Occurring in the revealed periodic behaviors Of the already discovered chemical elements.</p> <p style="text-align: right;">- Cite INTUITION, pp.18-19, May '72</p>	<p><u>Ninety-two Elements: Periodic Regularities Of:</u> (2)</p> <p style="text-align: center;">See Resonance, 18 Jun'71 Individuality & Degrees of Freedom, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Elements: Periodic Regularities Of:</u> (3)</p> <p>"Since Mendeleev's prediction, Every few years-- One by one-- All ninety-two have been identified As being present in various abundances In all the known stars of the heavens, While ninety-one of them Have been isolated by scientists Somewhere on planet Earth And all of them have the exact characteristics Predicted by Mendeleev and his colleagues.</p> <p>"And all the foregoing Subjective harvesting-- Accomplished by individuals Bound together By naught other than intellectual integrity-- Has enabled still other Remotely exploring Educatively inspired individuals First to discover Then inventively to employ</p> <p style="text-align: right;">- Cite INTUITION, pp.19-20, May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Ninety-Two Tendencies to Self-impoundment of Energy:</u></p> <p>"... As we come to explore for the fundamental principles of interpotentials and interactions called atoms, we find that, despite the astronomical number of aspects and events, only a few principles of behavior pervade the whole of Universe as, for instance, 92 tendencies to self-impoundment of energy;..."</p> <p style="text-align: right;">- Citation and context at Reciprocity (1), May'49</p>

Synergetics Dictionary

RBF DEFINITIONS

Ninety-two Elements: ^{Four} Unique Frequencies:

"This is just what Einstein was working on in his $E = Mc^2$ trying to explain a given mass and the way it interfered with itself to give itself this local uniqueness of relative concentration, because these precessions can give you angular changes and it gets tighter and tighter, which will give you unique frequencies and every one of our chemical elements has these unique frequencies and you can actually pick them out of the electromagnetic spectrum by a plurality of usually four unique frequencies characterizing each of the elements."

- Citation & context at Matter, 9 Jul'62

- Cite Oregon Lectures #5, pp. 164-165, 9 Jul'62

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Ninety-two Elements:

(2A)

See A Priori, 19 Oct'70
 Complex & Simplex, May'72
 Cosmic, 3 Oct'72
 Design Science, 29 Jun'72
 Design (4)*
 Design: A Priori vs. Deliberate, 13 Mar'73*
 Economic Accounting System (A)(D)
 Elementality, 25 Aug'71*
 Eternal Designing Capability (3)
 Frequency, 1970
 Industrialization (2)
 Industrial Principle, 1 Jun'49*
 Intereffects, 25 Sep'73
 Integer, 15 Oct'72
 Invisible Colors, 4 Mar'69
 Meshing & Nonmeshing, 1970
 Octahedron: Nuclear Asymmetric, 1 Apr'73
 Optical Motion Spectrum (1)(2)*

Ninety-two Elements: Four Unique Frequencies: (1)

See Number: Cosmically Absolute Numbers
 Family of Unique Frequencies

Ninety-two Elements: (2B)

Human Beings & Complex Universe, (6)
 See Pattern Integrity (A); 25 Aug'71*
 Pollution, 24 Feb'72
 Pollution Control (2)
 Railroad Tracks: Great Circle Energy Tracks (B)
 Relative Abundance, 9 Jul'62
 Reciprocity (2)
 Science (2)*
 Universe, 4 Jan'70; 9 Jul'62; 15 Dec'71
 Wealth, 1947
 World Game, 29 Jun'72*
 Scrap Sorting & Mongering (1)
 Individual Universes, (1)
 Single Integer Differentials, (1)
 Coupler, 27 Jan'75
 Orbital Escape from Critical Proximity, (4)
 Geometrical Function of Nine, (7)
 Darwin: Evolution May be Going the Other Way, 5 Jun'75
 Closed System, 10 Nov'75
 Building Industry, (11)
 Kite as Model for Quark, 3 May'77
 Communication, 21 Jun'77*

Ninety-two Elements: Unique Frequencies: (2)

See Integer, 15 Oct'72
 Physics: Difference Between Physics and Chemistry, 22 Jun'72
 Railroad Tracks: Great-circle Energy Tracks on the Surface of a Sphere (A)(B)
 Reality, 14 Oct'69
 Matter, 9 Jul'62*
 Meshing & Nonmeshing, 1970; 19 Oct'70
 Domains of Actions, 21 Dec'71
 Sweepout: Spherical Sweepout (1)(2)
 Chess: Game of Universe, 7 Oct'71
 Orbital Escape from Critical Proximity, (3)
 Alloys, 30 May'75
 Geometrical Function of Nine, (7)
 Cube & VE as Wave Propagating Model, 23 Feb'72
 Electromagnetic Spectrum, 26 Jan'76
 Heard & Unheard Resonances, 17 Jan'75
 Quantum Mechanics: Minimum Geometrical Fourness, (1)

Ninety-eight Point Six:

See Degrees: 98.6

Ninety-two Elements: (1)

See Atom
 Chemical Phenomenon
 Cosmic Absolutes
 Elementality
 Man: Relative Abundance of Chemical Elements in Man and Universe
 Minimum Set of Patterns
 Periodic Atomics
 Periodic Table and Closest Packing
 Relative Abundance
 Superatomics
 Energy Involvement of 92 Elements
 Family of Chemical Elements
 Isotopes

Ninrad:

See Darwin: Evolution May be Going the Other Way

Synergetics Dictionary

<p><u>Nixon: Richard M:</u></p> <p>See The One: Waterhate, 13 May'73 United States: Most Difficult Sovereignty to Break Up, (2) Building Industry, (6)</p>	<p>RBF DEFINITIONS</p> <p><u>No Absolute Division Into Parts:</u></p> <p>"There may be no absolute division of energetic Universe into isolated or noncommunicable parts..."</p> <p style="text-align: right;">- Citation & context at <u>Sphere Integrity</u>: <u>There Is No</u>, 1962</p>
<p><u>No Absolute Debt:</u></p> <p>See Debt, 1944 Deficit Accounting, Feb'67</p>	<p>RBF DEFINITIONS</p> <p>██████████ <u>No Absolute Enclosed Surface or Volume:</u></p> <p>"As there may be no absolute division of energetic universe into isolated or non-communicable parts, there is no absolute enclosed <u>surface</u> or absolutely enclosed volume; therefore, no true or absolutely defined surface sphere integrity."</p> <p style="text-align: right;">- Cite CHALK, Page 10, caption 1962</p> <p style="text-align: right;">- Citation & context at <u>Sphere Integrity</u>: <u>There Is No</u>, 1962</p> <p style="text-align: right;">UNIVERSE SEC. 307.3</p>
<p><u>No Absolute Disorder:</u></p> <p>See Chaos, 1971 Entropy, (p.90) May'72 Primordial, (p.156) May'72</p>	<p><u>No Absolute Enclosed Surface or Volume:</u></p> <p>See Realms vs. Surface</p>
<p><u>No Absolute Identity:</u></p> <p>See Noun, 1938</p>	<p><u>No Absolute Enclosed Surface or Volume:</u> (2) █</p> <p>See Frequency, Jun'71</p>

Synergetics Dictionary

No Absolute Time:

See Eternity vs Energy, 2 May'78

TITLE OF RBF PAPER

Noah's Ark:

"Project Noah's Ark
Discovering New Man Advantage
Summer, 1950"

- Cite RBF Paper, 24 pp., Summer '50

No Absolute Understanding:

See Invisible Reality, May'72

No Altitudeless Triangle:

See Systematic Realization, 20 Dec'74

No Absolute Void:

See Halo Concept; 25 Apr'71; Jun'71

Nobel Prize:

See Fuller, R.B.: Nobel Prize

No Absolutes:

See No Absolute Division into Parts
No Absolute Identity
No Absolute Enclosed Surface or Volume
No Sphere Integrity
No Absolute Understanding
No Absolute Disorder
No Absolute Debt
No Absolute Void
No Absolute Time

Nobility: Nobles:

(1)

See Kings and Nobles

Synergetics Dictionary

<p><u>Nobility: Nobles:</u> (2)</p> <p>See Design Revolution: Pulling the Bottom Up, (3)-(5) Race, (2)(3)</p>	<p>RBF DEFINITIONS</p> <p><u>No Building Blocks:</u></p> <p>"Man has an innate proclivity for wanting to monopolize, or to be monological. He wants to find the key, the building block. Every news reporter tries to talk in terms of 'finding the building blocks of universe.' But the physicists keep trying to tell society that it takes fundamental 'complementarity.' That is to say two different and complementary 'building blocks.' They are the proton and the neutron. The two are intertransformable. But if one transforms to the other, the other does likewise. But they are always unique in themselves. You cannot build universe with just the rightness or leftness 'blocks' exclusively of one another."</p> <p style="text-align: right;">- Cite NASA SPEECH, Pd. 67,68, Jun'66</p>
<p><u>Nobody to Mark Your Paper:</u></p> <p>See Mark Your Own Paper: Nobody to Mark Your Paper</p>	<p>RBF DEFINITIONS</p> <p><u>No Building Blocks:</u> (1)</p> <p>"Starting with the elementary viewpoint: you get a few things and put them together... The Darwinian idea. At his time the smallest thing you knew much about, you could look at it with a microscope, was a cell. We had again, Dalton, and his atoms, but not much was known about them in physics and basic chemistry. It came as a pretty nice idea from Darwin that he could seem to find the same cells occurring in all the things. You could say he started with the simplest cells and built up to the more complex cells. <u>Cells were the building blocks.</u></p> <p>"We have to note that man loves the idea of a building block. Man has a tremendous propensity for one thing. He wants the key. He loves to talk about the building block or the key.</p> <p>"What the modern physicist has found, and what Oppenheimer was giving us in his farewell address on TV (although it was not his discovery) was the idea of fundamental complementarity. We discover that we are dealing in a Universe of functions and there is a plurality of unique patterns. They are not the same patterns and fundamental complementarity means that you"</p> <p style="text-align: right;">- Cite Oregon Lecture #5, pp.168-169, 9 Jul'62</p>
<p><u>No Breadth:</u></p> <p>See Systematic Realization, 20 Dec'74</p>	<p>RBF DEFINITIONS</p> <p><u>No Building Blocks:</u> (2)</p> <p>"cannot talk about the Universe in terms of any one of them. There is no way you can talk about it in one. The oneness, or key, or building-block idea, has been found completely irrelevant by the physicists. It has no meaning at all."</p> <p style="text-align: right;">- Cite Oregon Lecture #5, p. 169, 9 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>No Building Block:</u></p> <p>"All monological explanations of Universe Are inherently inadequate And axiomatically fallacious. There can be no single key Nor unit building block of Universe."</p> <p style="text-align: right;">- Cite INTUITION, p.13, May '72</p>	<p>RBF DEFINITIONS</p> <p><u>No Building Blocks:</u></p> <p>"... All present economic criteria ... generated generated from the limited facets of generalization which seek 'keys' or 'basic building parts' from which to predict wholes is fallacious and obsolete."</p> <p style="text-align: right;">- Citation and context at [redacted] Hierarchy of Patterns, 1954 to Ltr. to Jim Fitzgibbons, [redacted]</p>

Synergetics Dictionary

<p><u>No Building Blocks:</u> (1)</p> <p>See Amoeba as Building Block Darwin: Evolution May Be Going the Other Way Key-keyhole Sequence Monological</p>	<p><u>No Change:</u> (2)</p> <p>See Charts, 3 Oct'73 Now, 14 Feb'72 Truth as Progressive Diminution of Residual Error, 1 Feb'75</p>
<p><u>No Building Blocks:</u> (2)</p> <p>See A Priori Four-dimensional Reality, (2) Cosmic Accounting, 20 Dec'73 Democritus, May'72 Dictionary, (1) Education, 6 Mar'60 Four-dimensional Reality, 30 Apr'77 Hierarchy of Patterns, 1954* Interttransformable, Jun'66 Mutual Survival Principles, (3) Particle, 6 Jul'62 Quantum Sequence, (3) Tetrahedron, 26 Apr'77 Twenty Questions, (1)(2) You & I as Pattern Integrities, 22 Jan'75 Human Beings & Complex Universe, (2)(3)(6)</p>	<p><u>No Chaos:</u></p> <p>See Integrity, 24 Jan'72</p>
<p><u>No Center of Gravity:</u></p> <p>See Gravitational System Zone, 14 Jan'55</p> <p>(Sec. 1030.20)</p>	<p><u>No Chemistry of Life:</u></p> <p>See Life is Not Physical, (2) Life, 5 Jun'75</p>
<p><u>No Change:</u> (1)</p> <p>See Changeless Rest: At Rest</p>	<p><u>No Physical Entity Cold:</u></p> <p>See Cold & Vacuum, 1946</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>No End in Itself:</u></p> <p>"... There are no 'absolutes' -- No 'ends' in themselves-- no 'things'-- Only transitionally transformative verbing."</p> <p style="text-align: right;">- Citation at <u>Absolute</u>, (p.52) Oct'66</p>	<p>RBF DEFINITIONS</p> <p><u>No Energy Crisis:</u> (B)</p> <p>first to make synthetic rubber from alcohol.... But America in World War II didn't have enough high-octane energy to satisfy both our aviation and our synthetic rubber needs, so the U.S. furtively made enormous amounts of synthetic rubber from alcohol. Then, when Eisenhower came in, the oil companies and the administration were careful not to let the public realize they were ever able to do it.</p> <p>"Nature doesn't have pollution. Pollution is valuable chemicals in the wrong place...."</p> <p>"I don't get any gold medals from the oil companies, but I do know David Rockefeller was impressed by the book / Medard Gabel's 'Energy, Earth & Everyone'/. He knows that it's so. I've been asked to speak at a luncheon given by the chairman of the board of Atlantic Richfield. They also know it's so. They don't say 'I hate you' or anything like that. They just don't know how to let go of a hot poker. It's not that they're bad human beings, but some are hooked on a bad game...."</p> <p>"Settling the energy crisis on the basis of how to make money may accelerate the coming of something we might not like--"</p> <p>* Cite RBF to Susan Watters in W (Women's Wear Daily); 13 May'77</p>
<p><u>No End in Itself:</u> (1)</p> <p style="text-align: center;">See Teleology</p>	<p>RBF DEFINITIONS</p> <p><u>No Energy Crisis:</u> (C)</p> <p>"socialism or communism...."</p> <p>"The whole thing started with Yankee ingenuity. The Yankee inventor was well-thought-of. He gave people a service and people admired him because of his product. Then the conglomerates came along and reduced that human pride. The power of money was equated with progress. For the moment, we are losing something tremendously valuable. If the energy crisis isn't properly handled, it could bring on another political system which promises to divide more equally an energy supply which people have incorrectly been led to perceive as limited. We could end up losing a very great battle."</p> <p style="text-align: right;">- Cite RBF to Susan Watters in W (Women's Wear Daily); 13 May'77</p>
<p><u>No End in Itself:</u> (2)</p> <p style="text-align: center;">See Pencil, 1938</p>	<p>RBF DEFINITIONS</p> <p><u>No Energy Crisis:</u> (1)</p> <p>"We are on a tiny little planet. Our nervous system still sees the sun set, even though the sun doesn't set... we're just rotating out of its sight. We talk about things being 'up' and 'down' even though there are no such directions. We say the wind is blowing from the northwest when it is really being sucked from the southeast."</p> <p>"The depth of ocean is really only 18,000th of the diameter of our Earth and yet we think of it as huge."</p> <p>"They talk about the drought as if there had been no way to prepare for it... but we've known how to desalinate since the steamship. Instead of putting some pipes up through the hills, which takes enormous amounts of energy, we should have taken some of the billions we're going to lose now and designate some of the vast Pacific Ocean."</p> <p>"When we go to the bathroom we waste four gallons of water to get rid of one pint of liquid. We should try dry toilets that don't splash. There's no energy problem, its ignorance--not recognizing that the solutions have always been available until the crisis is upon us."</p> <p style="text-align: right;">- Cite RBF to Karen Winner, Copley News Service; 9 Apr'77</p>
<p>RBF DEFINITIONS</p> <p><u>No Energy Crisis:</u> (A)</p> <p>"The Universe is nothing but energy. There is no energy crisis at all. It's a crisis of ignorance, fear, wrong thinking, an overblown bureaucracy, and conditioned reflexes."</p> <p>"The poor President [Carter] has a cabinet without an inventor on it.... to switch to coal is just deferring the crisis to another time, leaving it to another generation. You can't do it by politics. Carter is a politician. He is at the tail of the dragon where things are really snapping...."</p> <p>"Money-makers say they don't know how to put a meter between the people and the wind. This amount of energy is not being employed because people don't make money off it.... We continue live on the cream and not on the milk. We go after high-grade oil, making money on high-grade power, but what you're actually doing is using up nature's own savings account. The Universe has accumulated that energy over billions of years by impounding photosynthesized energy. With people making billions of dollars it's difficult to stop that kind of thing...."</p> <p>"When the German oil wells were bombed, they got by on alcohols, converting trees into fuel, and they also were the"</p> <p style="text-align: right;">- Cite RBF to Susan Watters in W (Women's Wear Daily); 13 May'77</p>	<p>RBF DEFINITIONS</p> <p><u>No Energy Crisis:</u> (2)</p> <p>"We have this philosophy that there's not enough to go around, therefore we're obsessed with 'survival.'"</p> <p>"There's ample to go around, we just need to understand how to use and dispose of it properly. People don't want to listen--they just want to forge blindly ahead with their drives and curiosities."</p> <p>"This is a totally regenerative Universe. There is energy all around us. Take windmills--one windmill would provide the needed energy per household instead of diminishing coal, natural gas, or oil resources. There is the problem of converting wind from direct to alternating current. So you take the wind and put it in the main public utility lines where you can store it."</p> <p style="text-align: right;">- Cite RBF interview with Karen Winner, Copley News Service as clipped from Baton Rouge, LA "Advocate," ; 9 Apr'77</p>

Synergetics Dictionary

<p><u>No Frequency:</u> See Frequencyless</p>	<p>RBF DEFINITIONS</p> <p><u>No Generalized Boat:</u> (B)</p> <p>"You can design Only special case boats, Ferries, or aircraft carriers, Or canoes, or sloops, Submarines or gondolas, And within those general categories You can only design special case boats Each having its unique dimensions And performance limitations, And very special Displacement characteristics."</p> <p>- Cite GENERALIZED PRINCIPLES, p.4, 28 Jan '69</p>
<p>RBF DEFINITIONS</p> <p><u>No Generalized Boat:</u></p> <p>"There is no generalized boat. There is no physically realized generalization in our lifetime."</p> <p>- Cite RBF at Penn Bell videotaping session, Philadelphia, 22 Jan'75</p>	<p><u>No Generalized Boat:</u></p> <p>See Invention Sequence, (I)(II) Ship, 1954 Generalized Principles, 22 Jun'75 Physical, 12 Nov'75</p>
<p>RBF DEFINITIONS</p> <p><u>No Generalized Boat:</u></p> <p>"While Archimedes discovered The generalized principle Governing displacement, We cannot design A generalized boat. It must be a specific canoe, A ferryboat, or sloop-- And each of unique size and capability and durability For all special-case embodiments Are entropically fated To disintegrate in time Whether the experience episodes Are passive or active-- I.e., involuntary or voluntary, Subjective or objective--..."</p> <p>- Cite INTUITION, p.21, May '72</p>	<p>RBF DEFINITIONS</p> <p><u>No Geometry of Space:</u></p> <p>"There is no geometry of space-- only of local aggregates of principles, of special cases."</p> <p>- Cite RBF to Brendan Citrehan, in memo Cleveland, 23 May'72 - Citation & context at Rubber Glove, 23 May'72</p>
<p>RBF DEFINITIONS</p> <p><u>No Generalized Boat:</u> (A)</p> <p>"You can abstract From many experiences With floating objects The principle of displacement As did Archimedes, But you cannot design A generalized displacement Nor a generalized boat."</p> <p>- Citation & Context at Generalized Principle (6), 28 Jan'69 - Cite GENERALIZED PRINCIPLES, p.4, 28 Jan'69</p>	<p><u>No Half-profile:</u></p> <p>See Profile: ^H Tere is No Half-profile _A</p>

Synergetics Dictionary

<p><u>No Innocence of Otherness:</u></p> <p>See No Linear Acceleration, 20 May'75</p>	<p><u>Noise:</u> (1)</p> <p>See No Noise</p>
<p><u>No Instant Cognition:</u></p> <p>See Time & Cognition, 11 Sep'75</p>	<p><u>Noise:</u> (2)</p> <p>See Pronouns: I = We = Us, (1)</p>
<p><u>No Insulation: We Can't Really Insulate Anything:</u></p> <p>See Trespassing, (1)</p>	<p><u>No Largest Case:</u></p> <p>See Time, (p.102) Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Noise:</u></p> <p>"Noise is only one of many important human behavior-conditioning mechanical factors known to exist, with the knowledge of that existence recorded and measured, which are as yet popularly unconsidered (beyond the area of the unscientifically phrased 'very annoying,')</p> <p>- Cite NINE CHAINS TO THE MOON, p.c, 1938</p>	<p><u>No Leaders:</u></p> <p>See Enough to Go Around, (2) Fuller, R.B: On Drinking Liquor, 22 Jun'77</p>

Synergetics Dictionary

No Mechanical Mind:

(1)

See Feedback Comprehensivity: Computers vs. Humans
Artificial Intelligence
Intelligence Machines

Non-aurally Tunable:

See Rigidity, 9 Jul'62

No Mechanical Mind:

(2)

See Teleology, (2)(3)
Life is Not Physical, 12 Dec'75

Nonbeing:

See Model of Nonbeing

Nonanthropomorphic God:

See Intellectual Integrity, Aug'64
Technology: Enchantment vs. Disenchantment, (2)

Nonbiologicals:

See Biologicals vs. Nonbiologicals

Nonarea:

See Area, 11 Feb'73

Noncircuit:

See Circuit & Noncircuit

Synergetics Dictionary

<p><u>Noncoexisting:</u></p> <p style="text-align: center;">See Universe, 26 May'72</p>	<p style="text-align: right;"><u>Nonconceptuality:</u> (1)</p> <p>See Conceptuality & Nonconceptuality Imaginary Universe Inconceivability Invisible ≠ Nonconceptual Mathematical Symbols Nonunitarily Conceptual Out Vacuum of Universe Stark Nonconceptual Irrelevancy</p>
<p><u>Noncompressible:</u></p> <p style="text-align: center;">See Water, 12 Nov'75</p>	<p style="text-align: right;"><u>Nonconceptuality:</u> <u>Nonconceivable:</u> (2)</p> <p>See Halo Concept, 1960; 22 Feb'72; Nov'71 Invisible Hole, 16 Jun'72 Joyce, James, 1965 Key-keyhole Sequence (2) Space, 17 Feb'73 Vacuum, 19 Feb'72° Powering: Fourth & Fifth Dimensions, 18 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Nonconceptuality:</u></p> <p>"At the indispensable center of the sphere Universe turns itself inside-out. The invisible, a priori, multiplicative twoness, differentially disclosed in the synergetics' tonological systems' hierarchy, is manifest of the integrity of the sizeless, timeless <u>nonconceptuality</u> always complementing the conceptual system take-out from nonconceptual scenario Universe's eternal self-regenerating."</p> <p style="text-align: center;">- For full context see <u>Vacuum</u>, 19 Feb re-write. 19 Feb'72</p>	<p style="text-align: right;"><u>Nonconformity:</u></p> <p style="text-align: right;">See Child Sequence, (4)</p>
<p>RBF DEFINITIONS</p> <p><u>Nonconceptuality:</u></p> <p>"... Humanity is frustrated by the fact that scientific evolution . . . is almost entirely invisible and its integrated significances are too difficult for total and effective comprehension by society. One reason for the latter frustration is that the language of science has been up to now almost exclusively mathematical, -- i.e., <u>nonconceptual</u>."</p> <p style="text-align: center;">- Cite DDXIADIS (UorO), p. 304 20 Jun'66</p>	<p style="text-align: right;"><u>Noncongruence:</u></p> <p style="text-align: right;">See Mite: Positive & Negative Functions, (1)(2)</p>

Synergetics Dictionary

<p><u>Nonconsiderable:</u></p> <p>See Mystery, 24 Jan'76</p>	<p><u>Noncrossing:</u> (2)</p> <p>See Vertexes, Faces & Lines, 1 Jan'75</p>
<p><u>Noncontiguous: Noncontiguity:</u></p> <p>See Critical Proximity, Jun'71</p>	<p>RBF DEFINITIONS</p> <p><u>Nondefinable:</u></p> <p>"The limits of an allspace-filling array are nondefinable. Nondefinable is not the same as infinite."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec.780.14, 22 Oct'72</p>
<p><u>Nonconvergence:</u></p> <p>See Convergence & Nonconvergence</p>	<p>RBF DEFINITIONS</p> <p><u>Nondefinable:</u></p> <p>"Not being simultaneous Universe cannot consist of one function. Functions only coexist. Universe while finite is <u>not definable</u>. I can define many of its parts But I cannot define The nonsimultaneously occurring Aggregate of experiences Whose total set of relationships Constitutes the whole Universe The the latter as an aggregate of finites is finite."</p> <p style="text-align: right;">- Cite HOW LITTLE I KNOW, p.60, Oct'66</p>
<p><u>Noncrossing:</u> (1)</p> <p>See Opening</p>	<p><u>Nondefinable ≠ Infinite:</u></p> <p>See Nondefinable, 22 Oct'72</p>

Synergetics Dictionary

<p><u>Nondefinable: Undefinable:</u> (1)</p> <p>See Definite: De-finite</p>	<p>RBF DEFINITIONS</p> <p><u>Nondimensionality:</u></p> <p>"Tension is shown experientially to be <u>nondimensional</u>, omnipresent, finitely accountable, continuous, comprehensive, ergo timeless, ergo eternal."</p> <p> </p> <p>- Cite RBF SYNERGETICS draft 'Tension and Compression,' revision of Urgan Lecture #5, pp. 157-158. 9 Jul'62 - Citation at <u>Tension</u>, 9 Jul'62</p>
<p><u>Nondefinable: Undefinable:</u> (2)</p> <p>See Bias on One Side of the Line, 4 May'67 De-finite, (pp.133-134) 1960</p>	<p><u>Nondimensional:</u> (1)</p> <p>See Undimensional</p>
<p><u>Nondifferentiable:</u> (1)</p> <p>See Differentiable and Nondifferentiable Undifferentiated</p>	<p><u>Nondimensional:</u> (2)</p> <p>See Tension, 9 Jul'62* Points, 1 Apr'72* Point-to-able Something, 30 Apr'77</p>
<p><u>Nondifferentiable:</u> (2)</p> <p>See Integral, 16 Feb'73 Resolution, 19 Jun'71</p>	<p>RBF DEFINITIONS</p> <p><u>Nondemonstrability:</u></p> <p>"Points are inherently nondemonstrable."</p> <p> </p> <p>- For citation and context see <u>Points</u> 19 Feb '72, as rewritten 1 Apr '72.</p>

Synergetics Dictionary

<p><u>Nondisciplining:</u></p> <p style="margin-left: 40px;">See Dream, 2 Jul'62</p>	<p style="text-align: right;">NONEQUALS: CHECKLIST (C)</p> <p style="margin-left: 40px;">See Conceptuality ≠ Thinkability Compression ≠ Tension* Cause ≠ Reason* Conceptual ≠ Visible</p> <p style="margin-left: 40px;">* Indexed under other formulation</p>
<p><u>Nondivisive:</u></p> <p style="margin-left: 40px;">See Gravity, 11 Feb'76</p>	<p style="text-align: right;"><u>Nonequals: (≠) : Checklist:</u> (D)</p> <p style="margin-left: 40px;">See Differentiation ≠ Integration</p>
<p><u>None: Non: Noneness:</u></p> <p style="margin-left: 40px;">See Nothing: None</p>	<p style="text-align: right;"><u>Nonequals: (≠) : Checklist:</u> (E)</p> <p style="margin-left: 40px;">See Endless ≠ Infinite Entropy ≠ Randomness</p>
<p><u>Non-empirically-discoverable:</u></p> <p style="margin-left: 40px;">See Vector Equilibrium as Starting Point, (1)</p>	<p style="text-align: right;"><u>Nonequals: (≠) : Checklist:</u> (F)</p> <p style="margin-left: 40px;">See Frequency ≠ One Fourth Dimension ≠ Time*</p>

Synergetics Dictionary

<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (G)</p> <p>See Gravity ≠ Implosion Gravitational ≠ Radiational* Geometry: Space ≠ Unoccupied Geometry</p> <p style="text-align: center;">* Indexed under other formulation</p>	<p><u>Nonequals:</u> (≠) <u>Checklist:</u> (M)</p> <p>See Macro→micro ≠ Micro→macro Metabolic Flow ≠ Man Money-making ≠ Industrialization* Minimum ≠ Integer</p> <p style="text-align: center;">* Indexed under other formulation</p>
<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (H)</p> <p>See Holism ≠ Synergy</p>	<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (N)</p> <p>See Negative ≠ Positive* Nonconceptual ≠ Invisible* Normal ≠ Permanence* Nondefinable ≠ Infinite Neighborliness ≠ Proximity* Negative ≠ Invisible*</p> <p style="text-align: center;">* Indexed under other formulation</p>
<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (I)</p> <p>See Interattraction ≠ Pressure Invisible ≠ Nonconceptual Inconceivable ≠ Infinite Inconceivable ≠ Invisible Implosion ≠ Gravity* Integration ≠ Differentiation Infinite ≠ Endless* Infinity ≠ Universally Extensive* Industrialization ≠ Money-making Infinite ≠ Nondefinable* Integer ≠ Minimum* Invisible ≠ Negative</p> <p style="text-align: center;">* Indexed under other formulation</p>	<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (O)</p> <p>See Organism ≠ Life One ≠ Frequency* Options ≠ Optimism</p> <p style="text-align: center;">* Indexed under other formulation</p>
<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (L)</p> <p>See Life ≠ Organism* Layer ≠ Surface*</p> <p style="text-align: center;">* Indexed under other formulation</p>	<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (P)</p> <p>See Positive ≠ Negative Pressure ≠ Interattraction* Permanence ≠ Normal Proximity ≠ Neighborliness</p> <p style="text-align: center;">* Indexed under other formulation</p>

Synergetics Dictionary

<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (R)</p> <p>See Reason ≠ Cause Radiational ≠ Gravitational Randomness ≠ Entropy* Restraints ≠ Vectors*</p> <p>* Indexed under other formulation</p>	<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (V)</p> <p>See Visible ≠ Conceptual* Vectors ≠ Restraints</p> <p>* Indexed under other formulation</p>
<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (S)</p> <p>See Surface ≠ Layer System ≠ World* Space ≠ Unoccupied Geometry Synergy ≠ Holism*</p> <p>* Indexed under other formulation</p>	<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (W)</p> <p>See World ≠ System World ≠ Universe</p>
<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (T)</p> <p>See Tension ≠ Compression Time ≠ Fourth Dimension Thinkability ≠ Conceptuality*</p> <p>* Indexed under other formulation</p>	<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (2)</p> <p>See Complementarities: Always & Only Coexisting Equals: Checklist Paired Concepts: Checklist Versus: Checklist</p>
<p><u>Nonequals:</u> (≠) : <u>Checklist:</u> (U)</p> <p>See Universally Extensive ≠ Infinity Unfamiliarity ≠ Unnatural Universe ≠ World*</p> <p>* Indexed under other formulation</p>	<p><u>Nonequal:</u> <u>Nonequality:</u></p> <p>See Teleology: Bow-tie Symbol</p>

Synergetics Dictionary

<p><u>Nonevent:</u></p> <p style="margin-left: 40px;">See Novent</p>	<p><u>Nonexistent:</u> (2)</p> <p style="margin-left: 40px;">See Systematic Realization, 20 Dec'74 Zerophase, (1)</p>
<p><u>Nonexperience:</u> <u>Nonexperienceability:</u> (1)</p> <p style="margin-left: 40px;">See Experienceable & Nonexperienceable Novent</p>	<p><u>Nonform:</u></p> <p style="margin-left: 40px;">See Formless Liquid = Nonform</p>
<p><u>Nonexperience:</u> <u>Nonexperienceable:</u> (2)</p> <p style="margin-left: 40px;">See Absurd, Jun'66 Systematic Realization, 20 Dec'74</p>	<p><u>Nonhappening:</u></p> <p style="margin-left: 40px;">See Vector Equilibrium, 11 Dec'75</p>
<p><u>Nonexistent:</u> (1)</p> <p style="margin-left: 40px;">See Unremembered = Nonexistent</p>	<p><u>Nonidentically Repetitive:</u></p> <p style="margin-left: 40px;">See Heisenberg-Eliot-Pound Sequence, 28 Jan'69 Irreversible, 6 Nov'73 Irreversibility, 22 Apr'68 Kaleidoscopes, Dec'69 Scenario Universe, May'72; Dec'69</p>

Synergetics Dictionary

<p><u>Nonidentical:</u></p> <p>See Phantom Captain, 1938 Universe, Spring'71; (p.62) 1969</p>	<p>RBF DEFINITIONS</p> <p><u>Noninterfering Zero Points:</u></p> <p>"Thus we discover the modus operandi by which radio waves and other waves pass uninterferingly through seeming solids, which are themselves only wave complexes. The lack of interference is explained by the crossing of the high-frequency waves through the much lower frequency waves at the <u>noninterfering zero points</u>, or indeed by the vari-frequenced waves through both one another's internal or external zero intervals."</p> <p style="text-align: right;">[5]</p> <p>_ Cite SYNERGETICS draft at Sec. 1223.16; 9 Mar'73</p>
<p><u>Nonintercontradictory:</u> (1)</p> <p>See Interaccommodation: Interaccommodative</p>	<p><u>Noninterference: Noninterfering:</u> (1)</p> <p>See Uninterferable Interference-noninterference Relaying Interference: Noninterference Frequencyless</p>
<p><u>Nonintercontradictory:</u> (2)</p> <p>See Motion, 27 May'72 Truth, 30 Jun'75</p>	<p><u>Noninterference: Noninterfering:</u> (2)</p> <p>See Carrier Wave, 9 Mar'73 Resonance Field, 13 May'73</p>
<p><u>Noninterference Relaying:</u></p> <p>See Valvability, 30 Nov'72</p>	<p><u>Nonintersecting Lines:</u></p> <p>See Individual: Theory Of, May'65</p>

Synergetics Dictionary

<p><u>Nonintersubstitutability:</u></p> <p>See General Systems Theory, ■ (A)</p>	<p><u>Nonline:</u></p> <p>See Line & Nonline</p>
<p>RBF DEFINITIONS</p> <p><u>Nonlimit:</u></p> <p>"... In synergetics the energy as Mass is constant and nonlimit frequency is variable."</p> <p>- Citation and context at <u>Einstein</u>, 16 Nov'72</p>	<p><u>Nonlocal:</u> (1)</p> <p>See Cosmic</p>
<p>RBF DEFINITIONS</p> <p><u>Nonlimit:</u> (1)</p> <p>See Limit-Limitless Unlimited</p>	<p><u>Nonlocal:</u> (2)</p> <p>See Invisible Hole, 16 Jun'72</p>
<p><u>Nonlimit:</u> (2)</p> <p>See Hydraulics, 20 Apr'72</p>	<p><u>Nonmeaning:</u></p> <p>See Meaningless</p>

Synergetics Dictionary

<p><u>Nonmerchandiseable:</u> See Abstractions, 1964</p>	<p>RBF DEFINITIONS</p> <p><u>Non-mirror Image:</u> "The complementary of parity is disparity and not a reflective image."</p> <p style="text-align: right;">Cite RBF results of SYNERGETICS gallery at See. 507.06, 7 Nov'73 - Citation at <u>Disparity</u>, 7 Nov'73</p>
<p><u>Nonmeshing:</u> See Meshing & Nonmeshing Unasynchronized</p>	<p>RBF DEFINITIONS</p> <p><u>Non-Mirror image:</u> "Non-mirror image,' i.e., dissimilar complementarity, is the conservation-producing principle."</p> <p style="text-align: right;">- Citation and context at <u>Ecology Sequence (A)</u>, 22 May'73</p>
<p>RBF DEFINITIONS</p> <p><u>Nonmirror Image:</u> "Concave is not a mirror image of convex. Ruth Asawa makes them and they don't look like you at all-- it's all the rest of the Universe and that doesn't have a shape, ever. What you see in the mirror is strictly a planar pattern-- a reverse series in a plane."</p> <p style="text-align: right;">- Cite RBF to EJA, 200 Locust, Phila, PA, 13 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Non-mirror Image:</u> "Mite's can fill allspace. They are either positive or negative affording a beautiful confirmation of negative Universe.... They are true rights and lefts and are not mirror images; they are inside-out and asymmetrical."</p> <p style="text-align: right;">- Citation & context at <u>Mite: Positive & Negative Functions (1)</u> 27 May'72</p>
<p>RBF DEFINITIONS</p> <p><u>Non-mirror Image:</u> "Order is obviously the complementary, but not mirror image, of disorder."</p> <p style="text-align: right;">- Citation & Context at <u>Entropy & Entropy</u>, 5 May'74</p>	<p>RBF DEFINITIONS</p> <p><u>Non-mirror Image:</u> "The antientropic metaphysical is not a mirror-imaged reversal of the entropic physical world's disorderly expansiveness."</p> <p style="text-align: right;">- Citation & context at <u>Irreversibility: Principle Of</u>, Apr'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Non-mirror Image</u>: "Negative is never the mirror image of the positive."</p> <p>- Citation & context at <u>Complementarity</u>, Spring'66</p>	<p><u>Nonmoment</u>: (1)</p> <p>See Zero Moment</p>
<p><u>Nonmirror Image</u>: (1)</p> <p>See Complementarity: Principle Of Disparity Irreversibility: Principle Of Left & Right Mirror Image Nonreflective Complementarity Rubber Glove Tetrahedron: Inside-outing Of</p>	<p><u>Nonmoment</u>: (2)</p> <p>See Vector Equilibrium as Starting Point, 8 Apr'75 Model of Nonbeing, 11 Sep'75</p>
<p><u>Nonmirror Image</u>: (2A)</p> <p>See Complementarity, 2 Mar'68; spring'66*: 1971 Complementarity: Principle Of, Mar'71 Complementary, May'72 Coupler, (2) Disparity, 7 Nov'73* Ecology Sequence (A); 22 May'73* In & Out, 13 Nov'69 Irreversibility: Principle Of, Apr'71* Multiplicative Twoness, 14 Feb'66 Mite: Positive & Negative Functions, (1)* Now, May'72 Negative, spring '66 Negative Vector Equilibrium, 8 Oct'71 Order & Disorder, 5 May'71 Proton & Neutron, 13 Nov'69; (1) Relative Asymmetry Sequence, (1) Scenario, May'72 Sphere, 2 Mar'68 Human Beings & Complex Universe, (2)</p>	<p><u>Nonnuclear</u>: (1)</p> <p>See Dodecahedron (all frequencies) Icosahedron (all frequencies) Octahedron (odd-numbered frequencies) Tetrahedron (odd-numbered frequencies) Cube (odd-numbered frequencies) Nuclear & Nonnuclear Nuclear & Nonnuclear Polyhedra Prime Volumes Prime Structural Systems Domains of Tetra, Octa & Icosa Denucleated Phase Tetrahedron as Prime Nonnucleated Structural System Subnuclear</p>
<p><u>Nonmirror Image</u>: (2B)</p> <p>See Syntropy & Entropy, 5 May'74* Zero, 13 Nov'69 Complementarity of Growth & Aging, 22 Jan'75 Geometrical Function of Nine, (2) Cube & VE as Wave Propagation Model, 23 Feb'72</p>	<p><u>Nonnuclear</u>: (2)</p> <p>See Omnitopology, 17 Feb'73 Prime Structural Systems (1) Carbon, 8 Jun'72 Nucleus vs. Boundaries, 28 Jan'75 Domain & Quantum, (1) Powering: Fifth & Eighth Powering, 11 Dec'75 Cube: Volume-3 Cube, 16 Dec'73 Powering: Fifth & Eighth Powering, 11 Dec'75; 25 Jan'76 Basic Nestable Configurations: Hierarchy Of, 29 May'72</p>

Synergetics Dictionary

Nonobvious:

See Obvious & Nonobvious

Nonparallel:

(1)

See Antiparallel
Tetrahedron: Four Unique Planes

RBF DEFINITIONS

No Noise:

"There is no true 'noise' or 'static.' There are only as yet undifferentiated and uncomprehended orders."

Nonparallel:

(2)

See Fourth Dimension, 14 Sep'71
Sphere, 22 Jul'71
Three: Number Function of Three in a Four-axial System, 24 Jan'76

~~Cite Synergetics draft, "Symmetry," 00522.04, JULY 1971.~~

~~Cite NASA speech, p. 40, Jun'66~~

- Citation & context at Chaos, Jun'66

No Noise:

See Order, 7 Nov'73

Nonperpendicular:

See Three: Number Function of Three in a Four-axial System, 24 Jan'76

RBF DEFINITIONS

No Nouns:

"Physics having found no things,
There are no nouns."

RBF DEFINITIONS

Nonpolarized:

"All systems have poles, ergo spin axes, ergo they are polarizably identifiable. Nonpolarized simply means that the spin axis is unrecognized under the conditions considered. There is no such thing as a nonpolarized point because if you tuned-in the subvisible system--appearing only as a directionally-positioned micro-something--to visible comprehension, you would find that, as a system, it has poles and that it has seven potential alternately employable poles.

"So we may call a point a focal center, i.e., a 'noise' with a direction, but it is an as-yet undistinguished system, with all the latter's characteristics.

"There is inherent polarity in all observation which always introduces an additive twoness:

Nonpolarized = unrecognized

Focal event = infratunable system"

- Cite A DEFINITION OF EVOLUTION, 15 Sep'71

- Cite SYNERGETICS, 2nd. Ed. at Secs. 527.25 & .26; RBF rewrite 11 Dec'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Nonpolarized:</u></p> <p>"All systems are polarized. Nonpolarized simply means unrecognized. There is no such thing as a nonpolarized point because if you tuned it in you would find that it had poles. So we may call it a focal center, i.e., a noise with a direction but with nondistinguished system characteristics.</p> <p>"There is inherent polarity in all observation: that is the additive twoness.</p> <p>"nonpolarized = unrecognized." "Focal event = Inffatunable system."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash. DC; 12 Nov'75</p>	<p><u>Nonpolarized = Unrecognized:</u></p> <p style="text-align: center;">See Nonpolarized, 12 Nov'75</p>
<p>RBF DEFINITIONS</p> <p><u>Nonpolar Points:</u></p> <p>"Nonpolar points, or localities, are four-dimensional-- there is the inside-out (i.e., concave and convex) dimension and three symmetrically interacting, great-circle-ways-around-- producing spherical octation, with eight tetrahedra having three internal (central) angles and three external spherical surface triangles' angles, each.</p> <p style="text-align: right;">- Cite RBF rewrite of SYNERGETICS galley at Sec. 527.22, 7 Nov'73</p>	<p><u>Nonpolar Points: Nonpolar Vertexes:</u></p> <p style="text-align: center;">See Constant Relative Abundance, 29 Nov'72; 26 Sep'73 Fourth Dimension, 29 Nov'72 Magic Numbers, 1967 Twelve Universal Degrees of Freedom, Feb'72; 7 Nov'73 In, Out & Around Experiences, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Nonpolar Points:</u></p> <p>"Nonpolar points, or localities, are four-dimensional: inside-out and three symmetrically interacting great-circle-ways-around; producing spherical octation with eight tetrahedra having three internal (central) angles and three external (spherical surface) angles each."</p> <p style="text-align: right;">- Citation at <u>Fourth Dimension</u>, 29 Nov'72 - Cite SYNERGETICS draft at Sec. 527.22, 29 Nov'72</p>	<p><u>Nonpolar: Nonpolarized:</u> (1)</p> <p style="text-align: center;">See Focal Event</p>
<p>RBF DEFINITIONS</p> <p><u>Nonpolar Points:</u></p> <p>"The nonpolar point is not fixable or structurally stabilized until it is three-way great circled."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 527.24, 29 Nov'72</p>	<p><u>Nonpolar: Nonpolarized:</u> (2)</p> <p style="text-align: center;">See Convergence & Divergence, 9 Apr'75</p>

Synergetics Dictionary

<p><u>Nonpolitical:</u></p> <p style="text-align: center;">See Surprise: The Nonpolitical Surprise Has Already Occurred</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Nonproduction:</u></p> <p>"The kind of strategies that have been calling for paying for nonproduction have been done in the terms of man's assuming there's nowhere nearly enough to go around anyway, and it has to be you or me, and those who are looking out for me then find that their particular price advantage is greatly enhanced by the nonproduction. These are always very ego-centric viewpoints that bring about that kind of strategy."</p> <p style="text-align: center;">- Cite RBF to World Game at NY Studio School, 12 Jun 1969, Saturn Film transcript, Sound 2, Part 3, pp.80-81.</p>
<p><u>Nonponderable:</u> (1)</p> <p style="text-align: center;">See Weightless</p>	<p><u>Nonradial Line:</u></p> <p style="text-align: center;">See Cube Edge Radial Line Starting with Parts: The Nonradial Line</p>
<p><u>Nonponderable:</u> (2)</p> <p style="text-align: center;">See Finite, 14 Feb'66</p>	<p><u>Nonreality:</u></p> <p style="text-align: center;">See Status Quo, 15 Sep'71 Vector Equilibrium: Zero Condition, 11 Jul'62</p>
<p><u>Nonpredictable:</u></p> <p style="text-align: center;">See Unpredictable: Unpredicted</p>	<p><u>Nonredundance:</u> <u>Nonredundant:</u> (1)</p> <p style="text-align: center;">See Stable = Nonredundant</p>

Synergetics Dictionary

<p><u>Nonredundance:</u> <u>Nonredundant:</u> (2)</p> <p>See Cork: Triangular Corks in Spherical Barrels, 15 Feb'66 Description, 25 Aug'71 Differentiation, 27 May'72; 22 Jun'72 Geodesics & Tensegrities, 9 Sep'74 Geometry of Vectors, 15 Jun'74 Insinuatability, 6 Nov'72 Probability, (1) Spherical Barrel, 15 Feb'66 Spin Twoness & Duality Twoness, 27 Dec'74 Prime Nuclear Structural Systems, 27 Dec'74 Stable & Unstable Structures, 7 Jun'72 Cube & VE as Wave Propagation Model, 23 Feb'72 Universal Vertex Center Model, 29 Apr'43</p>	<p><u>Nonrelationship:</u> (2)</p> <p>See In & Out, 7 Nov'72</p>
<p><u>Nonreflective Complementarity:</u> (1)</p> <p>See Non-mirror Image</p>	<p><u>Nonrepresentational:</u></p> <p>See James Joyce, 1965</p>
<p><u>Nonreflective Complementarity:</u> (2)</p> <p>See Boltzmann Sequence, (5)</p>	<p><u>Non-self-interfering:</u></p> <p>See Radiation, 1959 Spiral, 7 Nov'73</p>
<p><u>Nonrelationship:</u> (1)</p> <p>See Arelational</p>	<p><u>Nonselfregenerative:</u> (1)</p> <p>See Negative Universe Superatomics Transuranium Elements Isotope</p>

Synergetics Dictionary

<p><u>Nonselfregenerative:</u> (2)</p> <p>See Geometrical Function of Nine, (7) Nuclear Domain & Elementality, (1)(2)</p>	<p><u>Nonsensoriality:</u> (2)</p> <p>See Ephemeralization, 1938 Geometry of Reality, May'49 Pattern Generalization (2) Gravitational Continuum, Nov'71</p>
<p><u>Non-self-requested:</u></p> <p>See Birth: Non-self requested</p>	<p><u>Nonsense:</u></p> <p>See History, 27 Dec'73</p>
<p><u>Nonsel:</u></p> <p>See Self & Nonsel</p>	<p>BBF DEFINITIONS</p> <p><u>Nonsimultaneity:</u></p> <p>"Any point can tune in any other point in Universe. Between any two points in Universe there is a tetrahedral connection. Thus systematic connection of two points results in the interconnecting of four points. But none of the four event points of the tetrahedron are simultaneous. They are all overlappingly co-occurrent, each with different beginnings and endings. All of the atoms are independently introduced and terminated; many are in gear, but many are also way out of gear."</p> <p>- Cite SYNERGETICS, 2nd. Ed., Sec. 530.11, 30 May'75</p>
<p><u>Nonsensoriality:</u> (1)</p> <p>See Cipher Extrasensoriality Invisibility Invisible Reality Mathematical Symbols Infratunable Tunability: Infra & Ultra</p>	<p>BBF DEFINITIONS</p> <p><u>Nonsimultaneity:</u></p> <p>"Because of our overspecialization and our narrow electromagnetic spectrum range of our vision, we have very limited integrated comprehension of the significance of total information. For this reason, we see and comprehend very few motions among the vast inventory of unique motions and transformation developments of Universe. Universe is a nonsimultaneous complex of unique motions and transformations. Of course, we do not 'see' and our eyes cannot 'stop' the 186,000-miles-per-second kind of motion. We do not see the atomic motion. We do not even see the stars in motion, though they move at speeds of over a million miles per day. We do not see the tree's or child's moment-to-moment growth. We do not even see the hands of a clock in motion. We remember where the hands of a clock were when we last looked and thus we accredit that motion has occurred. In fact, experiment shows that we see and comprehend very little of the totality of motions."</p> <p>- Cite SYNERGETICS text at Sec. 537.32; galley rewrite 7 Nov'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Nonsimultaneity:</u></p> <p>"Thought discovers that we divide Universe into an 'outwardness and inwardness,' so thinking is the first subdivision of Universe, because Universe, we discovered, was finite. Thinking is a nonsimultaneously recallable aggregate of inherently finite experiences and finite experience furniture-- such as photons of light. One of the most important observations about our thought is the discovery that experiences are nonsimultaneous. Nonsimultaneity is a fundamental characteristic, and if experiences are nonsimultaneous, you cannot have simultaneous reconsideration."</p> <p>- Cite SYNERGETICS text at Sec. 530.01; RBF galley rewrite 7 Nov'71 73</p>	<p>RBF DEFINITIONS</p> <p><u>Nonsimultaneous:</u></p> <p>"Different shapes, ergo different abstractions, are nonsimultaneous; but all shapes are de-finite components of integral though nonsimultaneous, ergo shapeless, Universe."</p> <p>- Cite SYNERGETICS, "Corollaries," Sec. 240.60. 1971</p> <p>- Citation & context at <u>Abstraction</u>, 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Nonsimultaneous:</u></p> <p>"Until the present age, people thought that all of their faculties were simultaneously and instantly coordinate and operating at equal velocities. Einstein showed that neither 'simultaneous' nor 'instant' are valid, i.e., experimentally demonstrable. Observe that when we send up four rockets one-half second apart, their afterimages are approximately simultaneous. So we say that we see four rocket bursts 'at the same time.' The illusion of simultaneity is one of the most important illusions for us to consider. Musicians may be able to comprehend nonsimultaneity better than others do. Einstein emphasized the importance of attempted spontaneous comprehension of the nonsimultaneity of all events of Universe-- a concept akin to our discovery that in our Universe, none of the lines can ever go simultaneously through the same points (See Sec. 517.). What Einstein is telling us is that there is no conceptual validity to the notion that everything in Universe is actually in simultaneous static array."</p> <p>- Cite SYNERGETICS text at Sec. 510.09, May'71</p>	<p>RBF DEFINITIONS</p> <p><u>Non-Simultaneous:</u></p> <p>We "do not have to be simultaneous to be interconnected. We can telephone across the international date line from Sunday back to Saturday."</p> <p>- Cite NASA Speech, p. 92, Jun'66</p> <p style="text-align: center;"><u>NONSIMULTANEITY - SEC 530.04</u></p>
<p>RBF DEFINITIONS</p> <p><u>Nonsimultaneous:</u></p> <p>"Minimal consciousness evokes a nonsimultaneous sequence, ergo time."</p> <p>- Citation at <u>Time</u>, 7 Feb'71</p> <p>- Cite SYNERGETICS, SEC. 529.06 (Dec. 1971).</p> <p>- Cite RBF to RFA, Sarasota, Florida, 7-2-1971</p>	<p>RBF DEFINITIONS</p> <p><u>Non-simultaneous:</u> (1)</p> <p>"Engineering holds that the prime difference between the point of view of laymen and engineers is that the layman does not recognize, anticipate, and pay heed, as do engineers, to the experimentally demonstrable fact that every action always has an equal and opposite reaction. But the engineers have not modernized their concept to accommodate and adjust refiningly to two-of the scientists' recent physical physical discoveries and measurements-- First, of light's speed, as well as the speed of all electromagneticly propagated radiation, and secondly, the phenomenon known as precession. The approximately one billion kilometers-per-hour, speed of all radiation being too fast for human sense apprehendability, the engineers have not yet been constrained to recognize as must the physicist, that there is no instant universe as was mis-assumed by all pre-Twentieth Century scientific cosmologies and cosmogonies-- before the knowledge that light had indeed a speed.. Engineering must now acknowledge realistically and accommodate analytically, the experimentally"</p> <p>- Citation at <u>Engineering</u>, 13 Nov'69</p>
<p>RBF DEFINITIONS</p> <p><u>Non-simultaneous:</u></p> <p>"Non-simultaneous means not occurring at the same time."</p> <p>- Cite RBF marginalis Beverly Hotel, N.Y. 28 February 1971</p> <p>- Cite also SYNERGETICS, "Universe," Sec. 302. Oct. 1971.</p>	<p>RBF DEFINITIONS</p> <p><u>Nonsimultaneous:</u> (2)</p> <p>"demonstrable fact that every action has not only a reaction but also a nonsimultaneous but immediately subsequent resultant."</p> <p>- Citation at <u>Engineering</u>, 13 Nov'69</p>

Synergetics Dictionary

RBF DEFINITIONS

Non-simultaneity:

"The majority of academic people are still thinking in terms of Newtonian (classical) science's 'instant universe.' While light's speed of 700 million miles an hour is very fast in relation to automobiles it is very slow in relation to the 'no time at all' of society's (obsolete) instant universe thinking.

"It was part of the classical scientists' concept of instant universe that universe is a system in which all parts affect one another simultaneously, in varying degrees."

- Citation at Time, Jun'66

- Cite NASA Speech, pp. 25,26, Jun'66

(CONCEPTUALITY - TIME)

RBF DEFINITION

Non-simultaneous:

"It takes entirely different lengths of time to remember of 'look up' different names or past event facts. Universe, like the dictionary, though integral is ipso facto nonsimultaneously recollectable and, therefore, as with the set of all the words of the dictionary, is nonsimultaneously considerable and therefore is also nonsimultaneously reviewable, ergo is synergetically incomprehensible, yet progressively revealing."

- Citation & Context at Dictionary, 1960

(UNIVERSE)

- Cite UNIDIRECTIONAL HALO, p. 132, 1960

RBF DEFINITIONS

Non-simultaneous:

"Before the speed of light was measured, sight seemed, to all humanity, to be instantaneous. Newton's universe was instantaneous. . . . Neither light nor any other phenomenon is instantaneous."

- Cite NASA Speech, p. 52, Jun'66

[SYNERGETICS - ENERGY EVENT]

RBF DEFINITIONS

Non-simultaneous:

"Neither the set of all experiences nor the set of all the words which describe them nor the set of all the generalized conceptual principles harvested from the total of experiences are either instantly or simultaneously reviewable."

(Hyphens deleted.)

- Cite UNIDIRECTIONAL HALO, pp. 131,132, 1960

(CONSIDERABLE SET - SEC. 509.05)

RBF DEFINITIONS

Non-simultaneous:

"The speed of light measurements plus Planck's quantum mechanics and Einstein's relativity showed that the universe is an aggregate of non-simultaneous events and their experiments showed that as each of the non-simultaneous events lost their energy they lost it to newly occurring events. Thus energy always became 100 percent accounted for."

- Cite NASA Speech, p. 26 Jun'66

(NONSIMULTANEITY - SEC. 530.06)

RBF DEFINITIONS

Non-simultaneous:

"As Einstein clearly demonstrated, ~~non-simultaneous~~ the data coming in from all the scientists makes it clear that the whole Universe is in continual transformation. The geology of our Spaceship Earth makes it very clear how severe have been the great transformations of history. The moment of top soils and burdens around the surface of the Earth is very new geologically speaking. As Einstein interpreted the speed of light information and the observation of the brownian movement of the constant motion in water, etc., he then posited a Universe in which we now knew that light took eight minutes to get to us from the Sun and two-and-a-half years to get to us from the nearest star, and astronomical information which shows that some of the stars we are looking at having been there for a million years--- with that kind of information Einstein had to say physical Universe is quite obviously an aggregate of non-simultaneous and only partially overlapping transformation events."

have live shows coming in from 100 years ago, others from 1,000 years ago, and some of the stars we are looking at

- Cite "The Artists and the Scientists" p.1 Undated

(NONSIMULTANEITY - SEC. 530.07)

RBF DEFINITIONS

Nonsimultaneous:

"We discovered that experiences were nonsimultaneous and therefore we had a finite but nonsimultaneous universe. Therefore, being nonsimultaneous it was nonsimultaneously conceptual. It was not a unit picture that could be given to us. We have had a tendency in our general thinking to say that which is finite is that which is statically conceptual as one unit glimpse so we have been seemingly frustrated in trying to understand a universe which was more or less infinite and yet it was an omnidirectional experience and you felt there ought to be an outwardness of this sphere. That is a static concept and we begin to discover that we are not dealing with such a sphere because we have all these nonsimultaneous reports and all we have is interconnectedness of the nonsimultaneity. One of Einstein's most intellectual discoveries was this nonsimultaneity which he said apparently he could have come upon by virtue of his experience in examining the thoughts and patent claims regarding time-keeping devices, watches and clocks."

- Cite OREGON Lecture #3 - pp. 76-77, 5 Jul'62

(NONSIMULTANEITY - SEC. 538.05)

Nonsimultaneous Set:

See Comprehensive, 9 Jul'62

Synergetics Dictionary

<p><u>Nonsimultaneity:</u> <u>Nonsimultaneous:</u> (1)</p> <p>See Children's Pictures of the Sun and the Moon Four Nonsimultaneous Rocket Bursts Instantaneity Juggler Lag Overlapping Partially Overlapping Perception Scenario Scenario Principle Time Instant Universe vs. All-motion Universe Recall Lags Nonunitarily Conceptual Star Events Live Shows Reaching Us Took Place Billions of Years Ago Big Dipper</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Nonstate:</u></p> <p>"The vector equilibrium is such a physically abhorred nonstate as to be the eternal self-starter, ergo the eternal re-self-starter ever regenerating the off-zero perturbations, oscillations, and all the wave propagation of all humanly experienceable physical and metaphysical phenomena."</p> <p style="text-align: right;">- Citation & context at <u>Vector Equilibrium as Starting Pnt.</u>, (2) 11 Sep'75</p>
<p><u>Nonsimultaneity:</u> <u>Nonsimultaneous:</u> (2)</p> <p>See Abstraction, 1971* All-motion Universe, 1965 Complementary, May'72 Congruence, 25 Jan'72 Consideration, 1965 De-finite, 1960 Dictionary, Oct'66; Jun'66* Engineering, 13 Nov'69* Interaccommodative, 13 Mar'73 Relationships, 5 Jul'62 Resultant, 22 Jul'71 Time, 7 Feb'71*; Jun'66*; Dec'71 Vector Equilibrium, 1971 Now, May'72 Physical is Always the Imperfect, 26 May'72 Synergetic Integral, 1960 Individual Universes, (2) Parity, Nov'71 Conceptuality, 6 Nov'73 Tetrastuning, 30 May'75 Structure, 1965</p>	<p><u>Nonstraight:</u></p> <p>See Deliberately Nonstraight Lines Wavilinear</p>
<p><u>Nonsolid:</u></p> <p>See Vectors & Tensors, 19 Oct'72</p>	<p><u>Nonstructural Coincidence:</u></p> <p>See Tensegrity: Vertexal Connections: Locked Kiss, 10 Oct'63</p>
<p><u>Nonstable:</u></p> <p>See Instability Stability: Stable & Nonstable Systems Unstable</p>	<p><u>Nonsynchronous:</u> <u>Nonsynchronization:</u> (1)</p> <p>See Dissynchronous Nonmeshing</p>

Synergetics Dictionary

<p><u>Nonsynchronization: Nonsynchronous:</u> (2)</p> <p>See Universe, 26 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Non-Thinking:</u></p> <p>"Design logic requires . . . a bit of the eternal design capability . . . operating through human organisms . . . to offset the gamut of <u>non-thinking</u> conditioned reflexes of all biological systems."</p> <p> </p> <p>- Cyril Mosmanne Keynote Address Denver, pp. 13-14, 2 Jun'71</p> <p>- Citation at <u>Eternal Designing Capability</u>, 2 Jun'71</p>
<p><u>Nonsystem Parts:</u></p> <p>See Synergetic vs. Model (D)</p>	<p><u>Nonthinking:</u> (1)</p> <p>See Antithinking Ignorance [redacted] Reflexes Expensive = Nonthinking</p>
<p><u>Nonsystem:</u></p> <p>See Systems & Nonsystems Subsystem ≠ Nonsystem</p>	<p><u>Nonthinking:</u> (2)</p> <p>See <u>Eternal Designing Capability</u>, 2 Jun'71* Order & Disorder, Jun'66 Reflexes, 2 Jun'71 Thinkable You, (1) Mistake, 7 Nov'75 Crowd-reflexing, 7 Nov'75</p>
<p>RBF DEFINITIONS</p> <p><u>Nothing:</u></p> <p>"As specialists scientists seek only for somethings.... Specializing science seeking only somethings inherently overlooked the nothing vector equilibrium."</p> <p> </p> <p>- Citation & context at <u>Vector Equilibrium as Starting Point</u>, (1) 11 Sep'75</p>	<p>RBF DEFINITIONS</p> <p><u>Nontransformable:</u></p> <p>"The absolute would be <u>nontransformable</u>... experimentally meaningless."</p> <p> </p> <p>- Citation and context at <u>Absolute</u>, Oct'66</p>

Synergetics Dictionary

<p><u>Nontransmitting:</u></p> <p style="text-align: center;">See Information Transmitting & Nontransmitting Model</p>	<p>RBF DEFINITIONS</p> <p><u>Nonunitarily Conceptual:</u></p> <p>"Aggregate means sumtotally but nonunitarily conceptual as of any one moment."</p> <p style="text-align: right;">- Citation at <u>Aggregate</u>, 28 Feb'71</p> <p style="text-align: left;">501.671</p>
<p><u>Nontuned:</u></p> <p style="text-align: center;">See Space as Nontuned Angle & Frequency Information Untunable: Untuned Space = Nontunability</p>	<p><u>Nonunitarily Conceptual:</u> (1)</p> <p style="text-align: center;">See Finite Event Scenario Nonsimultaneity Overlapping Unitary Conceptuality Scenario Universe</p>
<p><u>Nontruth:</u></p> <p style="text-align: center;">Truth & Nontruth</p>	<p><u>Nonunitarily Conceptual:</u> (2)</p> <p style="text-align: center;">See <u>Aggregate</u>, 28 Feb'71* <u>Conceptualize</u>, 17 Feb'73 <u>Definable</u>, 1960 <u>Earth</u>, 1965 <u>Spherical Triangle Sequence (iii)*</u> <u>Universe</u>, 1965; (p.134)1960; 2 Jun'74 <u>Tunability: Intra & Ultra</u>, 1954 <u>Two Kinds of Twoness</u>, (B) <u>Conceptual Systems</u>, 27 May'75 <u>Structural Sequence</u>, (B) <u>Finite Event Scenario</u>, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Nonunitarily Conceptual:</u></p> <p>"...Invisible or nonunitarily conceptual minimum inventorying..."</p> <p style="text-align: right;">- Citation and cotext at <u>Spherical Triangle Sequence (iii)</u>, 26 Jan'73</p>	<p><u>Nonuse:</u></p> <p style="text-align: center;">See Use vs. Nonuse</p>

Synergetics Dictionary

<p><u>Nonverbal:</u> (1)</p> <p>See Nameless Wordless Gestured Communication Cross Communication Mute Communication Unspoken Communication Unarticulated</p>	<p>RBF DEFINITIONS</p> <p><u>No Open Endings:</u> "There are no open endings in Universe."</p> <p style="text-align: center;">- Citation and context at <u>Acceleration</u>, 14 Feb'73</p>
<p><u>Nonverbal:</u> (2)</p> <p>See Self-communicate, 8 Apr'75</p>	<p>RBF DEFINITIONS</p> <p><u>No Opposites:</u> "The 'opposite' of the engineers' equal-and-opposite action and reaction is strictly linear and planar. But macro is not opposite to micro: these are opposed, inward-and-outward, explosive-contractive, intertransformative accommodations, such as that displayed by the eight-triangular-cammed, perimeter-tangent, contact-driven, involuting-evoluting, rubber doughnut jitterbug. "Macro and micro are not opposed: they are the poles of inward-outward considerations of experience." (Sec. 465.02; 2nd. Ed.) - Cite RBF to EJA, 3200 Idaho Ave., Wash. DC; 12 Nov'75</p>
<p><u>Nonvertex:</u></p> <p>See Vertexes & Nonvertexes</p>	<p><u>No Organization:</u> See Impossible: Only the Impossible Happens, (A)</p>
<p>RBF DEFINITIONS</p> <p><u>No One:</u> "Unity does not mean the number one... One does not and cannot exist by itself." - Citation & context at <u>Subjective & Objective</u>, 16 May'75</p>	<p><u>No Otherness: No awareness:</u> See Geometry of Thinking, 16 Dec'73 Thirty Minimum Aspects of a System, (B) Somethingness & Otherness, 7 Oct'75 Human Beings & Complex Universe, (3)</p>

Synergetics Dictionary

<p><u>No Other:</u> <u>No Me:</u></p> <p style="text-align: center;">See Other, 5 Jun'73</p>	<p><u>No Politics:</u></p> <p style="text-align: center;">See Apolitical</p>
<p><u>No Planes:</u></p> <p style="text-align: center;">See Spirallinearity, Nov'71 Six Motion Freedoms & Degrees of Freedom, (1)</p>	<p><u>No Promotion:</u></p> <p style="text-align: center;">See Promote: I Don't Promote</p>
<p>RBF DEFINITIONS</p> <p><u>No-point:</u></p> <p>"All the no-points are always embracing all the points."</p> <p style="text-align: center; margin-top: 100px;">- Citation and context at <u>Integrity of Universe</u>, 23 Sep'73</p>	<p>TEXT CITATION</p> <p><u>No Race:</u> <u>No Class:</u></p> <p style="text-align: center;">World Game Document #1: pp. 157-164, 1971</p>
<p><u>No-point:</u></p> <p style="text-align: center;">See Integrity of Universe, 23 Sep'73= Novent, 23 Sep'73 Omniembracing, 23 Sep'73 Tetrahedron, 23 Sep'73</p>	<p>RBF DEFINITION</p> <p><u>No Right Angles in Nature:</u></p> <p>"There are no right angles in nature. Look at all those trees. Look at the angles of all those branches. Just let me know if you ever see branches coming out at 90 degrees."</p> <p style="text-align: center; margin-top: 100px;">* Cite RBF to JZA on porch deck, 3200 Idaho, Wash, DC., 1972</p>

Synergetics Dictionary

No Right Angles in Nature:

See No Straight Lines

RBF DEFINITIONS

Normal:

The average of all plus (+) and minus (-) weights of universe is Zero weight. The normal is eternal."

- Cite SYNERGETICS Draft - "Conceptuality: Life" - RBF marginalia, Somerset Club, Boston, 25 April 1971

RBF DEFINITIONS

Normal:

"Ninety-nine point nine-nine percent of the bodies in motion in physical Universe are operating orbitally; therefore normally; i.e., at 90° to the direction of the applied force.

"The special case of critical proximity where bodies converge due to the extreme disparity of relative mass magnitude is the rare special case at which special exceptional case point in Universe humans happen to exist, being thereby conditioned to think of the special-case exceptional as 'normal,' thus to misapprehend the normal general behavior. The misapprehension regards the normal as strangely perverse. There is much within the critical proximity environment which demonstrates the normal-- where the disparate mass relativities are not operating, as, for instance, when a rope is tensed and reacting at 90° to the direction of the tensing and thus becomes tauter. Compression members precess to bend."

- Cite SYNERGETICS draft at Secs. 1054.61+62, 6 Mar'73

Normalizer:

See Sleep, 11 Feb'73

RBF DEFINITIONS

Normal:

"Normal for Universe is 'in orbit'."

- Cite RBF to EJA, 200 Locust, Phila., 22 Jan'73

RBF DEFINITIONS

Norm of Einstein as Absolute Speed:

"We have a new norm. . . The norm of Einstein is absolute speed instead of 'at rest.'"

- Citation and context at Eternal Instantaneity (1) 22 Jun'72

RBF DEFINITIONS

Normal:

"I use 60 degrees as normal instead of 90 degrees."

- Citation & context at Pulse Pattern, 2 May'71

RBF DEFINITIONS

Norm of Einstein as Absolute Speed:

"Einstein's adoption as normal speed, the adoption of electromagnetic radiation expansion-- omnidirectionally in vacuo-- because the speeds of all the known different phases of measured radiation are apparently identical, despite vast differences in wavelength and frequencies, suggests a top speed of omnidirectional entropic disorder increase accommodation at which radiant speed reaches highest velocity when the last of the eternally regenerative Universe cyclic frequencies of multi-billions of years have been accommodated, all of which complex of nonsimultaneous transforming multivarieted frequency synchronizations is complementarily balanced to equate as zero by the sum-totality of locally converging orderly and synchronously concentrating energy phases of scenario universe's eternally pulsative, and only sum-totally synchronous, disintegrative, divergent, omnidirectionally exporting and only sum-totally synchronous integrative, convergent and discretely directional individual importings."

- Cite RBF to EJA in response to request to repeat his 'brief sentence' on sphere as a meeting of convergences. See SYNERGETICS draft 'Tension and Compression,' Sec. 614.08 See Sec. 325, Oct'71 Citation at Radiation: Speed Of

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Norm of Einstein as Absolute Speed:</u></p> <p>"Einstein's relativity, born at 20th century's opening, and its security in comprehended dynamic equilibrium becomes the newly acquired norm of the Airocean World, replacing the no longer tenable static norm of 'at rest' and 'death' and its invalidated securities of mass and inertia."</p> <p style="text-align: right;">- Citation and context at <u>Dyraxion Airocean World (II)</u>, Jun'50</p>	<p><u>Normal Speed:</u> (2)</p> <p style="text-align: center;">See All-acceleration Universe, 20 Jun'66</p>
<p><u>Norm of Einstein as Absolute Speed:</u> (1)</p> <p>See Absolute Velocity All-acceleration Universe Instant Universe vs. All-motion Universe Newton's Cosmic Norm of "At rest" Cosmic Norm Top Speed</p>	<p>RBF DEFINITIONS</p> <p><u>Norm: Tetrahedron As Norm:</u></p> <p>N.Y. Times, 15 May'72, H.M. Schmeck, Jr, "Immunology: A Code Spelling Life or Death": "The basic antibody structure is known to consist of four chains of chemical subunits-- two light chains and two heavy chains. On these are large 'constant regions' that are the same from antibody to antibody... Variable regions... confer specificity... the factor that allows antibodies to be <u>formed to fit</u>. (Underlining by R.B.F.)</p> <p>R.B.F. Marginalia: "Purely structural law. Purely triangle and tetra forming. 1 Tet = Norm. 6 = Norm.</p> <p>"6 = 2 x 3; 6 = 2 triangles; 2 triangles = 4 triangles; 4 triangles = Tet; 3 = 1/2 Norm.</p> <p>1 = Redundant Excess 2 = Deficient 3 = 1/2 Norm 6 = Norm"</p> <p style="text-align: right;">- Cite RBF marginalia presumably 15 May'72</p>
<p><u>Norm of Einstein as Absolute Speed:</u> (2)</p> <p>See Omnimotions, May'72 Eternal Instantaneity (I)* Radiation: Speed Of, Oct'71* Dyraxion Airocean World (II)* Intuition, 1 Feb'75 T Module, 31 Jul'77</p>	<p>RBF DEFINITIONS</p> <p><u>Normal to Universe:</u></p> <p>Q: "In the metaphor of the child pushing the spoon off the table, 90 degrees is normal to Universe; Precession. In what respect can 60 degrees be considered as normal?"</p> <p>RBF: "The interference energies of three-great-circle orbits automatically intertriangulate and automatically interequalize the interference energies to produce omniequilateral spherical triangles which always project flat-out as 60-degree triangles."</p> <p style="text-align: right;">- Cite RBF holograph answer to query by EJA, 3200 Idaho Ave., Wash, DC, 10 Sep'74</p>
<p><u>Normal Speed:</u> (1)</p> <p>See Norm of Einstein as Absolute Speed Top Speed</p>	<p><u>Normal to Universe:</u> (1)</p> <p style="text-align: center;">See Sixty Degrees as Normal</p>

Synergetics Dictionary

<p><u>Normal to Universe:</u></p> <p style="text-align: center;">See Child Pushes Spoon Off Edge of Table, 16 Jun'72</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>North-south Mobility of World Man:</u> (1)</p> <p>"All humanity is now prone to become world beings, so we're going to have to accommodate the comings and going in very new places.</p> <p>"When the United Nations was formed New York City was chosen as the headquarters because it could be reached by ships. At that time the chief way of getting around the world was by water, by vessel and ship. In 1961, long after the forming of the United Nations, three jet airplanes in one year outperformed the Queen Mary and the steamship United States at very much less cost; and suddenly the sea became obsolete as a way in which human beings would get from here to there.</p> <p>"We have been in an east-west orientation. New York City and San Francisco have been ports of embarkation and debarkation for freight and traffic. You fly over New York City today and look at the thousands of docks and you'll find about a dozen of them in use. And look at the great Jersey City railroad yards: absolutely empty. New York City has become completely obsolete from what it was.</p> <p>"That farm machinery I talked to you about [See Building Business, (2)] that brought about the farming in an entirely"</p> <p style="text-align: right;">- Cite RBF to "Town Meeting of the Air," Wash, DC; 10 Sep'75</p>
<p><u>Norm: Normal:</u> (1)</p> <p>See Cosmic Norm Failure as Norm Success as Norm Static Norm Newton's Cosmic Norm of "At Rest" Norm of Einstein as Absolute Speed Sixty Degrees as Normal Change is Normal Permanence ≠ Normal Zero = Normal</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>North-south Mobility of World Man:</u> (2)</p> <p>"different way, and mechanical implements created enormous agricultural industrial operations. Ninety percent of humanity yesterday were on the farms and they now have no other place to go but into the cities, occupying housing completely obsolete in the way it was built. I say that not only the building industry is obsolete but the whole of the cities are obsolete. And it is all at great cost to the human beings that are there... and we're going to have to do everything we can to make them as livable as we can. But we're in really for a completely new pattern, a new pattern of mobility for all of world man. Instead of the east-west world of the sea they're going to be flying over the pole."</p> <p style="text-align: right;">- Cite RBF to "Town Meeting of the Air," Wash, DC; 10 Sep'75</p>
<p><u>Norm: Normal:</u> (2)</p> <p>See Charts, 3 Oct'73 Eternal Instantaneity, (1) Problems, 9 Dec'73 Pulse Pattern, 2 May'71* Quick & the Dead: Song Of, Oct'66 New York City (10) Human Beings & Complex Universes, (15)</p>	<p><u>North-south Mobility of World Man:</u></p> <p style="text-align: center;">See World-around Communication Transcends Politics</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>North Face Domes:</u></p> <p>"At our Vancouver site, in addition to the four MFG "Molded Fiberglass" Company's Turtle Domes, there were two smaller North Face Domes. The name 'North Face' derives from the north face of Mt. Everest. These two North Face domes were developed by successful Everest climbers for their high altitude, advanced base, dwelling devices--designed for environmental conditions far more formidable than those with which humans anywhere had ever before swiftly and effectively coped. The North Face domes are oval in plan. They are geodesic. They are made with the highest tensile strength aircraft aluminum struts and have inner and outer dome skins of nylon with a double skin floor. They disassemble and roll into a pack two feet long by eight inches in diameter and weigh only eight pounds. An eight-pound home compounded with a sleeping bag permits human beings to be very intimate with nature under most hostile conditions."</p> <p style="text-align: right;">- Cite Accommodating Human Unsettlement, p.20; 20 Sep'76</p>	<p><u>No Secondhand Battleships:</u></p> <p style="text-align: center;">See Secondhand, 1946</p>

Synergetics Dictionary

<p><u>No Secondhand God:</u></p> <p>See Religion, (1) Iceland, 7 Oct'75 Young World, 9 Jul'62</p>	<p><u>No Sinking: Man Cannot Sink:</u></p> <p>See Down, May'49</p>
<p><u>Nose-to-navel Axis:</u></p> <p>See Axis of Reference: Nose-to-navel</p>	<p>RBF DEFINITIONS</p> <p><u>No-Size Conceptual Model:</u></p> <p>"Because I don't talk space, I don't have to have a vacuum. I don't start with space. I start with <u>nothing</u>. Things are always special-case temporary realizations of a specifically detailed dimension and behavior complex of generalized laws applied to a local inventory of physical resources. I start thinking with a no-size conceptual model of a whole system."</p> <p>- Cite 19 Feb re-write of <u>Vacuum</u>, 17 Feb '72</p>
<p><u>No Shape:</u></p> <p>See Shapeless: Universe Does Not Have a Shape</p>	<p><u>No-size Conceptual Model:</u></p> <p>See Conceptuality Independent of Size Zerosize</p>
<p><u>No Short Cuts:</u></p> <p>See Short Cuts</p>	<p>RBF DEFINITIONS</p> <p><u>No Solids:</u></p> <p>"Such objects, however, On closer inspection Are themselves mass-attractively integrated Energy event aggregates, Each of which is so closely amassed As to be superficially deceptive And therefore misidentified By humanity's optically limited discernment, As bodies-- Separate 'solid' bodies-- Despite that physics has never found And 'solid' phenomena."</p> <p>- Cite INTUITION, p.22, May '72</p>

Synergetics Dictionary

RBF DEFINITIONS

No Solids:

"If lines cannot go through the same point at the same time, there can be no continuous perfectly level planes. Planes are not experimentally demonstrable. Solids are not experimentally demonstrable. Physical experiment has never discovered any phenomena other than discontinuous discrete energy events, each uniquely identifiable amongst the gamut of frequencies of cyclic discontinuity of all the physical phenomena as comprehensively and overlappingly arrayed as the vast frequency ranges of the electromagnetic spectrum. The electromagnetic spectrum 'reality' has been found experimentally to embrace all known physical phenomena: visible, subvisible or ultraviolet thus far detected as present in universe. There are no solids. The synergetic behaviors of structures satisfactorily explains as discontinuous that which we have in the past superficially misidentified as 'solid.'"

- Cite SYNERGETIC Draft, "Conceptuality: Solid" - RBF Marginalia, Somerset Club, Boston, 25 April 1971

SOLIDS: MATTER - SEC. 525.01

No Solids:

(2)

See Subvisible Discontinuity, 19 Oct'72
Experiential Mathematics, 15 Oct'76
Fourth-dimensional Synergetics Mathematics, 14 Dec'76
Conceptual Physics, (1)(2)
Four-dimensional Reality, 30 Apr'77
Tuning-in & Tuning-out, 17 May'77

RBF DEFINITIONS

No Solids:

"For a microcosmic example of our spontaneous and superficial misapprehending and miscomprehending the environmental events we must concede that both theoretically and experimentally we have now learned and 'know' that there are no 'solids,' no continuous surfaces, only 'milky-way-like' aggregations of remotely interdistanced atomic events. There are no 'things'-- no particles-- only energetic events. Nonetheless society keeps right on 'seeing,' dealing and superficially celebrating in respect to 'things' called 'solids.'"

- Cite MIRT QUALITY ENVIRONMENT, 24 Apr'67

SOLIDS: MATTER - SEC. 525.02

RBF DEFINITIONS

No Speed:

"The top speed of radiation is simply the minimum operational lag before making the cosmic leap to the eternal No-speed, where the instantaneity spontaneous to a child's conception is normal and eternal."

- Citation and context at Intellect, 27 May'72

RBF DEFINITIONS

No Solids:

"If lines can't go through the same point at the same time, we can't even have 'planes'. So planes are 'out.' Solids are also gone because physical experiment has never disclosed any phenomena other than discontinuities identified as the gamut of frequencies of cyclic discontinuity of all the physical phenomena as arrayed within the vast frequency ranges of the electromagnetic spectrum which embraces all physical phenomena visible, sub-visible, or ultra-visible thus far detected in universe. Solids are 'out.'"

- Cite NASA SPBLCH, -Cite CARROLL L. TEXT IV, 29, IV, 30, P. 32, Jun'66

SOLIDS: MATTER - SEC 525.01

No Spherical Continuum:

See O Module, 29 Sep'76

RBF DEFINITIONS

No Sphere Integrity:

"As there may be no absolute division of energetic Universe into isolated or noncommunicable parts, there is no absolute enclosed surface or absolutely enclosed volume; therefore, no true or absolutely defined simultaneous surface sphere integrity. Therefore, a sphere is a polyhedron of invisible plurality of trussed facets..."

- Cite RBF caption in McHale's "RBF Fuller", Plate 36, 1962

UNIVERSE - SEC 307.3

No Solids:

(1)

See Static Invalidity of Solid Things vs. Empty Space

Synergetics Dictionary

<p><u>No Square Stability:</u> See Triclinic, 31 Aug'76</p>	<p>RBF DEFINITIONS</p> <p>██████ <u>No Static:</u> "There is no true 'noise' or '<u>static</u>.' There are ██████ only as yet undifferentiated and uncomprehended orders."</p> <p style="text-align: center;">(From NASA speech, p. 90.)</p> <p>- Cite Synergetics draft, "Symmetry," Sec. 32.04, July 1971.</p> <p>- Citation & context at <u>Chaos</u>, Jun'66</p>
<p><u>Nostalgia:</u> See Spherical Nostalgia Yesterdays</p>	<p><u>No Straight Lines:</u> (1)</p> <p>See Deliberately Nonstraight Lines Nonstraight No Right Angles in Nature Zigzag</p>
<p>RBF DEFINITIONS</p> <p><u>No Start:</u> "You don't have to find where Universe starts. It doesn't start. It's eternal."</p> <p>- Cite RBF at Penn Bell videotaping session, Philadelphia, 22 Jan'75</p>	<p><u>No Straight Lines:</u> (2)</p> <p>See Line, 28 Oct'73; Mar'71 Servomechanism, 15 May'75 Social Sciences: Analogue to Physical Sciences, (1) Left & Right, 7 Nov'75</p>
<p><u>No Static Frame of Reference:</u> See Eternity, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Not A Priori:</u> "The octet truss is not a priori."</p> <p>- Citation & context at <u>Octet Truss</u>, 24 Sep'73</p>

Synergetics Dictionary

<p><u>Not A Priori:</u> (1)</p> <p style="margin-left: 40px;">See Self is not A Priori</p>	<p><u>Not-everywhere:</u></p> <p style="margin-left: 40px;">See Distributive, 23 Sep'73</p>
<p><u>Not A Priori:</u> (2)</p> <p style="margin-left: 40px;">See Octet Truss, 24 Sep'73*</p>	<p><u>No Thickness:</u></p> <p style="margin-left: 40px;">See Systematic Realization, 20 Dec'74</p>
<p><u>Note: Notes:</u></p> <p style="margin-left: 40px;">See Basic Notes Chords & Notes</p>	<p>RBF DEFINITIONS</p> <p><u>Nothing:</u></p> <p style="margin-left: 40px;">"I don't start with space. I start with nothing."</p> <p style="margin-left: 40px;">- For citation and context see <u>Vacuum</u>, 17/19 Feb '72</p>
<p><u>Not Enough to Go Round:</u></p> <p style="margin-left: 40px;">See Scarcity</p>	<p>RBF DEFINITIONS</p> <p><u>Nothing:</u></p> <p style="margin-left: 40px;">"Lags are intervals-- <u>nothing</u>."</p> <p style="margin-left: 40px;">- Cite <u>SYNERGETICS DEPT.</u> - "Conceptuality: Life" - RBF <u>Marginalia, Somerset Club, Boston, 23 April 1971.</u></p> <p style="margin-left: 40px;">- Citation & context at <u>Eternal & Temporal</u>, 25 Apr'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>No-thing:</u> "There are no solids, nor particles-- <u>no-things</u>."</p> <p style="text-align: right;">- Cite SYNERGETICS corollaries, §ec. 240, 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Nothingness:</u> "When the vector equilibrium assembly of eight triangles and six squares is opened up it may be hand held in the omnissymmetry conformation of the 'idealized <u>nothingness</u> of absolute middleness.'"</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 460,02, 5 Oct'72</p>
<p>RBF DEFINITIONS</p> <p><u>Nothingness:</u> "The nothingness is just where you are not tuning. Nothingness = untuned somethingness."</p> <p style="text-align: right;">- Cite RBF to EJA, <u>ragano's Rest.</u>, Phila., PA., 22 Jun'75</p>	<p><u>No Thing: No Thing-in-itself:</u> (1)</p> <p>See Connections & Relatedness Starting Point System vs. Thing-in-itself Verbs: No 'Where's, No 'What's, Only 'When's Zero Model vs. Thing-in-itself Static Invalidity of Solid Things vs. Empty Space</p>
<p>RBF DEFINITIONS</p> <p><u>Nothingness:</u> "The nothingness area is one unbounded by any visible closed line. Nothingness is the part of the system unencompassed by the observer."</p> <p style="text-align: right;">- Citation & Context at <u>Minimum Awareness Model</u>, (1)(2), 9 Jun'75</p>	<p><u>No Thing-in-itself: No Thing:</u> (2)</p> <p>See Vector Equilibrium as Starting Point, 8 Apr'75 Ninety-two Elements, 21 Jun'77</p>
<p>RBF DEFINITIONS</p> <p><u>Nothingness:</u> "The total nothingness involved is accounted by $20 F^3$. The third power accounts both the untuned nothingness and the finitely tuned somethingness. The 20 is both Einstein's E and all the other untuned non-E of Universe. The $20 F^3$ is the total Universe momentarily all at one time center." time or timeless.</p> <p style="text-align: right; font-size: small;">PER RBF CORRECTION - 26 NOV'72</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 960,09, 16 Nov'72</p>	<p><u>Nothingness Local:</u></p> <p style="text-align: right;">See Zero-niness, 11 Sep'75</p>

Synergetics Dictionary

RBF DEFINITIONS

Nothingness: Mold of Nothingness:

"-- We suddely see the mold of nothingness. That's all it is!"

- For citation and context see Black Hole (2), 27 Jan'72

RBF DEFINITIONS

Nothingness of Areal and Volumetric Spaces:

"The function of the chords is to relate. . . And the resultant is the inadvertent definition of the nothingness of the areal and volumetric spaces. . . Areas do not create themselves. They are incidental to the lines between the events. The faces are the bounding of nothingness. Areas and volumes are incidental resultants to finding the connections between the events of experience."

- Citation and context at Connections and Relatedness, 20 Feb'73

Nothingness of Night:

See Fireworks, May'72

Nothingness of Areal & Volumetric Spaces:

See Domain & Quantum, (1)(2)

Nothingness Phase:

See Vacuum, 11 Sep'75

RBF DEFINITIONS

Nothingness of Universe:

"What the blowtorch does is to let infinity-- or the nothingness of Universe-- into the system."

- For citation and context see Barrel (2), Dec'70

Nothingness = Silence:

See Silence, 30 Sep'76

Nothingness = Untuned Somethingness:

See Nothingness, 22 Jun'75

Synergetics Dictionary

<p><u>Nothing:</u> <u>Nothingness:</u> <u>None:</u> (1)</p> <p>See Background Nothingness Central Nothingness Equilibrium Field of Omnidirectional Nothingness Infinite = Nothingness Mold of Nothingness Nonstate Nonthing Nothingness = Untuned Somethingness Novent Nucleus = Nine = Nothing; One = None Something-nothing-something-nothing Space Nothingness Straight-nothingness Unfolded Nothingness Untuned Windows of Nothingness</p>	<p><u>No Time:</u> <u>No-time-at-all:</u> (1)</p> <p>See Absolute Velocity Cosmic Synergy Eternal Instantaneity Eternity: Equation of Eternity Instantaneity Timeless Top Speed: Top Velocity</p>
<p><u>Nothing:</u> <u>Nothingness:</u> (2)</p> <p>Domes, 12 May'77 See A Priori Environment, May'72 A Priori Four-dimensional Reality, (2) Black Hole, (2)* Bow Ties, 6 Oct'72 Eternal & Temporal, 25 Apr'71* In & Out, 13 Nov'69 Intervals, 25 Apr'71 Lavoisier, 1 Oct'71 Tetrahedron, 20 Feb'73 Triangle, 16 Dec'73 Vacuum, 19 Feb'72* Vector Equilibrium: Zerophase, 1 May'71 Whole, 17 Feb'72 In & Out: Go In To Go Out, 16 Dec'73 Zerophase, (1) Star Events & Degrees of Freedom, 12 May'75 Thirty Minimum Topological Characteristics, (1) Self & Otherness: Four Minimal Aspects, 22 Jun'75 Minimum Awareness Model, (1)(2)* Dynamic Equilibrium, 24 Apr'76 Space, 2 Jul'76</p>	<p><u>No Time:</u> <u>No Time at All:</u> (2)</p> <p>See Intellect, 27 May'72 Motion, 27 May'72 Time & Space, 7 Feb'71 Pole Vaulting, 2 Jul'75</p>
<p><u>Nothing:</u> <u>Nothingness:</u> (3)</p> <p>See No-thing No Thing-in-itself Nothingness of Areal & Volumetric Spaces Nothingness: Mold of Nothingness Nothingness of Night Nothingness Phase Nothingness of Universe Nothingness = Untuned Somethingness Nothingness = Silence</p>	<p><u>Not Of:</u></p> <p>See Between and Not Of</p>
<p>RBF DEFINITIONS</p> <p><u>No-time-and-away-ago:</u></p> <p>"'No-time-and-away-ago' is my new phrase in the Goldilocks piece for a theme like Dante's. The otherness is broken down into past otherness, present otherness, and future otherness."</p> <p style="text-align: right;">- Cite RBF to EJA, 28 May'75</p>	<p><u>No Totality:</u></p> <p>See No Conceptual Totality</p>

Synergetics Dictionary

<p><u>Not Out of This World:</u> (1)</p> <p>See Imaginary Universe vs. This Universe Outside: What's Outside Outside?</p>	<p><u>No Two-dimensionality:</u></p> <p>See Fourth-dimensional Synergetics Mathematics, 14 Dec'76</p>
<p><u>Not Out of This World:</u> (2)</p> <p>See Omnigeometric, 27 May'72 Public Relations, 28 Jan'75</p>	<p>RBF DEFINITIONS</p> <p><u>No Twogon:</u></p> <p>"There is no twogon."</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed. at Sec. 608.24, 11 Apr'75</p>
<p><u>Not Touching: Never-quite-touching:</u></p> <p>See Rules of Never-quite-touching Vertaxial Connections Vertaxial Connections: Rules of Never-quite-touching</p>	<p>RBF DEFINITIONS</p> <p><u>Noun:</u></p> <p>"In architecture 'form' is a noun; in industry, 'form' is a verb. Industry is concerned with doing, whereas architecture has been engrossed with making replicas of end results of what people have industrially demonstrated in the past. <u>Noun</u>, in our phonetic etymology, means 'now-one,' i.e., the most recent chaos of thought reduced to an answer. The 'now-one' or noun must, in due course through selection by the intellect, become two or more observed characteristics of the one, there being no absolute identity. Nouns, from a language viewpoint, are tenable only as 'names' for facts recently determined. The noun is, therefore, more subject to constant revision than is any other part of speech. No longer is it 'stone.' No longer is it 'steel.' Industry is dealing in hundreds of different steels, physically more dissimilar than the Chinese and the Swiss."</p> <p style="text-align: right;">- Cite NINE CHAINS TO THE NOON, p.41, 1938</p>
<p><u>Not Trespassing:</u></p> <p>See Trespassing: Not Trespassing</p>	<p><u>Noun:</u> (1)</p> <p>See Name "Named" Phenomena: Name Words Newton was a Noun Thing: Thingness Verb vs. Noun No Nouns</p>

Synergetics Dictionary

<p><u>Noun:</u> (2)</p> <p>See Event, 26 Jan'72 Meaningless, Oct'66</p>	<p>RBF DEFINITIONS</p> <p><u>Novent:</u></p> <p>"Alan Watts: But I mean there is a common assumption-- it is ordinary common sense-- that space is nothing at all.</p> <p>Fuller: That's <u>novent</u>. I call it no-event. I don't like the word space anymore because it implies something. We have only frequencies. We have events and no-events. We have the unique energy packages.</p> <p>Watts: But any sort of solid energy package seems to me inconceivable without a special ground.</p> <p>Fuller: It doesn't bother me at all about the no-event.</p> <p>Watts: Well, how can you talk of curved space, the properties of space?</p> <p>Fuller: But you can't talk of straight space. There are no straight lines. Physics has found nothing but waves."</p> <p>- Cite WATTS TAPS, p. 52, 19 Oct'70 - Citation at Space, 19 Oct'70</p>
<p><u>No Up & Down:</u></p> <p>See Death, 29 Mar'77 Dynamic Frame of Reference, (3)(4) In, Out & Around, 17 Mar'77; 10 Dec'73 Nature in a Corner, 17 Nov'75 Spaceship, (1) Spaceship Earth, 22 Jun'74 Synergetic Hierarchy, 5 May'74 No Energy Crisis, (1) Conceptual Limits, 22 Jun'77</p>	<p>RBF DEFINITIONS</p> <p><u>Novent:</u> (1)</p> <p>"There are no specific directions or localities in Universe which may be oppositely designated as UP or DOWN. In their place we must use the words OUT and IN. We move in towards various with individual masses or we move out from them. But the words IN and OUT are not mirror image opposites. IN is in respect to individual experience foci-- OUT is common to all. IN is discrete, OUT is general. The IN's are discontinuous. The OUT's are continuous. OUT is nothingness, i.e. non-experience. Only the non-experience nothingness infers a continuum. The non-event continuum is the <u>Novent</u>. Inferentially the <u>Novent</u> continuum permeates the finitely populated withinness and comprises the finit <u>Novent</u> withoutness. The rubber glove stripped inside-outingly from off the left hand now fits only the right hand. First the left hand was conceptual and the right hand was non-conceptual-- and then the process of stripping off inside-outingly seemingly annihilated the left hand and created the right hand-- then vice versa as the next strip-off occurred. When physics finds experimentally that a unique energy patterning,-- erroneously referred to in archaic terms as a particle,-- is annihilated, that</p> <p>CONCEPTUALITY SEC. 524 <u>NOVENT</u> - Cite NEHRUS SPELCH, p.12, 13 Nov'69</p>
<p><u>Novel: Novels:</u></p> <p>See Fuller, R.B: The Thinking Me, a8 Dec'76</p>	<p>RBF DEFINITIONS</p> <p><u>Novent:</u> (2)</p> <p>"Annihilation is only of the rubber glove kind. The positive becomes the negative and the positive only seems to have been annihilated. We begin to realize conceptually the finite, yet non-sensorial, outness which can be converted into sensorial inness by the inside-outing process. Ergo, <u>novent</u> is the finite but non-sensorial continuum. Sensoriality is a corporeally external phenomenon-- reportedly relayed inwardly to the brain and therein imaginatively scanned by the mind which conceptualized independently in generalized formulations such as the conception of a nuclear grouping around a nucleus, ■ quite independent of size..."</p> <p>- Cite NEHRU SPELCH, p.12, 13 Nov'69</p>
<p>RBF DEFINITIONS</p> <p><u>Novent:</u></p> <p>"The limit case of prime otherness is that of the point and the no-points: the events and the novents. Numerically, one vs. zero. Because it is the limit case it is prime. Zero is prime otherness."</p> <p>- Citation and context at Prime Otherness, 23 Sep'73</p>	<p>RBF DEFINITIONS</p> <p><u>Novent:</u></p> <p>"There is no static geometry. There are momentarily existant geometrical relationships. There are events and lack-of-events. The electromagnetic spectrum is a manifest of the gamut of unique frequencies of recurrence. There are no 'solids,' no 'surfaces,' no continuums,' no straight lines or planes. We have only events and no-events-- the events being finite and their energies limited. . . .</p> <p>"We are talking about no event, so let us contract those two words into one word, <u>novent</u>, meaning nothing occurs."</p> <p>- Citation and context at Space, 1968</p>

Synergetics Dictionary

<p>MBF DEFINITIONS</p> <p><u>Novent Continuum:</u> "The non-event continuum is the Novent. . . The Novent continuum permeates the finitely populated withinness and comprises the finite Novent withoutness. . . Only the non-experience nothingness constitutes continuum."</p> <p style="text-align: right;">- Cite Synergetics draft, Secs. 524.04 + 524.05. 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Now:</u> "The future is not linear. Time is wavelinear. Experience is expansive, omnidirectionally including and refining the future. It probably consists of omnidirectional wave propagations. We seem to be talking about a greater range of known cycling. It is both a subjective 'now' and an objective 'now'; a forward-looking now and a backward-looking now which combine synergetically as one complete "now." Because every action has both a reaction and a resultant, every now must have both a fading past and a dawning future."</p> <p style="text-align: right;">- Cite RBF rewrite of SYNERGETICS galley at Sec. 529.11 7 Nov'73</p>
<p><u>Novent Continuum:</u></p> <p style="text-align: center;">See Gravitational Continuum</p>	<p>RBF DEFINITIONS</p> <p><u>Now:</u> "I cannot think simultaneously About all the special-case events which I have experienced, But I can think about one special set Of closely associated events At any one <u>now</u>."</p> <p style="text-align: right;">- Cite BRAIN & MIND, p.132 May '72</p>
<p><u>Novent:</u> (1)</p> <p>See Epistemological Stepping Stones Events & Nonevents Invisible No-point Nothing No-thing Nothingness: Mold of Nothingness Novent Continuum Vacuum Vacuum = Novent = Invisible Events, Novents & Event Interrelatabilities Space Nothingness</p>	<p>RBF DEFINITIONS</p> <p><u>Now:</u> "Universe is the aggregate * * * * * Which aggregate Of only partially overlapping events Is sum-totally a lot of yesterdays Plus an awareness of <u>now</u>."</p> <p style="text-align: right;">- Cite BRAIN AND MIND, p.125, galley p.131 May '72</p>
<p><u>Novent:</u> (2)</p> <p>See Connections & Relatedness, 20 Feb'73 Prime Otherness, 23 Sep'73* Space, 19 Oct'70; May'71 Star Event & Degrees of Freedom, 12 May'75</p>	<p>RBF DEFINITIONS</p> <p><u>Now:</u> "Yesterday and now Are neither simultaneous Nor mirror-imaged; But through them run themes As overlappingly woven threads, Which though multiplied individualized Sum-totally comprise a scenario."</p> <p style="text-align: right;">- Cite BRAIN & MIND, p.131 May '72</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Now:</u></p> <p>"Now is where man has kidded himself into thinking that there's no change at all.</p> <p>"Take the gestation rates from the elephant to the half-life radioactivity of atoms which approach cosmic speeds and get back into eternity. What we call <u>now</u> is just a slow-down. In the Gay 90's most people thought that there was no change at all. Even Newton could say 'at rest.'</p> <p>"I ramified the idealistic-- which is essential to all the palpitations. It goes back to angle, and triangle, and conceptuality independent of size and starting with the fundamental idea that there must be a nucleus. There is no straight line; only the wave coincides with reality."</p> <p>- Cite RBF to LJA, at breakfast 1200, Idaho, DC, after RBF had read first three chapters of Eccles 'Facing Reality,' until 3:00 a.m. the night before, 14 Feb '72.</p>	<p>RBF DEFINITIONS</p> <p><u>Now:</u></p> <p>"We cannot view the great confluences of separately and remotely significant events forwardly resultant to now."</p> <p>- Citation & context at <u>Surprise</u>, May '49</p>
<p>RBF DEFINITIONS</p> <p><u>Now:</u></p> <p>"Life is the <u>now</u> event with its reaction past and resultant future."</p> <p>- Citation & context at <u>Life</u>, 1 Jun '71</p>	<p><u>No Wave:</u></p> <p>See Waveless</p>
<p>RBF DEFINITIONS</p> <p><u>Now:</u></p> <p>"Because every action has both a reaction and a resultant every <u>now</u> must have a past and a dawning future."</p> <p>- Cite SYNERGETICS draft, 'Conceptuality: Time' - RBF marginalis added at Somerset Club Boston, 25 Apr '71</p>	<p>RBF DEFINITIONS</p> <p><u>Now Hourglass: Cross Section of Teleological Bow Tie:</u> (1)</p> <p>"The macrocosm of minimum frequency of omnidirectional self-interference restraints whose greatest degrees of outward expansions occur when the last of the least-frequent self-interfering cycles is completed, and cycles, being geodesic great circles, must always interfere with one another twice in each wave and frequency cycle, which 'twiceness' imposes eternally regenerative cosmic resonance, and all the latter's inherent quanta-wave-frequency-time-interference-mass-and effort-aspects in exquisite speed-of-light 700-million miles per hour, self-interfering radiation patterns' energetic self-tying into concentric knots of relative mass in a mathematically idealized variety of symmetrical-asymmetrical atomic assemblages whose local subvisibly resolvable micro-orbiting induces the superficially deceptive motionless thingness of mini-micro-cosmos of NOW</p> <p><u>TIME - 2nd Ed.</u> <u>SEC. 529.40</u> - Cite RBF rewrite, 25 Sep '73</p>
<p>RBF DEFINITIONS</p> <p><u>Now:</u></p> <p>"The future is not something linear. So we seem to be talking about a greater range of known cycling. . . We're talking a complete 'now.' It really is a subjective 'now' and an objective 'now' and so forth, but it really is all 'now.'"</p> <p>- Cite WATTS TAPE, p.39, 19 Oct '70</p> <p>- Citation at <u>Time</u>, Oct '70 19</p>	<p>RBF DEFINITIONS</p> <p><u>Now Hourglass: Cross Section of Teleological Bow Tie:</u> (2)</p> <p>"NOW which progressive experience-won knowledge multiplies by progressive intellectually contrived, instrumentally implemented exploratory subdividing into microscopically ever greater speeds of transformation through insectine phase magnitudes dividing into the micro-organisms phase, and then dividing progressively into molecular and atomic phases; then phasing into radioactivity at 700-million miles per hour, expanding once more into the macrocosm and repeat: ad infinitum.</p> <p><u>TIME - 2nd Ed.</u> <u>SEC. 529.40</u> - Cite RBF rewrite, 25 Sep '73</p>

Synergetics Dictionary

TEXT CITATIONS

Now Hourglass: Cross Section of Teleological Bow Tie:

See Sheltzer, Vol. 2., No. 4, p.43, May'72

Synergetics, 2nd. Ed. : Sec. 529.40

RBF DEFINITIONS

Now House:

(3)

"indoor-outdoor carpeting. The fourth dome stood mildly apart and could have been connected by a canopy but was not.

"One of the World Gamers' domes contained a complete workshop with all manner of handtools, benches, metal- and wood-working equipment and general electronics servicing gear. Another dome was used for the kitchen, bathroom, toilet, office, and clothes hanging. The third dome was used as a video theater and dormitory. The fourth dome was used for storage and laundry drying....

"Ten of the World Gamers lived in the Now House installation. They lived very comfortably and happily (as do a crew of 10 sailors living together on an ocean yacht, many of which are later equipped with hundreds of thousands of dollars worth of low-input, high-output, invisible performance instruments.)

"The Now House had been voluntarily equipped by many major corporations. Largest single supplier of all was the J.C. Penney Company. SONY let them have its most advanced multi-color videotape production and viewing system. Minnesota"

- Cite ACCOMMODATING HUMAN UNSETTLEMENT, p.12; 20 Sep'76

RBF DEFINITIONS

Now House:

(4)

"Mining had given them their best duplicating equipment. They had silk-screening equipment, printing equipment, and typewriters, and were able to broadcastingly communicate to society from their headquarters and received their feedback from a thousand visitors a day.

"In the kitchen-bathing dome Herman Miller had provided most compact, economic but adequate, shelving on which to mount their kitchen equipment. They had a toilet which converted human waste into high-grade fertilizer. The heat necessary for this odorless process was provided alternately by electricity from the windmill hookup or by heat from the solar panel water-heating device. The toilet system produced fertilizer as a rich, dry, manured, loam-like substance which needed to be taken out of the system only once a year....

"The domes were equipped with a remote control telephone. Arrayed between two of the three domes under a translucent canopy were banks of tomatoes and other food vegetation in hydroponic tanks, with noticeable growth accomplished during only the short two-week period of the installation."

- Cite ACCOMMODATING HUMAN UNSETTLEMENT, p.13; 20 Sep'76

RBF DEFINITIONS

Now House:

(1)

"That was present and physically demonstrated at Vancouver's UN Habitat Conference/ Jericho Beach site was a mushroom group of swiftly foldable and movable geodesic domes and modernised Indian tepees produced, developed, and installed by a young world inspired to do something about its own future.

"Our World Game staff... put on an exhibit of four geodesic domes, which are now in manufacture by the Molded Fiberglass Company (MFC) of Ashtabula, Ohio... Their 14-foot, 5/8-sphere polyester fiberglass geodesic domes have alternate translucent or opaque fiberglass hexagon or pentagon panels. Their domes retail for \$750.

"The World Game staff called their Exhibit the 'Now House.' This name derived from the fact that everything they had on display could be purchased right now from industrial mass production sources. All labor of their production occurred under the controlled environment-conditioning of factories: no rain, cold, heat, snow, ice, or wind. The MFC domes had no more need for old building technology than has the opening of an umbrella--a mobile, environment-controlling"

- Cite ACCOMMODATING HUMAN UNSETTLEMENT, p.10; 20 Sep'76

RBF DEFINITIONS

Now House:

(5)

"While the domes, as already noted, were priced at \$750 each, the total package with all its \$17,000-worth of equipment amounted to \$20,000. This ratio of \$3,000 for the environmental dwelling shells and skin to \$20,000 for the totally and luxuriously equipped living facility--approximately 1 : 7--is very close to the international ocean racing yachts' bareboat to sailaway equipped cost ratio. A modern 37-foot-overall length one-tonner at \$30,000 for the bare boat with full transoceanic racing equipment, sails, instruments, et al., costs approximately \$200,000. The reason the bareboat yacht hulls cost so much more than the bare Now House domes is due to all the stresses, strains, and other formidable conditions which must be coped with by the boat and their lightweight, high-strength equipment while operating at the interface of the air/ocean and the water/ocean. The conditions are not present in the land installations....

"The #2 Now House will be ready for exhibit by August 28, 1977, and will soon thereafter become publicly available as the air-deliverable, only rentable, world-around dwelling machine service right on its scheduled 50th birthday."....

- Cite ACCOMMODATING HUMAN UNSETTLEMENT; pp.13-14; 20 Sep'76

RBF DEFINITIONS

Now House:

(2)

"artifact. The World Gamers brought their exhibit from Philadelphia to Vancouver in one camper truck pulling one trailer.

"The World Gamers first dug circular trenches slightly larger in diameter than the domes' circular bases. As they trenched they threw their shovelfuls of Earth into the enclosed circle and leveled it to form an elevated base for each dome. On the top of the Earth they laid edge-overlapping corrugated aluminum panels which were surmounted first by aluminized foamboard to radiate heat, and next by plywood, and again by indoor-outdoor carpeting. This made a very comfortable, springy and dry floor.

"They anchored the domes so that they could not blow away, for the domes weighed only 225 pounds each.

"Three of the domes were positioned in a triangular pattern with ten feet between them. A high pole was mounted at the center of the triangular area, which in turn supported a watertight translucent canopy. The large between-domes triangular area below the canopy was covered with the"

- Cite ACCOMMODATING HUMAN UNSETTLEMENT, p.11; 20 Sep'76

RBF DEFINITIONS

Now House:

(6)

"One of the most impressive facts at Vancouver was that disclosed by nature. During the first four days of the installation there were torrential rains. Mud was everywhere around the Jericho Beach forum grounds.... The World Gamers had placed large heavy planks on the ground leading to their installations so that by the time the visitors came over mats into the complex their feet were reasonably dry. With the large numbers coming daily it was amazing that the flooring of the complex remained comfortably dry throughout the rains.

"The domes consisted of half opaque panels and half translucent panels and could be rotatingly rearranged with the translucent side south to impound enormous amounts of Sun radiation. With the translucent panels north, they remained cool and let in only the north light so desirable to artists."

- Cite ACCOMMODATING HUMAN UNSETTLEMENT; p.15; 20 Sep'76

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Now Necessity:</u></p> <p>The mathematicians by their pseudo-escape to abstraction from a <u>now necessity</u> often get to kidding themselves. They do not understand an hierarchy of events."</p> <p style="text-align: right;">- Cite <u>Moebius Strip</u>, 10 Jan'50</p>	<p style="text-align: right;"><u>Now:</u> (1)</p> <p>See Eternal Slowdown Instantaneity Future: Jan Backs into his Future Here & Now Reality is Eternally Now Self-now Status Quo Present Time is Only Now</p>
<p>RBF DEFINITIONS</p> <p><u>Now Set:</u></p> <p>"...the olfatorial and aural (what you are smelling, eating, saying, and hearing) are the <u>now set</u>."</p> <p style="text-align: right;">- Citation and context at <u>Sensea</u> (1), 22 Nov'73</p>	<p style="text-align: right;"><u>Now:</u> (2)</p> <p>See Apprehending, 22 Nov'73 Dynamic Frame of Reference, (5) Life, 1 Jun'71* Prims Enclosure, 17 Feb'73 Scenario, May'72 Sensorial Identification of Reality, (2) Surprise, May'49* Time, Oct'70* Time, Oct'70* Tuning-in & Tuning-out, 17 May'77</p>
<p><u>Now-you-see-it-now-you-don't:</u> (1)</p> <p>See Binary Conceptuality & Nonconceptuality Pulse Pattern Visible & Invisible Something-nothing-something-nothing</p>	<p style="text-align: right;"><u>Nowhere & Nowhen:</u> (1)</p> <p style="text-align: center;">See No Time</p>
<p><u>Now-you-see-it-now-you-don't:</u> (2)</p> <p>See Fourth Quantum, 9 Jun'75 Nuclear Sphere, 16 Dec'73 Resolvability Limits, 30 Apr'77</p>	<p style="text-align: right;"><u>Nowhere & Nowhen:</u> (2)</p> <p style="text-align: center;">See Cosmic Synergy, Jan'72</p>

Synergetics Dictionary

Nozzle: Harvesting Pollution at the Nozzle:

See Pollution, 1970
Pollution Control, (1)(2)

Nuclear Assemblage Components:

See Mites Make All Regular Polyhedra, 27 May'72

Nuances of Angles:

See Angle: Pumping Fraction Factors, 15 Mar'48

Nuclear Computer Design:

See Atomic Computer Complex
Omnidirectional Typewriter

Nuance:

See Dictionary, 23 Feb'72; 24 Feb'72; 19 Jul'76
Truth, 1967
Words, 2 Jun'74
Scheherazade Numbers: Declining Powers Of,
17 Mar'75
Words & Coping, 7 Nov'75

Nuclear Cube:

See Nucleated Cube

RBF DEFINITIONS

Nuclear:

"Synergetics is primarily the geometry of the nucleus rather than of the ~~geometry~~ geometry of chemistry. It's mostly the fundamental behaviors, the central behaviors. It is inherently nuclear in its own right."

- Citation & context at Synergetics, 23 Mar'74

RdF DEFINITIONS

Nuclear Domain:

"Vector equilibrium is the maximum domain of a nucleus."

- Cite RBF at Penn Bell videotaping session, Philadelphia,
22 Jan'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Nuclear Domain & Elementality:</u> (1)</p> <p>"The closest-packed sphere shell growth rate is governed by the formula $10 F^2 + 2$. The formula is reliably predictable in the identification of chemical elements, but that identification is limited to the unique nuclear domain pattern involvement.</p> <p>"When a new nucleus becomes completely surrounded by two layers then the exclusively unique pattern surroundment of the first nucleus is terminated. It is no longer the unique nucleus. The word <u>elemental</u> relates to the original unique patterning around any one nucleus of closest-packed spheres. When we get beyond the original unique patterning and find the patternings repeating themselves, we get into the molecular world.</p> <p>"Uranium 92 is the limit case of what we call <u>inherently self-regenerative chemical elements</u>. Beyond these, we get into split-second life demonstrations of the elements. These demonstrations are similar to having a rubber ball with a hole and stretching that hole's rubber outwardly around the hole until we can see the markings on the inner"</p> <p>- Cite RBF Ltr. to Paul Baclaski; 6 May'77</p>	<p><u>Nuclear Geometrical Limit of Rational Differentiation:</u></p> <p style="text-align: center;">See Mites as Prime Minimum System, 15 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Nuclear Domain & Elementality:</u> (2)</p> <p>"skin corresponding to markings on the outer skin, but when we release the ball the momentarily-outwardly-displayed markings of the inside will quickly resume their internal positions.</p> <p>"As we see in (Sec. 624), the inside-outing of Universe occurs only at the tetrahedral level. In the nucleated tetrahedral, closest-packed-sphere-shell growth rates, the outward layer sphere count increases as frequency to the second power times 100 plus 100--with the outer layer also always doubled in value."</p> <p style="text-align: center;">--Incorporated in SYNERGETICS 2 at Sec. 419.10-419.13</p> <p>- Cite RBF Ltr. to Paul Baclaski; 6 May'77</p>	<p><u>Nuclear Gyro:</u></p> <p style="text-align: center;">See Hen, 6 May'48</p>
<p><u>Nuclear Domain:</u> (1)</p> <p style="text-align: center;">See Spheric Domain vs. Nuclear Domain Domain of a Nucleus</p>	<p>RBF DEFINITIONS</p> <p><u>Nuclear and Nebular Zonal Waves:</u></p> <p>"Discontinuous compression, continuous-tension structures are finite islands of microcosmic, inwardly precessing, <u>zonal wave</u> sequence displacements of radial-to-circumferential-to-radial energy knotting regenerations as <u>nuclear</u> phenomena-- and the whole, enclosed in infinitely macro-cosmically trending precessional unravelings, regenerates precessionally as radial-to-circumferential-to-radial <u>nebular</u> phenomena-- circumferential micro- or macro- being finite, and radial being infinite. Compression is micro and tension is macro."</p> <p style="text-align: center;">- Cite Synergetics Notes, p.9, et. seq., 1955. Incorporated in SYNERGETICS at Sec647.04, 3 Aug-1 Oct'72</p>
<p><u>Nuclear Domain:</u> (2)</p> <p style="text-align: center;">See Nuclear Cube, 11 Dec'75; 23 Feb'76</p>	<p><u>Nuclear & Nebular Zonal Waves:</u></p> <p style="text-align: center;">See Oscillation & Pulsation Tidal</p>

Synergetics Dictionary

<p><u>Nuclear & Nebular: Nucleus & Galaxies</u></p> <p>See Astro & Nucleic Cosmic & Local Orbiting Magnitudes Relative Activity Diameters of Stars & Electrons</p>	<p>RBF DEFINITIONS</p> <p><u>Nuclear and Non-nuclear Polyhedra:</u></p> <p>"The closest packed" nucleated "octahedron requires 18 spheres; the tetrahedron 34; the rhombic dodecahedron 92; and the cube 364. The other two symmetric Platonic solids, the icosahedron and the dodecahedron, are inherently devoid of equiradius nuclear spheres, having insufficient radius space within the triangular void. This suggests both electron and neutron behavior relationships for the icosahedron and the dodecahedron. The nucleation of the octahedron, tetrahedron, rhombic dodecahedron, and cube very probably play important parts in the atomic structuring as well as in the chemical compounding and in crystallography."</p> <p>- Cite SYNERGETICS draft at Sec. 415.13, 19 May'72</p>
<p>RBF DEFINITIONS</p> <p><u>Nucleus = Nine = Nothing:</u></p> <p>"Nucleus as nine; i.e., non (Latin); i.e., none (English); i.e., nothing; i.e. interval integrity; i.e., the integrity of absolute generalized discontinuity accommodating all special-case 'space' of space-time reality."</p> <p>- Cite SYNERGETICS draft at Sec. 1012.01, 18 Feb'73</p>	<p><u>Nuclear & Nonnuclear:</u> (1)</p> <p>See Denucleated Phase Organics & the Nucleus Subnuclear</p>
<p><u>Nuclear: Outward Limit of Nuclear Phenomena:</u></p> <p>See Vector Equilibrium: Three-frequency VE</p>	<p><u>Nuclear & Nonnuclear:</u> (2)</p> <p>See Potential vs. Primitive, 12 May'77 S Quanta Module, 4 Jun'77</p>
<p>RBF DEFINITIONS</p> <p><u>Nuclear & Nonnuclear:</u></p> <p>"It could be that organics do not require a nucleus. Whatever the mysterious weightless phenomenon life may be, also may be the nucleus of all biological species, including you and me."</p> <p>- Citation and context at <u>Organics and the Nucleus</u> (2nd draft) - Cite SYNERGETICS draft at Sec. 415.20, 8 Jun'72 28 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Nuclear Power Generation:</u></p> <p>Q: "How do you feel about the protesters who were arrested at the Seabrook Nuclear Power site in New Hampshire?"</p> <p>RBF: "Make it obsolete... That's how you become effective."</p> <p>- Cite RBF to World Game Workshop'77; Phila., PA; 22 Jun'77</p>

Synergetics Dictionary

<p><u>Nuclear Power Generation:</u> See Fail-safe, 13 Sep'77</p>	<p>RBF DEFINITIONS</p> <p><u>Nuclear Set:</u> ". . . At the third layer of enclosure some of the Angular interrelationship patternings begin to repeat themselves. Thus we are able to inventory what we are going to call a <u>nuclear set</u> of unique interrelationship patterns."</p> <p style="text-align: right;">- Citation and context at <u>Atomic Computer Complex</u> (3), 13 May'73</p>
<p><u>Nuclear Propagation Rate:</u> See Powering: Fourth Powering, 15 Oct'72; 9 Sep'75</p>	<p><u>Nuclear Simplex:</u> See Compound, 13 Mar'73 Ninety-two Elements, 13 Mar'73</p>
<p><u>Nuclear = Regenerative:</u> (1) See Infinite = Eternally Regenerative</p>	<p><u>Nuclear-smallest:</u> See Man as Halfway in Range of Size of All Creatures, 22 Jun'75</p>
<p><u>Nuclear = Regenerative:</u> (2) See Prime Volumes, 17 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Nuclear Sphere:</u> This half-in-the-physical, half-in-the-metaphysical; i.e., half-conceptual, half-nonconceptual; i.e., now you see it, now you don't-- and repeat, behavior is characteristic of synergetics with its nuclear sphere being both concave and convex simultaneously, which elucidates the microcosmic, turn-around limit of Universe as does the c^2 the spherical-wave-terminal-limit velocity of outwardness elucidate the turn-around-and-return limit of the macrocosm."</p> <p style="text-align: right;">- Cite RBF rewrite of SYNERGETICS galley at Sec. 1053.16, 16 Dec'73</p>

Synergetics Dictionary

<p><u>Nuclear Sphere:</u> (1)</p> <p>See Ball at the Center Initial Sphere Sphere Center Central Ball: Central Sphere</p>	<p>RBF DEFINITIONS</p> <p><u>Nuclear Uniqueness:</u></p> <p>"...So the vector equilibrium is a <u>nuclear uniqueness</u> for the first layer of 12 and the next layer of 42, with no other potential nucleus as yet appearing in its system-- in its exterior shell's structural triangular facets-- to challenge its nuclear pristinaty."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1011,59, 18 Feb'73</p>
<p><u>Nuclear Sphere:</u> (2)</p> <p>See Nature in a Corner, 17 Nov'75 Omnidirectional Terminal Case Corner, 13 Nov'75 Vector Equilibrium: Potential & Primitive Tetravolumes, 12 May'77</p>	<p>RBF DEFINITIONS</p> <p><u>Nuclear Uniqueness:</u></p> <p>"And we have the concept of the limits of asymmetry in respect to the vector equilibrium as the limit of coming to the molecules. That's what we have: <u>nuclear uniqueness</u> and all of its variables within the domain of the three-frequency vector equilibrium. . . .</p> <p>" . . . Dealing with our original concept that the vector equilibriums are nuclear structures embracing all the variables of Universe."</p> <p style="text-align: right;">- Citation and context at <u>Vector Equilibrium</u>, 16 Oct'73</p>
<p><u>Nuclear vs. Superficial:</u></p> <p>See Push-pull Members, 28 Oct'72</p>	<p><u>Nuclear Uniqueness:</u></p> <p>See Vector Equilibrium: Three-frequency VE</p>
<p><u>Nuclear Symmetry:</u></p> <p>See Limit, 29 May'72 Rhombic Dodecahedron, 24 Feb'72</p>	<p><u>Nuclear Vertex:</u></p> <p>See Vector Equilibrium as Empty Set Tetrahedron, 2 Nov'73</p>

RBF DEFINITIONS

Nucleated Cube:

"The minimum allspace-filling nuclear cube is formed by adding eight eighth-octahedra to the eight triangular facets of the vector equilibrium of tetravolume 5; i.e., $5 \times 24 = 120$ quanta modules. This produces a cubical nuclear involvement domain (see sec. 1000.30) of tetravolume 6; i.e., $6 \times 24 = 144$ quanta modules.

"The nuclear cube is the maximum sizeless, timeless, subfrequency generalized nuclear domain of synergetic-energetic geometry."

"The construction of the first nuclear cube in effect restores the vector equilibrium truncations. The minimum has 142 balls in the vector equilibrium. The first nucleated cube has 2181 balls in the total aggregation."

(Secs. 415.17; 415.171; 415.172, 2nd. Ed.)

- Cite SYNERGETICS, 2nd. Ed. at above Secs; 23 Feb'76

Nucleated Cube:

(2)

See Vector Equilibrium Involvement Domain, 11 Dec'75; 10 Dec'75; 12 Dec'75
Allspace Filling, 11 Jul'62
Quantum Jump, 26 Aug'76

RBF DEFINITIONS

Nucleated Cube:

"The minimum allspace-filling nuclear cube is formed by adding eight eighth-octahedra to the eight triangular facets of the vector equilibrium of tetravolume 5; i.e. $5 \times 24 = 120$ quanta modules. This produces a cubical nuclear involvement domain of tetravolume 6; i.e., $6 \times 24 = 144$ quanta modules.

"This nuclear cube is the maximum sizeless, timeless, subfrequency generalized nuclear domain of synergetic-energetic geometry."

(Sec. 415.9, 2nd. Ed.)

- Cite RBF to EJA, 3200 Idaho, Wash., DC. + RBF holograph; 11 Dec'75

RBF DEFINITIONS

Nucleus & Embracement:

"You can't have a nucleus without an embracement."

- Cite RBF to EJA, 3200 Idaho, Wash., DC.; 24 Jan'76

RBF DEFINITIONS

Nucleated Cube:

"To find the first nucleated cube, you just untruncate (restore) the vector equilibrium truncations. The minimum has 142 balls in the vector equilibrium part. The first nucleated cube has 2181 balls."

(Sec. 415.062, 2nd, Ed.)

- Cite RBF to EJA, Wash DC, 7 Oct. '71.

RBF DEFINITIONS

Nuclear Pattern of Growth & Decay:

"There is no way in parallel thinking that man can come to any important conclusions. We tend to think in parallels and perpendiculars when our Universe is not operating in parallels. Our Universe operates from a nucleus; it radiates and converges--it's a gravitational pulling together and entropy trying to come apart. Everything is either growing or decaying. There is nothing in parallel at all; there is no nucleus in parallels. In nuclear growth a two goes into a three and a three goes back to two as electromagnetic waves go out and then converge. Waves are not drawn on a piece of paper in a plane; they are convergent and divergent expressing the great pulsations in our Universe. I find this is a very important part of fundamental thinking."

- Cite RBF National Geographic Land Use Seminar; transcript pp. 17-18 Side II & p.1 Side III; 8 Dec'75

Nucleated Cube:

(1)

See Vector Equilibrium Involvement Domain

RBF DEFINITIONS

Nucleated Systems: Idealistic Vectorial Geometry Of:

"It is experientially demonstrable that the structural inter patterning principles governing all the atomic behaviors are characterized by triangular and tetrahedral-based associations governed by the 12 degrees of freedom.

"These structural, pattern-governing, conceptualizable principles, in turn govern all eternally regenerative design evolution including the complex patternings of potential, symmetrically- and asymmetrically-limited, pulsative regeneration, only in respect to all of which are ideals conceivable, as is experientially manifest in synergetics and in my closed-system, topological hierarchy discovered only through a half century of persistent exploration of the ramifications of the idealistic vectorial geometry characteristics of inherently nucleated systems and their experientially demonstrable properties."

(See Principle, 14 Feb'72 for first draft.)

- Cite RBF marginalia in Eccles 'Facing Reality,' as rewritten by RBF, 15 Feb'72
(- Incorporated in SYNERGETICS, 2nd. Ed. at Sec. 421.20)

Synergetics Dictionary

<p><u>Nucleated System:</u> <u>Nuclear Systems:</u> (1)</p> <p>See VE as Prime Nucleated System</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"The coordinate system of nature as revealed in synergetics is one in which nature operates in convergent-divergent, associative-dissociative agglomerating, a system in which the inherent symmetry is maintained only by the equilateral triangles. Nature is synergetically both expansively radiant and convergently gravitational: radiant as radiation or as an expansive, disintegrative, coming apart, or nature as gravitationally convergent with increasing symmetry and order. Nature resolves her problems by convergence to an inherent nucleus."</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed., at Sec. 260.41; 13 Nov'75</p>
<p><u>Nucleated Systems:</u> <u>Nuclear Systems:</u> (2)</p> <p>See Vector Equilibrium, Oct'75 Vector Equilibrium Involvement Domain, 10 Dec'75</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"Two spheres in Universe --- mass attraction --- vector equilibrium --- nuclear assembly. Nuclear assembly starts with an inherent volume of 20, which is the minimum model of nucleation."</p> <p style="text-align: right;">- Citation & context at <u>Quantum Sequence</u>, (4), 23 Jun'75</p>
<p><u>Nucleon:</u></p> <p>See Octahedron: Nuclear Asymmetric Octahedra, 1 Apr'73</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"The divergent characteristics of the tetrahedra at the center of the vector equilibrium demonstrate the nucleus. This is because the tetrahedron is a system and not anything in its own right.</p> <p>"A nucleus is a complex of systems. A nucleus could not possibly be a simplex. Spherically and symmetrically there are 12-around-1. Volumetrically and asymmetrically there are 20 tetrahedra around a nucleus: that is what nucleates it."</p> <p style="text-align: right;">- Cite RBF to EJA, Pagano Nest., Phila., PA., 22 Jun'75</p>
<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"...the ITZ coordinates have nothing to do with the way Universe works....That's why you couldn't have a nucleus in a perpendicular or a parallel system. You can only have nuclei when you have convergence."</p> <p style="text-align: right;">- Citation & context at <u>Convergence & Divergence</u>, 1 May'77</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"The nucleus can accommodate wave passage without disrupting the fundamental resonance of the octaves. The tetrahedron is the minimum, ergo, prime nonnucleated structural system of Universe. The vector equilibrium is the minimum, ergo prime, nucleated structural system of Universe."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 421.05; galley rewrite, 2 Nov'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"...The common center ball, being two-in-one, can be used for a pulse or a space; for an integer or a zero. The one active nucleus is the key to the binary Yes-No of the invisible transistor circuitry."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1012.12, 18 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"A nucleus, by definition, must be surrounded in all directions. This means that there must be a ball in every possible angular relationship to the nucleus. This does not happen with one layer of twelve balls, nor with a second layer of forty-two balls. Not until a third layer of ninety-two balls is added are all the angular relationships to the nucleus filled. We now have a true nucleus."</p> <p style="text-align: right;">- Cite RBF Draft, Numerology, 4.21 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u> (1)</p> <p>"Operationally speaking the word omnidirectional involves a speaker who is observing from some viewing point. He says, 'People and things are going every which way around me.' It sounds chaotic. We cannot and do not live and experience in a two-dimensional infinitely extended planar world. We live in an omnidirectionally viewable world. Unidirectional means that a center of a sphere of observation that resolves all that can be observed to either passing by tangentially which is always perpendicular to the radii of the observer, which means that the multiplicity of his real events does not produce chaos but instead produces orderly relationships to the very orderly radii of the observer, all of which events are subject to orderly recording and interrelating in relationship to the observer's inherently orderly sphere of reference. The expression 'frame' of reference is not only 'square', but its two-dimensional 3-D axes of reference such as XYZ coordinates requires inept rectilinear defining quite uncharacteristic of omnidirectional orbiting Universe events; whereas the infinite dimensioning of tangential radii referencing can always be 'right on' the actual event tracery. Unidirectional implies a nucleus. Because of omni-closest-packing of 12 spheres triangularly surrounding</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 14 Feb '72. Rewritten 17 Feb.</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>The definition of a nucleus as defined for the symmetrical and tangential closest packing of equiradius spheres does "not apply to an asymmetrical or single-axis system, e.g. Hydrogen, where a nucleus may be encircled by action within a single plane and where the surround is generated by a single orbit."</p> <p style="text-align: right;">- Cite RBF to EJA as footnote to Sec 415.1 of Synergetics draft. Bear Island, 25 August 1971</p>
<p>RBF DEFINITIONS</p> <p><u>nucleus:</u> (2)</p> <p>"one. Energy cannot be distributed inwardly, therefore it has to be distributed outwardly. With 12 omnidirectional alternate moves with each event, complex distribution swiftly ensues. Because there are spaces between closest packed sphere energy can be imported which can only be articulated outwardly-- ergo entropy."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 14 Feb '72. Rewritten 17 Feb. rewritten as SYNERGETICS draft Secs, 1001 + 1002, 27 Feb '72</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"Omnitopology differs from Euler's superficial topology, omnitopology being <u>nuclear</u>."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 14 Feb '72. Rewritten 17 Feb. rewritten as SYNERGETICS draft Secs, 1001 + 1002, 27 Feb '72</p> <p style="text-align: right;">- Citation at Omnitopology, 18 Jun'71</p>
<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"Omnidirectional implies a nucleus. Because of closest packing energy cannot be distributed inwardly, therefore it has to be distributed outwardly. With 12 omnidirectional alternate moves with each event, complex distribution swiftly ensues."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 14 Feb '72</p>	<p>RBF DEFINITIONS</p> <p><u>Nucleus:</u></p> <p>"Each ball can always have a neutral function among these aggregates. It is a <u>nuclear ball</u> whether it's in a planar array or in an omnidirectional array. It has a function in each of the two adjacent systems which performs like bonding."</p> <p style="text-align: right;">- Cite tape transcript RBF to EJA, Chez Wolf, 18 June 1971</p> <p style="text-align: right;"><u>NUCLEUS IN ISO.VEC MATRIX- SEC 421.03</u></p>

Synergetics Dictionary

RBF DEFINITIONS

Nucleus:

"The nucleus can accommodate waves without breaking up the fundamental resonance of the octaves."

- Cite RBF to EJA, Fairfield, Conn. Ches Wolf. 18 June 1971.

NVCLUUS IN ISO. VEC. MATRIX - SEC 421.04

RBF DEFINITIONS

Nucleus:

In closest packing of spheres "the third layer of 92 spheres contains eight new potential nuclei which, however, do not become active nuclei until each has three more layers surrounding it-- three layers being unique to each nucleus. This tells us that the nuclear group with 92 spheres in its outer or third layer is the limit of unique, closest-packed assemblages of unit-wavelength and frequency, nuclear symmetry systems."

- Cite NEHRU SPEECH, p, 25, 13 Nov'69

RBF DEFINITIONS

Nucleus:

"Systems can have nuclei and prime volumes cannot. There are only three prime volumes."

* Citation at Prime Volumes, 18 Jun'71

- Cite RBF to EJA, Fairfield, Conn., Ches Wolf. 18 June 1971.

RBF DEFINITIONS

Nucleus:

"In this dynamically opposed system... every nuclear component has its positive or negative opposite with each reversing every characteristic of the other."

- Citation & context at ENERGY, 16 Sep'67

RBF DEFINITIONS

Nucleus:

"A nucleus, by definition, Must be surrounded in all directions."

- Cite NUMEROLOGY Draft, p. 34 - April 1971

RBF DEFINITIONS

Nucleus:

The vector equilibrium is the "most compact spherical agglomeration;" it "expands to infinity" with " a new nucleus every four orbits."

(Adapted.)

- Cite Geometrical Chart of 35 Synergetic Figures: - Fig. 22. 1967

RBF DEFINITIONS

Nucleus:

"A formula for the nucleus: a ball with a ball inside it-- concave and convex."

- Cite RBF to EJA by telephone from Los Angeles, January 1971

RBF DEFINITIONS

Nucleus:

"All the internal or nuclear affairs of the atom occur internally to the vector equilibrium and all the external or chemical associations occur externally to the vector equilibrium."

- Citation at Physics: Difference Between Physics and Chemistry, Jun'66

- Cite Carbondale Draft - Return to Modelability, p. V, 16
- Cite NASA Speech, p. 83, Jun'66

RBF DEFINITIONS

Nucleus:

"It is characteristic of a nucleus that it has at least two layers in which there is no new nucleus showing up, no potential. In the third layer, however, a potential new nucleus shows up, but it does not have its own two unique layers to protect it-- so you would not say it is as yet a realized nucleus, only a potential nucleus."

- Cite Oregon Lecture #8, p. 304. 12 Jul'62

Nucleus: Nucleation: Nuclear:

(2A)

See Closest Packing of Spheres, 29 May'72; 13 Mar'71
 Coupler (2)
 Domain, 11 Feb'73
 Energy, 16 Sep'67
 Environment, 22 Sep'73
 Growthability, 6 Mar'73
 Human, 22 Sep'73
 In & Out, 4 May'57
 Invisible Circuitry (1)(2)
 Isotropic Vector Matrix, 4 Mar'73
 Limit, 29 May'72
 Now, 14 Feb'72
 Omnitopology, 18 Jun'71*
 Experience, 28 Apr'74
 Crystallography, 17 Aug'70
 Hydrogen, 29 May'72

RBF DEFINITIONS

Nucleus vs. Boundaries:

"The Greeks had the myopic bias of a game of boundaries; there was no nucleus at all in the Greek geometry."

- Cite RBF at videotaping session, Penn Bell Labs., Philadelphia, 28 Jan'75

Nucleus: Nucleation: Nuclear:

(2B)

See Particle, 6 Jul'62
 Physics: Difference Between Physics & Chemistry, Jun'66*
 Prime Volumes, 18 Jun'71*
 Regenerative Design: Law Of, (2)
 Spherical Nostalgia, 12 Jun'74
 Universe, 4 May'57
 Vector Equilibrium, 17 Aug'70; 19 Nov'74
 Vertex, 11 Oct'73
 Self & Otherness, 19 Nov'74
 Quantum Sequence, (4)*
 Cloud Chamber, Nov'71
 Vector Equilibrium Growth, 13 Nov'75
 Zero Volume Tetrahedron, 10 Dec'75
 Gravity: Speed of, 21 Oct'72
 Parallel, 28 Mar'77
 Potential vs. Primitive, 12 May'77
 Convergence & Divergence, 1 May'77*
 Mites & Quarks as Basic Notes, (1)

Nucleus: Nucleation: Nuclear:

(1A)

See Astro & Nucleic Interpositioning
 Atomics
 Ball at the Center
 Convex & Concave
 Cube: Nucleated Cube
 Initial Sphere
 Internuclear Vector Modulus
 Nebula
~~Nine: Nucleus = Nine = Nothing~~
 Nonnuclear
 Nuclear & Nebular Zonal Waves
 Nuclear & Nonnuclear
 Biological Cell Nucleus
 Octahedron: Nuclear Asymmetric Octahedra
 Omnitopology
 Organics & the Nucleus
 Orbiting Magnitudes
 Outward Limit of Nuclear Phenomena

Nucleus: Nucleation: Nuclear:

(3A)

See Nuclear Computer Design
~~Nuclear Domain~~
 Nuclear Gyro
 Nuclear & Nebular Zonal Waves
 Nucleus = Nine = Nothing
 Nuclear: Outward Limit
 Nuclear & Nonnuclear
 Nuclear ~~Propagating~~ Propagation Rate
 Nuclear Set
 Nuclear Simplex
 Nuclear Sphere
 Nuclear Symmetry
 Nuclear Uniqueness
 Nuclear Vertex
 Nucleated Cube
 Nucleated Systems: Idealistic Vectorial Geometry Of
 Nucleon
 Nucleus vs. Boundaries
 Nuclear Assemblage Components

Nucleus: Nucleation: Nuclear:

(1B)

See Prime Nucleus
 Prime Nucleated System
 Terminal Condition
 Topological Aspects: Inventory Of
 Topology: Synergetic & Eulerian
 Zero Frequency
 Prime Nuclear Structural Systems
 Coupler: Nuclear Asymmetric Octahedron
 Central Symmetry
~~Central Symmetry~~
 Domain of a Nucleus
 Zero Mineness
 Internuclear Voids
 Subnuclear

Nucleus: Nucleation: Nuclear:

(3B)

See Nuclear Geometrical Limit of Rational Differentiation
 Nucleus & Embracement
 Nuclear = Regenerative
 Nuclear vs. Superficial
 Nuclear Pattern of Growth & Decay
 Nuclear & Nebular: Nucleus & Galaxies
 Nuclear Limit
 Nuclear Peer Generation

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>"All number awareness is discovered through experiences, which are all special cases. Every time you write a number-- every time you say, write, or read a number-- you see resolvable clusters of light differentiation. And clusters are an experience. Conscious thoughts of numbers, either subjective or objective are always special case."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 508.04, galley rewrite, 7 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>"Numbers are experiences. You have one experience and another experience, which, when reviewed, are composited. Numbers have unique experiential meaning. Even the development of sets derives from experience because mathematics is generalization-- but generalization itself is sequitur to experience-- where intuition and mind discover the synergetic inter-behavior that is not implicit in any of the data of the past.</p> <p>"The mathematician talks of "pure imaginary numbers" on the false assumption that mathematics could be a priori to experience. All number awareness is discovered through experiences, which are all special cases. Every time you write a number-- every time you say, or write, or read a number-- you see clusters and clusters are an experience. Conscious thinking of number, subjective and objective, are always special case."</p> <p style="text-align: right;">- Cite RBF to EJA Beverly Hotel, New York 13 March 1971</p> <p><u>CONCEPTUALITY - NUMBER - Secs. 508.01-508.04</u></p>
<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>"... Numbers are both abstract (empty sets) or special case (filled sets)."</p> <p style="text-align: right;">- Citation and context at <u>Vector</u>, 26 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>Synergetics provides for "the identification of energy with <u>number</u>."</p> <p style="text-align: right;">- Citation at <u>Synergetics</u>, 19 Jan'71</p> <p style="text-align: right;">- Cite RBF to EJA by telephone from Los Angeles, 19 Jan '71 pursuant to Coxeter's letter offering mathematical proof of "Planetary Planning" in Am. Scholer, Winter '80-71</p>
<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>"Only number can self-communicate as structural or destructural associabilities."</p> <p style="text-align: right;">- Citation at <u>Self-communicate</u>, 15 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>"Mathematicians theretofore [i.e., before topology] had erroneously thought that they had attained utter abstraction, or utter non-conceptuality-- ergo 'pure' non-sensoriality, by employing a series of algebraic symbols substituted for calculus symbols and substituted for again by 'empty set' symbols.</p> <p>"They overlooked that even their symbols themselves were conceptual patterns and only recognizable that way, for instance numbers of phonetic letters, consist of physical ingredients and physical experience recalls. The physical ingredients consist inherently of event-paired quanta and the latter's six-vectored, positive and negative actions, reactions, and resultants else they would not have become employable by the deluding, experience-immersed 'purists.'</p> <p style="text-align: right;">- Cite CARBONDALE DRAFT II, 4.</p> <p><u>CONCEPTUALITY - NUMBER - SEC. 508.10</u> <u>PATTERN - SEC. 505.12</u> - Cite NASA Speech, p. 58, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>"The number itself has its own integrity And therefore ought to be integrated."</p> <p style="text-align: right;">- Cite <u>Numerology Draft</u> August 1971, p. 30. - Citation at <u>Integrity</u>, Aug'71</p>	<p>RBF DEFINITIONS</p> <p><u>Number:</u></p> <p>"Tetrahedra have a fundamental prime <u>number</u>: oneness. The octahedron has a fundamental twoness, its volume of four being made up of the prime number two; even the topological accountings of vertexes and faces disclose their respective fundamental oneness, twoness, and threeness."</p> <p style="text-align: right;">- Cite Carbondale Draft Return to Modelability, p. V.7 - Cite NASA Speech, p. 72, Jun'66</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Number:</u> "Numbers are meaningless independent of pattern."</p> <p style="text-align: right;">- Citation and context at <u>Synergy</u>, 1954</p>	<p>RBF DEFINITIONS</p> <p><u>Number:</u> <u>Even Number:</u> "Because of a hemisphere's polar symmetry to its opposite polar hemisphere the total inventory of great circle grid triangles in the comprehensive world grid is always <u>even</u> in number."</p> <p style="text-align: right;">- Cite Undated Sheet: THE DYNAMION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION.</p>
<p>RBF DEFINITIONS</p> <p><u>Number:</u> "The number itself has its own integrity and therefore ought to be integrated." . . . "Nature does all her associating and disassociating in whole rational numbers."</p> <p style="text-align: right;">- Cite RBF Draft, NUMEROLOGY 4.11, 4.18</p>	<p>RBF DEFINITIONS</p> <p><u>Number:</u> <u>Even Number:</u> "...It is mathematically discovered that the total number of points, or areas, or lines, of a system are always <u>even numbers</u>; and that this divisibility by two accommodates polar-and-hemispherical positive-negativeness of all systems."</p> <p style="text-align: right;">- Citation and context at <u>Probability Model of Three Cars on a Highway</u> (1), 26 Sep'73</p>
<p>RBF DEFINITIONS</p> <p><u>Number:</u> <u>Cosmically Absolute Numbers:</u> "There are apparently no cosmically absolute numbers other than 1, 2, 3, and 4. This primitive fourness identifies exactly with one quantum of energy and with the fourness of the tetrahedron's primitive structuring as constituting the 'prime structural system of Universe,' i.e., as the minimum omnitriangulated differentiator of Universe into insideness and outsideness, which alone, of all macro-micro Universe differentiators pulsates inside-outingly and vice versa as instigated by only one force vector impinging upon it."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1222.21, 5 Mar'73</p>	<p><u>Number:</u> <u>Even Numbers:</u> See Geodesic Diamonds, 31 Jan'75 Polarity, undated sheet Vertexial Spheres, 8 Apr'75</p>
<p><u>Number:</u> <u>Cosmically Absolute Numbers:</u> See Cosmic Absolutes Ninety-two Elements: Four Unique Frequencies</p>	<p><u>Number:</u> <u>Even & Odd Numbers:</u> (1) See Locking & Blocking Vector Equilibrium: Odd or Even Shell Growth</p>

Synergetics Dictionary

<p>Number: <u>Even & Odd Numbers:</u> (2)</p> <p>See Gear Train: Locking & Blocking, 25 Feb'69 Necklace, (1)(2)</p>	<p>RBF DEFINITIONS</p> <p>Number: <u>Tetrahedral Number:</u></p> <p>$\frac{N^2 - N}{2}$ is always a triangular number as, for instance, the number of balls in the rack on a pool table. A telephone connection is a circuit; a circuit is a circle; two people need one circuit and three people need three circles, which make a triangle. Four people need six circuits, and six circuits cluster most economically and symmetrically in a triangle. Five people need 10 private circuits, six people need 15, and seven people need 21, and so on: all are triangular numbers.</p> <p>"Successive stackings of the number of relationships of our experiences are a stacking of triangles. The number of balls in the longest row of any triangular cluster will always be the same number as the number of rows of balls in the triangle, each row always having one more than the preceding row. The number of balls in any triangle will always be</p> $\frac{(R + 1)^2 - (R + 1)}{2}$ <p>where R = the number of rows (or the number of balls in the longest row)."</p> <p>- Cite SYNERGETICS text at Sec.s 508.20, .30, May'71</p>
<p>Number: <u>Names for Numbers:</u></p> <p>See Etymology, Aug'71 Old Words, 22 Jul'71</p>	<p>RBF DEFINITIONS</p> <p>Number: <u>Tetrahedral Number:</u> $\frac{N^2 - N}{2}$:</p> <p>$\frac{N^2 - N}{2}$ is also the number of balls in a triangular grouping such as that of pool balls grouped for the 'break.'</p> <p>- Cite PLANETARY PLANNING, p. 18, 13 Nov'69 (Am. Scholar, p. 48)</p>
<p>RBF DEFINITIONS</p> <p><u>Number System is Inherently Octave:</u></p> <p>"Number system is inherently octave and corresponds to the four positive and four negative facets of the octahedron which polyhedrally represents the eight 45° angles constituents of 360° unity in the trigonometric function calculations."</p> <p>- Citation and context at <u>Indig</u>, 3 Mar'73</p>	<p>RBF DEFINITIONS</p> <p>Number: <u>Tetrahedral Number:</u> $\frac{N^2 - N}{2}$:</p> <p>"Comprehension means identifying all the most uniquely economical interrelationships of the focal point entities involved. We may say that: Comprehension = $\frac{N^2 - N}{2}$."</p> <p>Cite OPERATING MANUAL, P. 70, 1969</p>
<p>RBF DEFINITIONS</p> <p><u>Number Pattern:</u></p> <p>"Number behavior phenomena is pattern. Number treatment or function treatment without pattern is unthinkable. Formulations and equations are pattern. Numbers are therefore nonexistent without pattern. There are no empty sets of number independent of pattern. There are empty sets but the word 'sets' is inherently a subclass of 'pattern.'"</p> <p>"There are no number 'abstractions.' There are pattern abstractions. What is abstracted is the residual generalized pattern. Pattern phenomena is synergetic-- which means behavior of whole systems unpredicted by behavior of respective subsystems-- which is to say that <u>numbers</u> are meaningless independent of pattern."</p> <p>- Cite Ltr. to Jim Fitzgibbon (?), Raleigh, NC, undated. (1954-59)</p>	<p>RBF DEFINITIONS</p> <p>Number: <u>Tetrahedral Number:</u> $\frac{N^2 - N}{2}$:</p> <p>"The number of relationships between items is always $\frac{N^2 - N}{2}$."</p> <p>The relationships between four or more items are always greater in number than the number of items.</p> <p>- Cite HOW LITTLE, p. 56, Oct'66</p>

Synergetics Dictionary

RBF DEFINITIONS

Number: Triangular Numbers:

$\frac{n^2 - n}{2}$ is always a triangular number, as for instance, the number of balls in the rack on a pool table. A telephone connection is a circuit, a circuit is a circle; two people need one circuit; three people need three circles; these make a triangle. Four people need four circuits. Successive stackings of the number of relationships of our experiences are a stacking of triangles where the sum-total of balls in the successive rows will always be $\frac{(R + 1)^2 - (R + 1)}{2}$.

- Cite RBF to EJA
Beverly Hotel, New York
13 March 1971

CONCEPTUALITY - NUMBER - SECS. 568,20 + 568,30

Number:

(1B)

See Powering
Rate: Fundamental Rates of Change of Number
Scheherazade Number
Six-wave (Sexave) Phenomenon of Number
SSRCD
Volume-number Ratios
Rational Whole Numbers
Figures & Words
Generalized Topological Definability
Energy & Number
Complementary & Reciprocal Numbers
Zero-ninness
Geometry & Number

Number-value Accounting:

(1)

See Intertransformative Number-value Accounting

Number:

(2)

See Integrity, Aug'71*
Line, 7 Nov'72
Self-communicate, 15 May'72
Sensorial Reflex, 13 Mar'73
Synergetics, 19 Jan'71*
Synergy, 1954*
Vector, 26 May'72*
Vector Equilibrium, 10 Nov'74
Human Beings & Complex Universe, (7)

Number-value Accounting:

(2)

See Models, 9 Jan'74
Synergetics, 19 Jan'71

Number:

(3)

See Number: Cosmically Absolute Numbers
Number: Even Numbers
Number: Even & Odd Numbers
Number: Names for Numbers
Number System is Inherently Octave
Number Pattern
Number: Tetrahedral Number: $\frac{N^2 - N}{2}$
Number Theory
Number: Triangular Numbers
Number-value Accounting

Number:

(1A)

Beginning Number
See Cipher
Constants
Decimal & Duodecimal
Empty Set
Even Number
Imaginary Number
Indig
Interwave Behavior of Number
Illions
Irrational Number
Intertransformative Number-value Accounting
Limit Number
Low-order Prime Numbers
Old Words
Pi
Prime Number
Rememberable Number

NUMBERS IN THIS FILE

(1)

See Degrees in This File
SSRCD Numbers

Synergetics Dictionary

<p><u>RBF-DEFINITIONS</u></p> <p style="text-align: right;">(2)</p> <p><u>Numbers in This File:</u></p> <p>See One Two: <u>Twoness</u> Three: <u>Threefoldness</u> Four: <u>Fourness</u> Six: <u>Sixness</u> Eight: <u>Eighthness</u> Nine: <u>Nineness: Nine as Zero</u> Ten: <u>Ten-ness</u> Twelve Thirteen Fourteen: <u>Fourteeness</u> Fifteen: <u>Fifteeness</u> Eighteen Twentyess</p> <p>(N.B. For numbers over <u>Twenty</u> see Arabic listings after <u>Number</u>)</p>	<p><u>RBF-DEFINITIONS</u></p> <p style="text-align: right;">Number: 3.702 :</p> <p>See ████████████████████ <u>Vector Equilibrium: Ratio of Volume to Quantum</u>, 23 Jan'72 <u>Immaculate Conception</u>, 25 Jan'72 Environment Control, 3 Oct'72</p>
<p><u>RBF DEFINITIONS</u></p> <p style="text-align: right;">Number: 2½ : (1)</p> <p>See <u>Askewness</u> <u>Frequency: Half Frequency</u></p>	<p><u>RBF DEFINITIONS</u></p> <p style="text-align: right;">Number: 6.28 :</p> <p>See <u>Universal Integrity: Principle Of</u>, 5 Jan'72, 21 Dec'71 <u>Gravity</u>, 21 Dec'71</p>
<p style="text-align: right;">Number: 2½ : (2)</p> <p>See <u>Basic Triangle: Basic Disequilibrium 120 LCD Triangle</u>, 20 Dec'73 <u>Basic Triangle: Basic Equilibrium 48 LCD Triangle</u>, 17 Dec'73 <u>Constant Relative Abundance</u>, 29 Nov'72 <u>Fiveness</u>, 7 Mar'73 <u>Rhombic Dodecahedron</u>, 12 May'77 <u>Split Personality</u>, 15 Jan'74 <u>Vector Equilibrium: Potential & Primitive Tetra-volumes</u>, 12 May'77 <u>T Module</u>, 21 Jun'77</p>	<p><u>RBF DEFINITIONS</u></p> <p style="text-align: right;">Number: 6.6666t :</p> <p>See <u>Universal Integrity: Principle Of</u>, 8 May'72 13 Nov'69</p>
<p style="text-align: right;">Number: 3.7 :</p> <p>See <u>Structural Quanta</u>, 9 Nov'73 <u>Units of Environment Control</u>, 9 Nov'73</p>	<p><u>RBF DEFINITIONS</u></p> <p style="text-align: right;">Number: 18.36 :</p> <p>See <u>Icosahedron as Electron Model</u>, 7 Mar'73</p>

Synergetics Dictionary

DEFINITIONS

Number: 18.51 :

See Twentyness in Mass Ratio of Electron & Proton
Universal Integrity: Vector Equilibrium & Icosahedron (1)
Vector Equilibrium: Ratio of Volume to Quantum, 23 Jan'72
Icosahedron and Vector-edged Cube, 11 Mar'69
Icosahedron as Electron Model, 15 Oct'64
 Electron & Neutron, 2 Oct'72
 Gravitational Constant (2)
 Structural Quanta, 9 Nov'73; 3 Oct'72

FILE INDICATORS

Number: 24 :

(a)
 See Basic Triangle: Basic Equilibrium 48 LCD Triangle, 16 Dec'73
Control Quantum, 19 Apr'73
Coulter, 27 Jan'75
Gravitational Constant, (1)
Module: A Quanta Module: Introduction Of, 22 Feb'77
Nuclear Cube, 23 Feb'76
Octahedron: Eight-octahedra, 16 Dec'73
Powering: Fifth & Eighth Powering, 11 Dec'75
Sphere: Volume-surface Ratios, 11 Dec'75
Stabilized Vector Equilibrium, 23 Feb'72
Tetrahedroning, (3)
Twelve Universal Degrees of Freedom, (1)
Tetrahedron: Twenty-fourth Tetrahedron Vectors, 25 Aug'71
Vector Equilibrium, 19 Nov'74
Wire Wheel, 4 May'57
Quanta Loss by Congruence, (1)
Rhombic Dodecahedron, 12 May'77
Vector Equilibrium: Potential & Primitive Tetravolumes, 12 May'77

Number: 18.63 :

See Icosahedron as Electron Model, 11 Jul'62

Number: 24 :

(b)
 See Mites & Quarks as Basic Notes, (3)

FILE INDICATORS

Number: 23 :

See Trigonometric Limit: First 14 Primes

Number: 25 :

See Gravitational Constant, (1)
Octahedron, 7 Mar'73
Railroad Tracks: Great Circle Energy Tracks On The Surface of a Sphere
Symmetry: Seven Axes of Symmetry
Vector Equilibrium: Great Circles Of

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Number: 24 :

Sec. 415.06	✓954.10	954.10
✓4223.16*	✓954.21-954.22	✓537.131 (2nd.Ed.)
✓982.62	✓954.46	✓1012.11
✓982.70	✓954.49	✓450.11
✓443.00 (Table)	✓954.51	✓1053.12
✓453.01	✓955.02	✓1053.36 (2nd.Ed.)
✓905.51	✓955.40 (Table)	961.44
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John McHale's R. BUCKMINSTER FULLER (George Braziller), p.44, 1962

Synergetics Dictionary

<p><u>Number: 26 :</u></p> <p>See <u>Thirty Minimum Topological Characteristics</u>, (1) <u>Geometrical Function of Nine</u>, (6)</p>	<p><u>Number: 30 :</u></p> <p>See <u>Gravitational Constant</u> (1)(2) <u>Thirty Minimum Topological Characteristics</u> <u>Thirty Minimum Aspects of a System</u> <u>Unity as Thirty</u> <u>Hex-pent Sphere</u>, 15 Sep'76</p>
<p>DEFINITIONS</p> <p><u>Number: 27 :</u></p> <p>See <u>Icosahedron and Vector-edged Cube</u>, 11 Mar'69 <u>Tetrahedroning</u> (3)</p>	<p>FILE INDICATORS</p> <p><u>Number: 31 :</u> (1)</p> <p>See <u>Trigonometric Limit: First 14 Primes</u></p>
<p>DEFINITIONS</p> <p><u>Number: 28 :</u></p> <p>See <u>Vector Equilibrium: Eight-pointed Star System</u>, 16 Dec'73 <u>Humans as Machines</u>, (1)</p>	<p>DEFINITIONS</p> <p>Number: 31 : (2)</p> <p>See <u>Icosahedron</u> <u>Symmetry: Seven Axes of Symmetry</u> <u>Octahedron</u>, 7 Mar'73 <u>Railroad Tracks: Great-circle Energy Tracks</u> <u>On the Surface of a Sphere</u> <u>Prime Number</u>, Oct'71 <u>Spherical Barrel: Kumasi Dome</u>, (1)(2)</p>
<p>FILE INDICATORS</p> <p><u>Number: 29 :</u></p> <p>See <u>Trigonometric Limit: First 14 Primes</u></p>	<p>DEFINITIONS</p> <p><u>Number: 32 :</u></p> <p>See <u>Dodecahedron</u>, 22 Feb'72 <u>Mite as Prime Minimum System</u>, 15 Nov'72</p>

Synergetics Dictionary

<p><u>SEE DEFINITIONS</u></p> <p><u>Number:</u> 34 :</p> <p style="text-align: center;">See <u>Nuclear and Non-nuclear Polyhedra</u>, 19 May'72</p>	<p><u>FILE INDICATORS</u></p> <p><u>Number:</u> 37 : (2)</p> <p style="text-align: center;">See Tetrahedroning (3)</p>
<p><u>Number:</u> 35 :</p> <p style="text-align: center;">See Closest Packing of Spheres, 29 May'72 Vectorial & Vertexial Geometry, (3)</p>	<p><u>FILE INDICATORS</u></p> <p><u>Number:</u> 41 :</p> <p style="text-align: center;">See Trigonometric Limit: First 14 Primes</p>
<p><u>Number:</u> 36 :</p> <p style="text-align: center;">See Closest Packing of Spheres, 29 May'72 Periodic Table: Harmonics of 18, 22 May'75</p>	<p><u>Number:</u> 42 :</p> <p style="text-align: center;">See Axis of Spin, (5) Closest Packing of Spheres, (2) Energetic Frequency, 18 Feb'73 Mite as Model for Quark, 3 May'77 Nuclear Uniqueness, 18 Feb'73 Periodic Table & Closest Packing, 13 Nov'69 Tetrakaidcahedron, 25 Feb'72 Vector Equilibrium: Eight New Nuclei At Fifth Frequency, 18 Jun'71; 7 Oct'71</p>
<p><u>FILE INDICATORS</u></p> <p><u>Number:</u> 37 : (1)</p> <p style="text-align: center;">See Trigonometric Limit: First 14 Primes</p>	<p><u>FILE INDICATORS</u></p> <p><u>Number:</u> 43 :</p> <p style="text-align: center;">See Trigonometric Limit: First 14 Primes</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Number: 45 :</u></p> <p>See <u>Information Transaction and Valving Models</u> <u>Tetrahedron: Dissimilar Rate of Change Accommodation</u> <u>Trigonometric Limit</u></p>	<p><u>Number: 60:</u></p> <p>See <u>Dodecahedron, 21 Feb'72</u> <u>Hex-pent Sphere, 15 Sep'76</u></p>
<p><u>Number: 48 :</u></p> <p>See <u>Basic Triangle: Basic Equilibrium 48 LCD Triangle</u> <u>Quanta Loss by Congruence, (2)</u> <u>Twelve Universal Degrees of Freedom, (1)</u> <u>Rhombic Dodecahedron, 12 May'77</u></p>	<p>RBF DEFINITIONS</p> <p><u>Number: 64 :</u></p> <p>"The sixty-fourness is the octave system to the fourth power. It shows up in quite a few ways, for instance in the periodic table."</p> <p style="text-align: right;">- Cite RBF to EJA, 200 Locust, Phila., 22 Jan'73</p>
<p>RBF DEFINITIONS</p> <p><u>Number: 50 :</u></p> <p>See <u>Magic Numbers: Isotopal Magic Numbers</u></p>	<p>RBF DEFINITIONS</p> <p><u>Number: 64 :</u></p> <p>See <u>Spherical Triangle Sequence (iv)</u> <u>Rope, Dec'71</u> <u>Tetrahedroning, Jun'66; (3)</u></p>
<p>FILE INDICATORS</p> <p><u>Number: 56 :</u></p> <p>See <u>Foldability of Great Circles, 2 May'71</u> <u>Great Circle Subdivisions of Spherical Unity, May'72</u> <u>Seven Axes of Symmetry, 25 Aug'71; 13 May'73</u> <u>Tetrakaidcahedron, 25 Feb'72</u> <u>Precession & Degrees of Freedom, (2)</u></p>	<p>RBF DEFINITIONS</p> <p><u>Number: 68 :</u></p> <p>See <u>Tetrakaidcahedron, 25 Feb'72</u></p>

Synergetics Dictionary

<p><u>RMF DEFINITIONS</u></p> <p><u>Number:</u> 82 :</p> <p>See <u>Magic Numbers:</u> <u>Isotopal Magic Numbers</u></p>	<p><u>RMF DEFINITIONS</u></p> <p><u>Number:</u> 98.6 :</p> <p>See <u>Temperature of the Human Body</u> <u>Degrees:</u> 98.6</p>
<p><u>Number:</u> 90:</p> <p>See Dodecahedron, 22 Feb'72 Hex-pent Sphere, 15 Sep'76</p>	<p><u>Number:</u> 104 :</p> <p>See Geometrical Function of Nine, (6)</p>
<p><u>Number:</u> 92:</p> <p>See Axis of Spin, (5)(6) Closest Packing of Spheres Sequence, (2) Coupler, 27 Jan'75 Hex-pent Sphere, 15 Sep'76 Limit, 29 May'72 Nuclear & Nonnuclear Polyhedra, 19 May'72 Nucleus, 13 Nov'69 Ten, 22 Jun'75 Twelve Universal Degrees of Freedom, (2) Vector Equilibrium: Eight New Nuclei at Fifth Frequency, 18 Jun'71; 7 Oct'71 Modules: A & B Quanta Modules: Subtetrahedra, 14 May'73</p>	<p><u>Number:</u> 120 :</p> <p>See Basic Triangle: Basic XXXX Disequilibrium 120 LCD Triangle Decimal & Duodecimal Precession of Two Sets of 60 Closest-packed Spheres Equilateral, 11 Oct'71 Fourth Dimension, Mar'72 Powering: Fifth & Eighth Powering, 11 Dec'75 Sphere: Volume-surface Ratios, 11 Dec'75 Triacontrahedron, 3 May'77 T Quanta Module, (1)</p>
<p><u>RMF DEFINITIONS</u></p> <p><u>Number:</u> 96 :</p> <p>See <u>Modules:</u> <u>A & B Quanta Modules</u> (11) Bubbles (1) Twelve Universal Degrees of Freedom (2)</p>	<p><u>Number:</u> 126 :</p> <p>See <u>Magic Numbers:</u> <u>Isotopal Magic Numbers</u></p>

Synergetics Dictionary

<p><u>NEW DEFINITIONS</u></p> <p><u>Number:</u> 142 :</p> <p>See <u>Nucleated Cube</u>, 7 Oct'71 <u>Nuclear Cube</u>, 23 Feb'76</p>	<p><u>NEW DEFINITIONS</u></p> <p><u>Number:</u> 162 :</p> <p>See <u>Vector Equilibrium: Eight New Nuclei at Fifth Frequency</u>, 18 Jun'71, 7 Oct'71 <u>Closest Packing of Spheres Sequence</u> (2) Ten, 22 Jun'75</p>
<p><u>NEW DEFINITIONS</u></p> <p><u>Number:</u> 144 :</p> <p>See <u>Valvability</u>, 30 Nov'72 <u>Nuclear Cube</u>, 23 Feb'76</p>	<p><u>Number:</u> 180:</p> <p>See <u>Hex-pent Sphere</u>, 15 Sep'76 <u>Hex-pent Sphere: Transformation into Geodesic Spiral Tube</u>, (1) <u>Information Transaction and Valving Models</u>, 9 Nov'73</p>
<p><u>NEW DEFINITIONS</u></p> <p><u>Number:</u> 146 :</p> <p>See <u>Periodic Table and Closest Packing</u>, 13 Nov'69 <u>Super-Atomica Sequence</u> (3)(A)(B)</p>	<p><u>NEW DEFINITIONS</u></p> <p><u>Number:</u> 184 :</p> <p>See <u>Super-Atomica Sequence</u> (1)</p>
<p><u>NEW DEFINITIONS</u></p> <p><u>Number:</u> 160 :</p> <p>See <u>Fourth Dimension</u>, 10 Jul'62 <u>Frequency</u>, 2 Nov'73 <u>Powering: Fourth and Fifth Dimensions</u>, Jun'66 <u>Mite as Prime Minimum System</u>, 15 Nov'72 <u>Multidimensionality</u>, (1)(2) <u>Powering: Fifth & Eighth Powering</u>, 11 Dec'75</p>	<p><u>Number:</u> 192 :</p> <p>See <u>Multidimensionality</u>, (2)</p>

Synergetics Dictionary

<p><u>RRF DEFINITIONS</u></p> <p><u>Number:</u> 234 :</p> <p>See <u>Super-Atomica Sequence (4) (B) Chain Reaction</u>, Aug'71</p>	<p><u>RRF DEFINITIONS</u></p> <p><u>Number:</u> 252 :</p> <p>See <u>Vector Equilibrium: Eight New Nuclei at Fifth Frequency</u>, 18 Jun'71, 7 Oct'71 <u>Closest Packing of Spheres Sequence (2) Ten</u>, 22 Jun'75</p>
<p><u>RRF DEFINITIONS</u></p> <p><u>Number:</u> 236 :</p> <p>See <u>Periodic Table and Closest Packing</u>, 13 Nov'73</p>	<p><u>RRF DEFINITIONS</u></p> <p><u>Number:</u> 360 :</p> <p>See <u>Information Transaction and Valving Models</u>, 9 Nov'73</p>
<p><u>RRF DEFINITIONS</u></p> <p><u>Number:</u> 238 :</p> <p>See <u>Periodic Table and Closest Packing</u>, 13 Nov'69 <u>Super-Atomica Sequence (3) (B)</u></p>	<p><u>RRF DEFINITIONS</u></p> <p><u>Number:</u> 362 :</p> <p>See <u>Vector Equilibrium: Eight New Nuclei at Fifth Frequency</u>, 18 Jun'71, 7 Oct'71 Ten, 22 Jun'75</p>
<p><u>Number:</u> 240:</p> <p>See <u>Tensegrity: Twelve Pentagons</u>, Aug'72</p>	<p><u>RRF DEFINITIONS</u></p> <p><u>Number:</u> 364 :</p> <p>See <u>Nuclear and Non-nuclear Polyhedra</u>, 10 May'72</p>

Synergetics Dictionary

Number: 459 :

See S Quanta Module, 4 Jun'77

Number: 768 :

See Rope, Dec'71

RBF-DEFINITIONS

Number: 480 :

See Subfrequency (1)(2)

Modules: A & B Quanta Modules (11), 12 Jul'62
Modules: A & B Quanta Modules: Unity as 480
Vector Equilibrium, 12 Jul'62

RBF-DEFINITIONS

Number: 1001 :

See Scheherazade Number

RBF-DEFINITIONS

Number: 552 :

See Complexocta, 20 Dec'73

Number: 1280 :

See Mites as Prime Minimum System, 15 Nov'72

Number: 644 :

See Modules: A & B Quanta Modules: Subtetrahedra,
14 May'73

Number: 1836 :

See S Quanta Module, 4 Jun'77

Synergetics Dictionary

<p><u>RBF DEFINITIONS</u></p> <p><u>Number:</u> 2181 :</p> <p style="text-align: center;">See Nucleated Cube, 7 Oct'71 Nuclear Cube, 23 Feb'76</p>	<p><u>RBF DEFINITIONS</u></p> <p><u>Numerology:</u></p> <p>"It is probable That many of the experiences which humanity has been unable to explain, And therefore has treated with superstition, Often embrace phenomena Which turn out, in due course, To be of importance.</p> <p>"For this reason I have paid a lot of attention to <u>numerology</u>, Thinking that it might contain Very important bases For understanding New properties of mathematics."</p> <p style="text-align: right;">- Cite RBF draft NUMEROLOGY, 4.1, 1971</p>
<p><u>Number:</u> 2520 :</p> <p style="text-align: center;">See Vectorial & Vertextial Geometry, (3)</p>	<p><u>Numerology:</u> (1)</p> <p style="text-align: center;">See Astrology</p>
<p><u>Number:</u> 2880 :</p> <p style="text-align: center;">See Powering: Fifth & Eighth Powering, 11 Dec'75</p>	<p><u>Numerology:</u> (2)</p> <p style="text-align: center;">See Modelability, (3)</p>
<p><u>RBF DEFINITIONS</u></p> <p><u>Numerology:</u></p> <p>"What the numerologists does Is to add numbers horizontally ($120 = 1+2+0 = 3$) Until they are left with one digit. They have also assigned To the letters of the alphabet Corresponding numbers: A is one, B is two, C is three, etc. Numerologists wishfully assume that they can identify Characteristics of people By the residual digit Derived from integrating Of all the digits Corresponding to all the letters In the individual's complete set of names. Numerologists do not pretend to be scientific. They are just fascinated with Correspondence of their key digits With various happenstances of existence.</p> <p style="text-align: right;">- Cite Numerology draft August 1971, p. 31</p>	<p><u>Nut, Bolt & Screw Standards:</u></p> <p style="text-align: center;">See World-around Language, (2)</p>

Synergetics Dictionary

Nutcrackers:

See Earth Model as Bundle of Nutcrackers

Nutrient:

See Bird's Nest as a Tool, (A)

Nuts:

See Gonads
Vessel

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Synergetics Dictionary

<p><u>"O" = Circle:</u></p> <p>See Geometry, 1 Oct'71</p>	<p><u>Qar:</u> (2)</p> <p>See Lever (b) Precession (b); (II)</p>
<p>RBF DEFINITIONS</p> <p><u>O Module:</u></p> <p>"The O Module is a tetrahedron with its apex at the center of the sphere and its base described by the 15 great circles of the Basic Disequilibrium 120 LCD triangle of the 31-great-circle spherical icosahedron system. See Fig. 901.03.</p> <p>"The icosahedron is a "double" as a result of the 30 whole great circles from which it may be folded. This results in 120 transformable O Modules.</p> <p>"O Module = A Quanta Module = 1/24th of a tetravolume.</p> <p>"There is no spherical continuum. $120/24 = 5$. The icosahedron is the sphere. When tetra is 1, the sphere is 5."</p> <p>- Cite EJA composite of RBF holograph reAite and statements to EJA, 3200 Idaho, 29 Sep'76.</p>	<p><u>Qath Giving in Courts:</u></p> <p>See Measurement, (1)</p>
<p><u>O Module:</u></p> <p>See T Quanta Module:</p>	<p><u>Qath:</u></p> <p>See Cussing</p>
<p><u>Qar:</u> (1)</p> <p>See Vacuum-fulcrumed Qars</p>	<p>RBF DEFINITIONS</p> <p><u>Object:</u></p> <p>"To be referred to as a rememberable entity, an object must be membered with structural integrity, whether maple leaf or crystal complex. To have structural integrity, it must consist entirely of triangles, which are the only complex of energy events that are self-interference-regenerating systems resulting in polygonal pattern stabilization."</p> <p>- Cite SYNERGETICS text at Sec. 615.01; galley rewrite 9 Nov'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Object</u>; What we call an <u>object</u> or an entity is always an aggregate; it is never a solid."</p> <p>- Cite RBF to EJA, Beverly Hotel, NY, 28 Feb '71</p>	<p style="text-align: right;"><u>Objective Employment of Principles:</u> (1)</p> <p style="text-align: center;">See Invention</p>
<p><u>Object</u>: <u>Objects</u>:</p> <p>See Group Design, 1 Feb'75 General Systems Theory, (1)</p>	<p style="text-align: right;"><u>Objective Employment of Principles:</u> (2)</p> <p>See Design Science & World Game (A) Orbital Escape from Critical Proximity, (1) Loss: Discovery Through Loss, 2 Nov'73 Dymaxion Afrocean World Map, (1)</p>
<p><u>Objective Coping:</u></p> <p>See Generalized Principle (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Objective Integrity:</u> "Realization is objective integrity."</p> <p>- Citation at <u>Realization</u>, May'60 - <u>Cite Int. Princ. Design</u>, p. 243, May'60</p>
<p><u>Objective Design:</u></p> <p>See Design, (1); 4 Apr'71</p>	<p>RBF DEFINITIONS</p> <p><u>Objective Intellect:</u> "The more you discover scientifically, the more you are overwhelmed by what we don't know. We're dealing in a fantastic mystery, and yet that mystery does have all this extraordinary orderliness, so that you can't help but realize that it can only be found by intellect. Apparently we learn it subjectively, so apparently there must be an <u>objective intellect</u>. There seems to be an a priori greater intellect than that of man operative."</p> <p>- Citation and context at <u>Generalization Sequence</u> (4), Jun-Jul'69</p>

Synergetics Dictionary

<p><u>Objective Intellect:</u> (1)</p> <p>See God as a Verb Intellect in Physical Universe Verb: I Seem to be a Verb</p>	<p><u>Objective:</u> (2)</p> <p>See Size-selective, 30 Nov'72 Work, Dec'72</p>
<p><u>Objective Intellect:</u> (2)</p> <p>See Generalization Sequence, (4)* Laissez-faire Process, 10 Oct'63</p>	<p><u>Objective:</u> (3)</p> <p>See Objective Coping Objective Design Objective Employment of Principles Objective Integrity Objective Intellect Objective: Making Thought Objective</p>
<p><u>Objective: Making Thought Objective:</u></p> <p>See Pencil, 1938 Teleology, (2) (3)</p>	<p>RBF DEFINITIONS</p> <p><u>Objets d'art:</u></p> <p>"I have shunned daily the recurrent opportunities to exploit the energetic-synergetic geometry either as toys or as <u>objets d'art . . .</u>"</p> <p>- Citation and context at Tensegrity: <u>Depolarized Orientation Of Tensegrity-Octahedron Universal Joint</u> (2), Dec'61</p>
<p><u>Objective:</u> (1)</p> <p>See Medical Man is Objective Subjective & Objective Teleologic Objective</p>	<p><u>Objets d'Art:</u></p> <p>See Energy Quanta Values, (1)</p>

Synergetics Dictionary

<p><u>Oblique = Sideways:</u></p> <p style="text-align: center;">See Trial & Error, 5 Jun'73</p>	<p>RBF DEFINITIONS</p> <p><u>Obnoxica:</u></p> <p>"...For purchasable accoutrements, architecture, equipment, and gadgets of distinction; and for the plethora of behavioral <u>obnoxica</u> imposed or induced by the supposed inextinguishability of the Malthus-Darwin theorem of survival only for the slickest fittest."</p> <p style="text-align: right;">- Citation and context at <u>Meek Have Inherited the Earth</u> (1) - Cite PROSPECT FOR HUMANITY, Sav. Review, 29 Aug'64</p>
<p><u>Oblique:</u></p> <p style="text-align: center;">See Trial & Error, 5 Jun'73</p>	<p>RBF DEFINITIONS</p> <p><u>Obnoxico:</u></p> <p>RBF award for "the obnoxious, e.g. bronzed training pants."</p> <p style="text-align: right;">- Cite Wm. Marlin. 1971</p>
<p><u>Oblivion:</u></p> <p style="text-align: center;">See Utopia or Oblivion Forget the Universe</p>	<p><u>Obnoxica: Obnoxico:</u> (1)</p> <p style="text-align: center;">See A-bomb: Souvenir A-bomb Objets d'Art Plastic Call-girl Angels Plastic Replica of a Cotswold Cottage Plastic Flowers</p>
<p>RBF DEFINITIONS</p> <p><u>Obnoxico:</u></p> <p>"When I was living in Manhattan in the 30s and seeing a lot of architects and artists I invented the word 'obnoxico' to describe the most dreadful objects we could imagine that exploited peoples' ignorance and sentimentality... almost anything that could be gilded or bronzed and hung in a car's back window. We thought we would have a lot of fun with a contest, seeing if we could actually sell them. But we had to stop because it wasn't funny; no matter how awful the thing was you couldn't avoid making money on it. It was too mean a game to play."</p> <p style="text-align: right;">- Cite RBF to Lee Nordness at Martin's Carriage House, Wash, DC; 24 Apr'76</p>	<p><u>Obnoxica: Obnoxico:</u> (2)</p> <p style="text-align: center;">See <u>Meek Have Inherited the Earth</u>, (1) Reproducible, 30 May'72</p>

Synergetics Dictionary

<p><u>Obscenity:</u> See Cussing</p>	<p><u>Observation Alters the Phenomenon Observed:</u> See Heisenberg-Eliot-Pound Sequence, autumn'68</p>
<p>RBF DEFINITIONS</p> <p><u>Observation:</u> "Conception is metaphysical; <u>Observation</u> is physical. And the observed is physical."</p> <p style="text-align: center;">- Cite RBF entry BRAIN & MIND, p.11, 1971.</p> <p>- Citation & context at <u>Considerable</u>, 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Observer & Observed:</u> "Starting with whole Universe as observer and observed, we can subdivide the unity of Universe...."</p> <p>- Citation & context at <u>Starting With Universe</u>, 24 Sep'73</p>
<p>RBF DEFINITIONS</p> <p><u>Observation:</u> "At the end of a piece of rope we make a metaphysical disconnect and a new set of <u>observations</u> are inaugurated, each consisting of finite quanta integral ingredients such as the <u>time quality</u> of all finite-energy quanta."</p> <p>- Cite RBF <u>margin</u> of <u>Infinity</u> entry from <u>HOW LITTLE</u>, made on 13 Mar '71 Beverly Hotel, N.Y. Confirmed and expanded, Beverly Hotel, N.Y., 49 June '71.</p> <p>- Citation at <u>Metaphysical Disconnect</u>, 19 Jun'71</p>	<p>RBF DEFINITIONS</p> <p>██████████ <u>Observer & Observed:</u> "To be experiential we must have an <u>observer</u> and the <u>observed</u>."</p> <p style="text-align: right;">- Cite RBF editing <u>SYNERGETICS</u> Mar '71</p> <p>- Citation & context at <u>Happening</u>, Apr'71</p>
<p>RBF DEFINITIONS</p> <p><u>Observation:</u> "Heisenberg said that observation alters the phenomenon observed."</p> <p>- Compare this with <u>Truth</u> entry cited to TOTAL THINKING, I&I, p.226</p> <p>- Cite High Kenner, "The Rope and the Knot," Kentucky Review, Autumn 1966, who attributes this quote to an RBF conversation with Calvin Tomkins reported in the <u>"New Yorker"</u> on 10/10/66 where it was not cited</p>	<p><u>Observer & Observed:</u> (1)</p> <p>See Axis of Conceptual Observation Line of Interrelationship Observer & Otherness Self & Otherness Integral Otherness Universe Considers Itself World Looks at Itself</p>

Synergetics Dictionary

Observer & Observed: (2)

See Experiment, Nov'71
 Starting With Universe, 24 Sep'73*
 Time, 16 Dec'73
 Happening, Apr'71*
 Self & Otherness: Four Minimal Aspects, 9 Jun'75
 Experiential, 25 Mar'71
 Subjective & Objective, 16 May'75
 Pronouns: I = We = Us, (1)(2)
 Height, Length & Width, 19 Jul'76
 Polyhedra, 18 Jul'76
 Awareness, 28 Apr'77

Observer & Otherness: Tetrahedral Relationship Between: (2)

See Geometry of Thinking, 16 Dec'73
 Pronouns: I = We = Us, (2)

RBF DEFINITIONS

Observer & Otherness: Tetrahedral Relationship Between:

"The relationship between the observer and otherness is tetrahedral."

(See Sketch, RBF at Beverly Hotel, NYC, 10 Jan'74

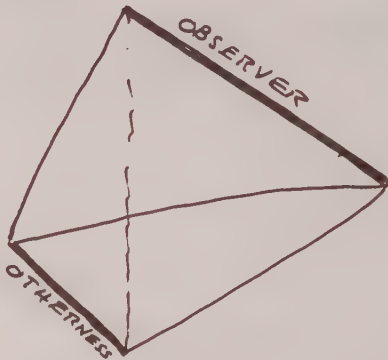
- Cite RBF to EJA, 10 Jan'74

RBF DEFINITIONS

Observing & Articulating:

"The articulations are ever reenacted to reduce the magnitude tolerance of residual inaccuracy of either observation or articulation."

- Cite SYNERGETICS, 2nd. Ed., at Sec. 513.08; inadvertently omitted from Ms. at 513.07 of Mar'71, 4 Aug'75



RBF DEFINITIONS

Observing vs. Articulating:

"My life is the progressive harvestings of trying to be accurate-- the harvesting of ever more accurate observational citations. Life consists of observing and articulating. Resonantly propagated evolution oscillates between observation and articulation ever reenacted hopefully to reduce the magnitude tolerance of residual inaccuracy of observation or articulation."

(See Life, 25 Mar'71 for later citation.)

- Cite RBF SYNERGETICS Draft Mar '71

VICTORIAL DIRECTION - SEC. 513.06

Observer & Otherness: Tetrahedral Relationship Between: (1)

See Metaphysical & Physical Tetrahedral Quanta

TEXT CITATIONS

Observing & Articulating:

Sec. 420.041

Synergetics Dictionary

<p><u>Obsolete:</u> <u>Inventory of Obsolete Concepts:</u> (1B) ■■</p> <p>See Nation, Oct'70 Ninety Degreeeness, 5 Jun'73 Obsolescence, Apr'72 Polyhedron, 20 Feb'73 Possession, 1969 Scarcity, 23 Feb'72 Selling Anything, Apr'72 Capitalism, 1962 Sovereignty, Jun'66 Square, 8 Jan'66 Superstition, circa 1955 Propaganda, circa 1955 Tradition: In Tradition Lies Fallacy Daddy, 2 Jun'74 Educational Theories Romances Mores Geographical Identity Immobility, 4 May'57</p>	<p><u>Obtuse:</u> <u>Obtuseness:</u></p> <p>See Quantum Wave Phenomenon Sequence, (1) Tetrahedron: Regular, 29 Nov'72</p>
<p><u>Obsoles:</u> <u>Inventory of Obsolete Concepts:</u> (1C)</p> <p>See Atlantic Ocean { Dymaxion Airocean World, Pacific Ocean { 20 Jan'75 Indian Ocean { Textbooks New York City, 30 Jul'75 Sea, 10 Sep'75 Energy Environment-harvesting Machines, 27 Jan'77 Belief, 20 Feb'77 Holistic Good & Bad, 22 Jun'77</p>	<p><u>Obverse & Reverse:</u></p> <p>See Axis of Spin, (2) Octantation, 14 May'73 Brouwer's Theorem, 1 Jan'75 Pauli's Exclusion Principle, 1960 Triangle, Jun'71 Geometrical Function of Nine, (1) Two-dimensional Polarity, 11 Sep'75 Structural System, 9 Nov'73</p>
<p><u>Obsolescence:</u> <u>Obsolete:</u> (1)</p> <p>See Sailing Ship Effect Weapons Technology Yesterday's Certainties</p>	<p><u>Obverse:</u></p> <p>See Re-exterior</p>
<p><u>Obsolescence:</u> <u>Obsolete:</u> (2)</p> <p>See Automation, 1970 Artifact (A) Capitalism, 1962 City (A) Ecology Sequence (H)(I) Hunting, 19 Dec'71 Inventions, 1947 Pollution, Feb'73 New York City, 30 Jul'75 Everybody's Business, (1) East-west Mobility of World Man, (2) Transnational Capitalism & Export of Know-how, (1)-(3) Building Industry, (1)(6) (12) Detente, 20 Sep'76 Nuclear Power Generation, 22 Jun'77 Technology & Culture, 25 Oct'77</p>	<p>RBF DEFINITIONS</p> <p><u>Obvious:</u></p> <p>"Due to the myopia of popularized selfishness Naught is so invisible As the obvious Whose immediate relevancy Can be seen Only through deep focussed wide angled lenses."</p> <p>- Cite EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH, Jan '72, pp. 6-7.</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Obvious:</u></p> <p>"Complementarity requires that where there is conceptuality there must be nonconceptuality. The explicable requires the inexplicable. Experience requires the nonexperientiable. The <u>obvious</u> requires the mystical. . . "</p> <p style="text-align: center;"><u>Complementarity</u></p> <p>- Citation at ██████████, 12 Sep'71</p> <p>- Cite RBF to ██████████, Beverly Hotel, New York, 12 Sept. 1971.</p>	<p style="text-align: right;"><u>Obvious:</u> (1)</p> <p>See Obvious & Nonobvious Invisibility: Naught so Invisible as the Obvious Obvious = Axiomatic</p>
<p>RBF DEFINITIONS</p> <p><u>Obvious:</u></p> <p>"..Apparently ample tolerance for their many errors.. was included in the design of the ship and the celestial support system. Though often <u>obvious</u> for millions of years, most of these vital advantage-giving principles long have remained unrecognized for what they are and can do; it would seem to be a part of the ██████████ designed scheme of Universe that-- For the nonce, anyway-- nothing is quite so invisible to Spaceship Earth's passengers as the <u>obvious</u>."</p> <p style="text-align: center;"><u>Complementarity</u></p> <p>- Citation and context at <u>Spaceship Earth</u> (c), 1968</p>	<p style="text-align: right;"><u>Obvious:</u> (2)</p> <p>See Axiom, 13 Nov'69 Complementary, 12 Sep'71* Improvement, 1954 Octahedron, 16 Dec'73 Spaceship Earth, (c)* Periodic Experience, (3) Concave & Convex, 7 Nov'73</p>
<p><u>Obvious = Axiomatic:</u></p> <p style="text-align: center;">See Infinity, 1971</p>	<p><u>Occulting Membranes:</u></p> <p style="text-align: center;">See Privacy, 22 Apr'71</p>
<p><u>Obvious & Nonobvious:</u></p> <p>See Conceptuality & Nonconceptuality, 12 Sep'71 Symmetry & Asymmetry, Jul'71 Repetition, 2 Jul'75</p>	<p><u>Occulting:</u></p> <p style="text-align: center;">See Opaque: Opacity</p>

Synergetics Dictionary

<p><u>Occupancy:</u></p> <p>See Air Space, May'65 Empty, May'70 Office Building, 28 Jan'72</p>	<p><u>Ocean:</u> (1)</p> <p>See Gulf Stream Surf Poundings Hole in the Ocean Airocean Waterocean Landoccean #ater</p>
<p>RBF DEFINITIONS</p> <p><u>Occur:</u></p> <p>"Events Occur. Occur is a time word."</p> <p>- Citation & context at <u>Overlapping</u>, 30 May'75</p>	<p><u>Ocean:</u> (2)</p> <p>See Island, Sep'72 Dymaxion Airocean World, 20 Jan'75 Rain, 11 Feb'76 Airepace Technology, 20 Sep'76 No Energy Crisis, (1)</p>
<p><u>Occurrence:</u></p> <p>See Events & Novents, Nov'71</p>	<p><u>Octa Edge:</u></p> <p>See Precession of Octa Edge-vector</p>
<p><u>Ocean Liner:</u></p> <p>See Queen Mary Ships</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron--both numerically and geometrically--should always be considered as quadrivalent: ie., congruent with self; i.e., doubly present.</p> <p>"In the volumetric hierarchy of prime number identities we identify the octahedron's prime number twoness and the inherent volume fourness (in tetra terms) as volume 2^2, which produces the experiential volume four."</p> <p>- Cite RBF to EJA, 3200 Idaho, Wash., DC; incorporated in SYNERGETICS, 2nd. Ed. at Sec. 1053.601; 10 Dec'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"Octahedron: So we have the octahedron in the middle. (Between the tetra and icoxa.) It is also the second power of the only even prime number: $2^2 = 4$. The octahedron is the most common form of energy associated as matter."</p> <p style="text-align: right;">[15]</p> <p>- Citation & context at <u>Quantum Sequence</u>, (5), 23 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron, mostly outside but partly inside the nuclear sphere, is <u>four</u>."</p> <p style="text-align: right;">[15]</p> <p>- Citation and context at <u>Constant Relative Abundance</u>, 29 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron... restrainingly vector-blocked... can only infold itself pulsatingly to a condition of hemispherical congruence like a deflated basketball. Thus the octahedron's concave-convex, unity-twoness state remains plurally obvious. You can see the concave infolded hemisphere nested into the as yet outfolded convex hemisphere.</p> <p>"Verifying the octahedron's fourness as being an evolutionary transformation of the tetrahedron's unity-twoness, we may take the four triangles of the tetrahedron which were edge-hinged together (bivalently) and reassemble them univalently (that is, corner-to-corner) and produce the octahedron, four of whose faces are triangular (ergo structurally stable) voids. This, incidentally, introduces the structural stability of the triangle as a visualizable yet physical nothingness."</p> <p style="text-align: right;">[15]</p> <p>- Citation & context at <u>Octahedron as Model of Doubleness of Unity</u>, (2)(3), 16 Dec'73</p> <p>- Cite SYNERGETICS draft at Sec. 905.15, 16 Dec'73</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"I see the <u>octahedron</u> as a complex of two tetrahedra always. . . They are half way to the condition of four planes going through the same point.</p> <p style="text-align: right;">[15]</p> <p>- Cite RBF tape, Blackstone Hotel, Chicago, 31 May 1971, p.33.</p> <p><u>SYSTEM - SEC 470.03</u></p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron ... polyhedrally represents the eight 45° angle constituents of 360° unity in the trigonometric function <u> </u> calculations."</p> <p style="text-align: right;">[15]</p> <p>- Citation and context at <u>Indig</u>, 3 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron has very many strange effects because closest packed spheres then have the spaces and the spaces are concave octahedra and concave vector equilibria. The octahedron is part of the exchange between being spheres and spaces."</p> <p style="text-align: right;">[15]</p> <p>- Cite RBF tape, Blackstone Hotel, Chicago, 31 May 1971, p. 35.</p> <p><u>SYSTEM - SEC. 470.03</u></p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The tetrahedron. . . is structured with three triangles around each vertex while the octahedron has four, and the icosahedron has five triangles around each vertex. We find the octahedron in between, doubling its prime number twoness into volumetric fourness as is manifest in the great-circle foldability of the octahedron, which always requires two sets of great circles, whereas all the other icosahedron and vector equilibrium ³¹ and 25 great circles are foldable from single sets of great circles."</p> <p style="text-align: right;">[60]</p> <p>- Cite SYNERGETICS draft at Sec. 1053.64, 7 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The tetrahedron, <u>octahedron</u> and icosahedron relate to physics, the internal affairs of the atom."</p> <p style="text-align: right;">[60]</p> <p>- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971:</p> <p>- Citation & context at <u>Physics: Difference Between Physics and Chemistry</u>, 31 May'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron is infoldable, or innestible-- hemi-hedrally."</p> <p style="text-align: center;">- Cite RBF-holographs and sketches on "Annihilation," Somerset Club, Boston, 22 April 1971</p> <p>- Citation & context at <u>Insidoutable</u>, 22 Apr'71</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"A polyhedron having eight equal equilateral triangular plane faces or sides; may be skeletal, as when made of interconnected struts; or continuous, as when made of interlocking or interconnected sheets or plates; or partly skeletal and partly continuous."</p> <p style="text-align: center;">- Cite Patent No. 2,986,241, May 30, 1961 SYNERGETIC BUILDING CONSTRUCTION</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron provides an example of [redacted] volumetric annihilation when you remove one vector and reduce the figure to three tetrahedra triple-bonded. This also reduces from the volumetric value of four to the volumetric value of three. The process is, of course, reversible."</p> <p style="text-align: center;">- Cite Sketch #1, 28 Feb '71 and RBF marginalis on p. 3 - SYNERGETICS DRAFT.</p> <p>- Citation at [redacted] <u>Volumetric Annihilation</u>, 28 Feb'71</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Annihilation Model:</u></p> <p>"Just reorienting one vector of the octahedron shows how it goes into the tetrahelix as a model of how energy goes from matter to radiation and vice versa. This shows how you can have annihilation and no energy is lost."</p> <p style="text-align: center;">- Cite RBF to EJA by telephone from 200 Locust, Philadelphia, 8 Mar'75</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The octahedron has a fundamentalkwoness, its volume of four being made up of the prime number two . . ."</p> <p style="text-align: center;">- Cite Carbondale Draft Return to Modelability, p. V.7</p> <p>- Cite Nasa Speech, p. 73, Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Annihilation Model:</u></p> <p>"This an illustration of the symmetry of matter and how it precesses to radiation.. It is that moment of Universe that Einstein was preoccupied with. Just as three triangles edge-to-edge become four... topologically... they have made a tetrahedron... when you turn the triangle inside-out it makes a new vertex and the four have become five.</p> <p>"We used to think that two is company and three is a crowd but now we see that four is company and five is a crowd... it's only the fifth ball that has to find a place to go. This is very exciting..."</p> <p style="text-align: center;">- Cite RBF to EJA from Hope Watts, DelRay, FL., 23 Feb'75</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron:</u></p> <p>"The tetrahedron will not fill all space. . . But we can fill all space with tetrahedra and <u>octahedra</u>."</p> <p style="text-align: center;">- Cite Carbondale Draft Nature's Coordination, p. VI.13</p> <p>- Cite Oregon Lecture #6, p.216, 10 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Annihilation Model:</u></p> <p>"The one-quantum 'leap' is also manifest when one vector edge of the volume 4 octahedron is rotated 90 degrees by disconnecting two of its ends and reconnecting them with the next set of vertexes occurring at 90 degrees from the previously interconnected-with vertexes, transforming the same unit-length, 12-vector structuring from the octahedron to the first three-triple-bonded-together (face-to-face) tetrahedra of the tetrahelix of the DNA-RNA formulation.</p> <p>"One 90-degree vector reorientation in the complex alters the volume from exactly 4 to exactly 3. This relationship of one quantum disappearance coincident to the transformation of the nuclear symmetrical octahedron into the asymmetrical initiation of the DNA-RNA helix is a reminder of the disappearing-quanta behavior of the always integrally end-cohered jitterbugging transformational stages from the 20 tetrahedral volumes of the vector equilibrium to the octahedron's 4 and thence to the tetrahedron's 1 volume. All of these stages are rationally concentric in our unified operational field of 12-around-one closest-packed spheres that is only conceptual as equilibrionic. We note also that per each sphere space between closest packed spheres is a volume of exactly one tetrahedron: $6 - 5 = 1$."</p> <p style="text-align: center;">- Cite SYNERGETICS text at Sec. 982.73, RBF galley rewrite 30 Dec'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octahedron as Conservation & Annihilation Model:</u></p> <p>"We may consider the octahedron as a water-filled tube, pulling on a water-filled tube. The pulling will make it bulge in the middle. As we pull, the gravitational embracement causes a precessional rearrangement of the vector edge whereby one tetrahedron drops out. One quantum has dropped out, but, topologically it is still an octahedron:</p> $6V + 8F = 12 + 2 \text{ (three face-bonded tetra), or}$ $6V + 8F = 12 + 2 \text{ (octahedron)}$ <p>Topologically there is no difference.</p> <p>"This is the quantum leap, the quantum jump. With interference it precesses from matter to radiation; and then back into matter again. This is the lever that will bring science into further consideration of synergetics."</p> <p>- Citation & context at <u>Quantum Sequence</u>, (5), 23 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Conservation & Annihilation Model:</u> (3)</p> <p>"again be precessionally transformed back into the crystallographic form of the octahedron, thus <u>syntropically</u> regaining not only its symmetry but the one tetrahedron quantum of energy which it had <u>entropically</u> lost.</p> <p>"Goldy realizes that the scientist Boltzmann had long ago hypothesized that the physical Universe of energy as matter was able to export energies from all the stars only because those energies were being importantly reassembled in vast numbers of elsewhere. Einstein, too, assumed the foregoing to be true. However, many scientists remained skeptical, saying that entropy was universal and increasingly disorderly and expansive, wherefore Universe is spending itself inexorably and irrevocably.</p> <p>"Since photons show that energy occurs only in discrete packages and is discontinuous, and since the stars lose energy quanta entropically, how can the lost quanta reappear elsewhere? Goldy says to the bears, "Vectorial geometry conceptually demonstrates the exact way in which energy quanta are lost and regained in the course of the entropic-syntropic turnaround events of astrophysics. The topological integrity of"</p> <p>- Cite GOLDYLOCKS, p. G13, 16 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron as Conservation and Annihilation Model:</u></p> <p>"The octahedron goes from a volume of four to a volume of three as one tensor is precessed at 90 degrees. This is a demonstration in terms of tension and compression of how energy can disappear and reappear. The process is reversible like Boltzmann's law and like the operation of syntropy and entropy. The lost tetrahedron <u>reappears</u> and become symmetrical in its optimum form as a ball-bearing-sphere octahedron. There are six great circles doubled up in the octahedron. Compression is radiational; it reappears. Out of the fundamental fourness of all systems we have a model of how four can become three in the octahedron conservation and annihilation model.</p> <p>"See the Iceland spar crystals for the octahedron's double vector-edge image."</p> <p>- Cite SYNERGETICS, 2nd. Ed., at Sec. 936, 15-16, 23 May'75</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Conservation & Annihilation Model:</u> (4)</p> <p>"vectorial geometry elucidates both the one-quantum loss and the one-quantum of energy recovery incidental to the entropic transforming from matter to radiation and the syntropic transforming from radiation to matter, as clearly manifest in the octahedron to tetra-arc transformation and its reversal to the octahedron. This topological transformation, but not its energy-quantum relationship, was originally discovered in 1951 by the geodesic engineer-scientist, D.L. Richter.</p> <p>"This elucidation of the way in which Universe can temporarily drop out or regain its energy quanta, elucidates much more, says Goldy. "It explains what happens in the photosynthetic process as planet Earth's vegetation converts Sun radiation receipts into beautiful hydrocarbon molecules. Energy quanta are regained on Earth. It explains even more. It shows how the weightless metaphysical tetrahedron is lost and regained in Universe as life dies out here and is reborn there. It shows how the tripli-bonded addition of the recoverable one tetrahedron, when added to the neutral phase, W-profiled, tetra-arc, triple-bonded assembly of three tetrahedra, must always produce either a male or a female twisting helix, which, when extended, becomes the DNA-RNA tetrahelix which is the structural system programmer of all living species and individuals of those species."</p> <p>- Cite GOLDYLOCKS, pp.G13,G14, 16 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron as Conservation & Annihilation Model:</u> (1)</p> <p>"Suddenly Goldy realizes that all these discoveries she has been making combine to explain how it can be that the stars of the billions of now-discovered galaxies are giving off energies at incredible rates in such a manner that, as discrete quanta of energy, they become discontinued and apparently annihilated, yet the same quanta of energies reappear elsewhere, as for instance in the terrestrial vegetation's photo-synthetic reduction and proliferation of hydrocarbon molecules in biologic organisms and in crystallographic growths.</p> <p>"Since the pattern of two most dominant critical proximity, mass-interattraction (gravity) forces pulling diametrically on any one body produces the same model as that of Goldy's water-filled, rubber tube, the precessional squeezing of a symmetrical body, such as that of an octahedron, by two diametric gravitational forces, pulling embracingly upon it as it passes between two neighboring cosmic bodies, will cause some part of the octahedron's integral vectorial structure to yield precessionally in a plane oriented at right angles to the line between the two pulling forces, thus to transform the octahedron from its symmetrical form into an asymmetrical form."</p> <p>- Cite GOLDYLOCKS, pp. G11, G12, 16 May'75</p>	<p>TEXT CITATIONS</p> <p><u>Octahedron as Conservation & Annihilation Model:</u></p> <p>Synergetics, Sec. 982.73</p> <p>RBF Videotaping Marathon: Penn Bell Studios, Philadelphia, Session #3 : 22 Jan'75 : 2044 studio time (See EJA Log) Session #4 : 23 Jan'75 : 1925 studio time Session #6 : 25 Jan'75 : 1430 studio time</p> <p>RBF marginalia at SYNERGETICS draft (undated): "Synergy", p.3 - Sec. 108</p> <p>Synergetics, 2nd. Ed. : Secs. 935-938</p> <p>Synergetics, Sec. 985.08</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron as Conservation & Annihilation Model:</u> (2)</p> <p>"This is most economically accomplished by one of the octahedron's equatorial vector-edges disconnecting at both of its equatorially engaged, end vertexes and rotating precessionally 90 degrees to rejoin its two ends with the octahedron's two polar vertexes. This local rotation results in the disappearance of the symmetrical octahedron and leaves in its stead the asymmetrical, face-bonded, three tetrahedra assembly in the form of an arc which is the neutral electromagnetic-wave-initiating state.</p> <p>"The asymmetrical arc-wave consists of the same 12 vector edges and the same eight equiangled triangles and the same six vertexes as those of the original octahedron. Topologically described, it is the same polyhedron. However, it is clearly observable that the transformation not only converted omnidirectional symmetry into two-directional asymmetry, but it also reduced the octahedron's exact volume of four quanta to a volume of exactly three quanta in the form of the three face-interbonded tetrahedra. What has happened here is that matter (as the synergetic octahedron) is precessionally transformed into a directionally oriented electromagnetic wave which, upon interference with other radiation or matter, will"</p> <p>- Cite GOLDYLOCKS, p. G12, 16 May'75</p>	<p><u>Octahedron as Annihilation Model:</u></p> <p>See Volumetric Annihilation Tensegrity Model of Self-interference of Energy Octahedron as Conservation & Annihilation Model</p>

Synergetics Dictionary

<p><u>Octahedron as Conservation & Annihilation Model:</u> (1)</p> <p>See Discontinuity Accommodation Model Invisible Quantum as Tetrahelix Gap Closer Octahedron as Annihilation Model Quantum Jump: Quantum Leap Fourth Quantum Radiation vs. Crystal Model Information Transmitting & Nontransmitting Model Richter Transformation Octahedron as Photosynthesis Model Precession of Octa Edge-vector</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron: Eighth-octahedra:</u> (3)</p> <p>"for big steel ships and the radar scopes clearly outline land masses and other sizable objects. Because they do not show the little sailing ships, those little ships are in incredible danger as they cross--as they must--those big sailing ship lanes. As a consequence of this hazard, there has been evolved a device which can be mounted on the topmast or the yard-arm of sailing ships which does register as a clearly-defined pip on the radar scopes. This device consists of a spherical octahedron with three great circles made of aluminum-foil-covered cardboard surface. The three great circles cross each other at 90 degrees. The spherical surface is uncovered.</p> <p>"As you look at the device--a radar reflector--you look into whatever number of the spherical octahedron's central-angular tetrahedra as may be within the line of view. It has been discovered that the ship's radar signals, when impinging on any one of those eighth-octahedra's concave tetrahedra, produce a reflection pattern which returns directly back to the radar-sending ship to register on the radar scope.</p> <p>"What the radar's invisible-to-the-human-eye electromagnetic" - Cite RBF Ltr. to Stephen Barba, N. Miami Beach, FL; 4 May'76</p>
<p><u>Octahedron as Conservation & Annihilation Model:</u> (2)</p> <p>See Geometrical Function of Nine, (5)(6) Six - Five = One, 8 Jan'76 Vector Equilibrium Involvement Domain, 24 Apr'76</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron: Eighth-octahedra:</u> (4)</p> <p>radiation wave does is to make it optically clear--as when a searchlight is aimed at such a sailing ship, at which time a very bright reflection beam returns to the viewer who is manipulating the searchlight aimed at the sailing ship. This is just one of the eight eighth-octahedra's concave tetrahedron's three faces, glowing vividly, beaming the light back to the source of the searchlight. You can diagram this yourself to see what happens....</p> <p>"As you know, when light strikes a surface it bounces away at an angle which is exactly the same as the angle at which it impinges on its surface. Any beam entering the eighth-octahedra will bounce off at the same angle to a second side of the concave octahedron and then bounce off again at the same angle. This means that the two bouncings add up to 180°, which means sending the radiation directly back to its source.</p> <p>"These angular bouncings of electromagnetics... may relate very importantly to all the phenomena seeming to be mystically produced by the pyramid mystery cults."</p> <p>- Cite RBF Ltr. to Stephen Barba, N. Miami Beach, FL; 4 May'76</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron: Eighth-octahedra:</u> (1)</p> <p>"...Though I have twice visited the Great Pyramid at Giseh, I have never carried a sextant and tape with me so I do not have the angular data I need. I know there are others who have made measurements, but my experience teaches me not to be too confident of the published statements of others when I do not know those personalities nor the degree of exactitude at which they operate.</p> <p>"At the present moment I can give you some very interesting information regarding not only octahedra, but in particular eighth-octahedra. In the spherical octahedron each of the eight spherical surface corners are 90°. Each of the spherical octahedron's eight triangular edges are 90° of arc, which means that they subtend central angles of 90° each.</p> <p>"Here is a very extraordinary asymmetrical tetrahedron with three 90-degree central angles and three 90-degree surface angles--as well as having six 90-degree internal corners where the three radii of the octahedron impinge perpendicularly upon the three great-circle arcs. All of the spherical octahedron's one-eighth symmetrical self-divisions have eight corners each of 90°.</p> <p style="text-align: right;">'76</p> <p>- Cite RBF Ltr. to Stephen A. Barba, North Miami Beach, FL; 4 May</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron: Eighth-Octahedra:</u></p> <p>"By internally interconnecting its six vertexes with three polar axes: X, Y, and Z, and rotating the octahedron successively upon those three axes, three planes are internally generated that symmetrically subdivide the octahedron into eight uniformly equal, equiangle-triangle-based, asymmetrical tetrahedra, with three convergent, 90-degree-angle-surrounded apexes, each of whose volume is one-eighth of the volume of one octahedron: this is called the Eighth-Octahedron. (See also Sec. 912.) The octahedron having a volume of four tetrahedra, allows each Eighth-Octahedron to have a volume of one-half of one tetrahedron. If we apply the equiaugled-triangular base of one each of these eight Eighth-Octahedra to each of the vector equilibrium's eight equiangle-triangle facets, with the Eighth-Octahedra's three-90-degree-angle-surrounded vertexes pointing outwardly, they will exactly and symmetrically produce the 24-volume, nucleus-embracing cube symmetrically surrounding the 20-volume vector equilibrium; thus with $8 \times \frac{3}{4} = 6$ being added to the 20-volume vector equilibrium producing a 24-volume total."</p> <p style="text-align: right;">'44</p> <p>- Cite SYNERGETICS text at Sec. 905.43, 16 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron: Eighth-octahedra:</u> (2)</p> <p>"The spherical octahedron's triangle is the only triangle in which the center of area of the triangle occurs at mid-altitude of the triangle's three perpendicular bisectors of its three corner angles:</p> <div style="text-align: center; margin: 10px 0;"> </div> <p>"In modern ocean cruising sailing craft in the high seas routes often cross the main ocean highway of steam and diesel ship channels. These great new high speed ships often operate by automatic navigational equipment with a watch officer idly standing by. They rush forward through night and fog at speeds in the 20-knot range. Little sailing craft up to 72 feet in length with their minuscule red, green, and white navigational lights are not visible from any great distance--and often in high waves they are approximately invisible. Such sailing ships have relatively little metal in them. The radar scopes of the big ships show readily recognizable pips"</p> <p>- Cite RBF Ltr. to Stephen Barba, N. Miami Beach, FL; 4 May'76</p>	<p><u>Octahedron: Eighth-octahedra:</u></p> <p>See Allspace Filling, 11 Jul'62 Cube: Volume-3 Cube, 16 Dec'73 Modules: A & B Quanta Modules, 27 Jan'75 Quantum Sequence, (4) Nuclear Cube, 11 Dec'75; 23 Feb'76 Basic Nestable Configurations: Hierarchy Of, 29 May'72 Rhombic Dodecahedron, 12 May'77</p>

Synergetics Dictionary

Octahedron: Energy Holding Pattern:

See Holding Patterns of Energy, Apr '72

Octahedron: Half-octahedron:

(2)

See Allspace Filling, 11 Jul '62
Cube, 18 Sep '71
Equilibrions, 23 Jan '72

RBF DEFINITIONS

Octahedron: Half Octahedron:

"A half-octahedron, to be stable, has to have its other half. The vector equilibrium has only the half-octahedra, so the circumferential instability of its six square faces invites structural instability: it is, ergo, equilibrions."

- Cite RBF marginalis at 3200 Idaho, D6, 23 Jan '72, at SYNERGETICS Draft Sec. 884.10 of 9 Feb '72.

SYSTEM - SEC 470.03

RBF DEFINITIONS

Octahedron Model of Doubleness of Unity:

(1)

"The prime number twoness of the octahedron always occurs in structuring doubled together as four-- i.e., 2²-- a fourness which is also doubleness of unity. Unity is plural and, at minimum, is two. The unity volume 1 of the tetrahedron is, in structural verity, two, being both the outwardly displayed convex tetrahedron and the inwardly contained concave tetrahedron.

"The three-great-circle model of the spherical octahedron only 'seems' to be three; it is in fact 'double'; it is only foldably producible in unbroken (whole) great-circle sheets by edge-combining six hemispherically folded whole great circles. Thus it is seen that the octahedron-- as in Iceland spar crystals-- occurs only doubly, i.e., omnicongruent with itself, which is 'quadrivalent'."

"Among the three possible omnisymmetrical prime structural systems-- the tetrahedron, octahedron, and icosahedron-- only the tetrahedron has each of its vertexes diametrically opposite a triangular opening. In the octahedron and icosahedron, each vertex is opposite another vertex; and each of their vertexes is diametrically blocked against articulating a self-inside--"

- Cite SYNERGETICS text at Secs. 905.11-13, 16 Dec '73

RBF DEFINITIONS

Octahedron: Half Octahedron: Lending Model

"Half octahedra can be pulled out of the square faces of the vector equilibria. This goes on in atoms joining one another and they are able to lend something to one another sometimes, they are able to lend electrons. We can lend out of the square faces without in any way jeopardizing the structural system which was dependent upon the triangulation of the tetrahedral parts."

"We can lend up to four without bothering it."

- Cite Oregon Lecture #7, pp. 255. 11 Jun '62

RBF DEFINITIONS

Octahedron Model of Doubleness of Unity:

(2)

"-outing transformation. In both the octahedron and the icosahedron, each of the vertexes is tense-vector-restrained from escaping outwardly by the convergent vectorial strength of the system's other immediately surrounding-- at minimum three-- vertexial event neighbors. But contrariwise, each of the octahedron's and icosahedron's vertex events are constrictingly impelled inwardly in an exact central-system direction and thence impelled toward diametric exit and inside-outing transformation; and their vertex events would do so were it not for their diametrically opposed vertexes, which are surroundingly tense-vector-restrained from permitting such outward egress."

"As a consequence of its uniquely unopposed diametric vertexing-- ergo permitted-- diametric exit, only the tetrahedron among all the symmetric polyhedra can turn itself pulsatingly inside-out, and can do so in eight different ways (see Sec. 624); and in each instance, as it does so, one-half of its combined concave-convex unity 'twoness' is always inherently invisible."

"The octahedron, however, restrainingly vector-blocked as described, can only infold itself pulsatingly to a condition of hemispherical congruence like a deflated basketball."

- Cite SYNERGETICS text at Secs 905.13-15, 16 Dec '73

Octahedron: Half-octahedron:

(1)

See Mite
Pyramid = Half-octahedron
Vector Equilibrium: Lending & Borrowing Model

RBF DEFINITIONS

Octahedron as Model of Doubleness of Unity:

(3)

"Thus the octahedron's concave-convex, unity-twoness state remains plurally obvious. You can see the concave infolded hemisphere nested into the as-yet outfolded convex hemisphere."

"Verifying the octahedron's fourness as being an evolutionary transformation of the tetrahedron's unity-twoness, we may take the four triangles of the tetrahedron which were edge-hinged together (bivalently) and reassemble them univalently (that is, corner-to-corner) and produce the octahedron, four of whose faces are triangular (ergo structurally stable) voids. This, incidentally, introduces the structural stability of the triangle as a visualizable yet physical nothingness."

- Cite SYNERGETICS text at Sec. 905.15, 16 Dec '73

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octahedron: Nuclear Asymmetric Octahedra:</u></p> <p>"There are eight asymmetric octahedra which surround each face of the 'coupler.' It is probable that these eight asymmetric nuclear octahedra account all the varieties of intercomplex complexity required for the permutations of the 92 regenerative chemical elements. These eight variables alone provide for a fantastic number of rearrangements and reorientations of the A and B Quanta Modules within exactly the same volume.</p> <p>"I now believe it is possible that there are no other fundamental complex varieties. So we have a limit of variation. With our friend octave coming in as before, This is how we now find out what we have been looking for when we have been talking about 'number one.' It is one nucleon, which can be either neutron or proton, depending on how you rearrange the modules in the same space."</p> <p>- Cite RBF to EJA, by telephone from Phila., 1 Apr'73 Incorporated in SYNERGETICS text at Sec. 954.30</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Photosynthesis Model:</u> (B)</p> <p>"end-to-end, where mass interattraction works, they close back upon themselves and are always more effective. So the tendency of Universe to come apart is always well offset by the finite closure of the same six vectors.</p> <p>"We must consider the effect of gravity on the octahedron in terms of embracement. Of the three structural systems in Universe--tetra, octa, and icosah--the octahedron is in the middle and always is inherently doubled-up, the vectors double up.</p> <p>The most plentiful of all the crystals are octahedral crystals. The embracement of the octahedron is typical of matter, but the embracement is precessed causing a reaction at 90 degrees. Our pulling makes for greater pressure for it to try to come apart.</p> <p>"The 12 vectors of the octahedron are embraced by gravity. The two polar pyramids join in a quadrangular equator. This crystal gets between two other celestial masses and is pulled by them. They are pulling like the Chinese finger puzzle device that pulls your finger in and squeezes it. Precessionally, you pull it one way and it squeezes the other way. So this octahedron is a sort of rubber tube; if you pull on it it makes the tube contract. Compression operates on it."</p> <p>- Cite RBF to Hugh Kenner, Phila., PA, Transcript p.7; 8 Jun'75</p>
<p><u>Octahedron: Nuclear Asymmetric Octahedron:</u></p> <p>See Coupler</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Photosynthesis Model:</u> (C)</p> <p>"The precessional effect operates on the octahedron's 12 vectors, and one of them precesses. I want you to think of the six vertexes. You've got four ^{on} the top like a pyramid--a regular Egyptian pyramid--and a reflecting pyramid at the bottom. So there are four vectors at the north pole; four at the south; and four around the equator. The embracing effect is to make one of the four equatorial vectors precess; it lets go from the two adjacent points in the equator and rotates 90 degrees to join the north pole to the south pole.</p> <p>"We still have exactly the same six vertexes; we simply connected the poles instead of the adjacent equator points. You will find that what this does is to turn this form into an arc where you have three tetrahedra face-bonded. We go from an octahedron of volume four to three tetrahedra face-bonded: six vertexes, eight faces, 12 edges. There is no way topologically that you can tell that anything has happened. But you have dropped out one tetrahedron, or one unit of quantum.</p> <p>"This explains why Boltzmann saw the Universe with all the stars giving off energy entropically. He said the energy must be being collected elsewhere. Einstein went along with it."</p> <p>- Cite RBF to Hugh Kenner, Phila. PA., transcript p.7; 8 Jun'75</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron as Photosynthesis Model:</u></p> <p>The vector-processed, three-quanta octahedron manifests interference and demonstrates radiation; when the vector-edge precesses again, the fourth quantum reappears, the interference disappears, and gravity is demonstrated. This is the way photosynthesis functions-- the conversion of radiation in the leaf, or on your skin.</p> <p>- Cite RBF to EJA, 3200 Idaho, Wash., DC., 11 Dec'75</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Photosynthesis Model:</u> (D)</p> <p>"But the scientists said that entropy means that energy gets lost: How could it possibly be picked up again over here? So we suddenly see how it does in this form of the three-tetra-arc. One minute you add a tetrahedron to it and the next you have lost one and it disappears... It comes out on the end and becomes the tetrahelix. The tetrahelix is always this wave, an electromagnetic wave. This wave is the way gravitation becomes radiation. The quantum is separated out when the radiation has an interference with anything, then it immediately precesses again and becomes matter-- and it goes from the three-tetra back to the four. And we suddenly have one unit of quantum seemingly disappear in the Universe and it's picked up again over there.</p> <p>"This is how the quantum gets picked up by photosynthesis. Photosynthesis had not been understood before: it is simply the picking up of that one unit of quantum.</p> <p>"The transformation from the octahedron to the three tetrahedra was discovered by Don Richter, but he did not know the significance of it as he had not been thinking about it that way. He was not thinking about it as an accounting of energetic phenomena; but it completely explains how the gravitational effect will"</p> <p>- Cite RBF to Hugh Kenner, Phila. PA., transcript p.8; 8 Jun'75</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron as Photosynthesis Model:</u> (A)</p> <p>"Gravity must always be thought of as embracing. For instance, it would be like the hoops of a barrel. The staves are wedges. Unless you have truncated the wedges they could all go right to the center of the sphere; and they would like to get out of the system, but the bands hold them together. They cannot get any closer together because their outer parts are larger than their inner parts. They can't fall in. But the point is that the bands are finite: they come back upon themselves and they embrace. You have to return on to yourself to embrace. Gravity operates then by embracement. The larger the phenomenon that it embraces, the more leverage effect it has because you simply tighten the screws and the bands at the ends of the lever. This is why the pressures increase as you go into the earth; they continually increase the further in you go due to the leverage effect of the embracement.</p> <p>"Gravity does not operate perpendicularly. It operates not as a radius but at 90 degrees to the radius. All the radiation goes outward radially; the gravity is always circumferential and therefore finite and enclosing. I give you, for instance, the hexagon, where the six radii are trying to come apart explosively. They disintegrate; the radii do not help each other. But if you have the same number of sticks arranged"</p> <p>- Cite RBF to Hugh Kenner, Phila., PA, Transcript p.7; 8 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron as Photosynthesis Model:</u> (E)</p> <p>"convert matter into radiation... and how the energy is only apparently lost. All the topological accounting is there. But nobody would ever know it because it is topologically the same. A unit of quantum absolutely disappears from the described Universe. It explains how entropy could occur. The entropy was there but no one could understand the syntropy. But there it is."</p> <p>- Cite RBF to Hugh Kenner, Phila. PA, transcript p.8; 8 Jun'75</p>

Synergetics Dictionary

<p><u>Octahedron as Photosynthesis Model:</u></p> <p style="text-align: center;">See Radiation-gravitation Model</p>	<p><u>Octahedron-tetrahedron System:</u></p> <p style="text-align: center;">See Octet Truss</p>
<p><u>Octahedral Tensegrity:</u></p> <p style="text-align: center;">See Tensegrity: Depolarized Orientation of Tensegrity-Octahedron Universal Joint</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron: Volume of Cube as Three:</u> (3)</p> <p>"I am going to take these four one-eighth octahedra, and because each has an equilateral triangular face, I can superimpose it on the equilateral triangular faces of a regular tetrahedron. There are four faces, so the four faces of the tetrahedra will accommodate four one-eighth octahedra superimposed so that the equilateral triangle faces are becoming congruent. This leaves a 90-degree angle sticking outwardly, and it makes the cube. So the cube then is one regular tetrahedron, with four one-eighth octahedra superimposed on its surface. The volume of a one-eighth octahedron is one-half, and four times one-half on the faces ($4 \times \frac{1}{2} = 2$) and so the volume of the tetrahedron which I superimposed is one, so ($2 + 1 = 3$), so the volume of a cube in the system is three. That gets to be very interesting. Here is another nice whole number. You have the tetrahedron as one, octahedron is four, and cube is three. A cube as three is not what people have been thinking. They have been thinking that a cube was one, but I am using unity where a tetrahedron is one."</p> <p style="text-align: right;">- Cite Oregon Lecture #6, pp. 215-216. 10 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron-tetrahedron System:</u></p> <p>"You cannot make big tetrahedra or octahedra out of littler tetrahedra or octahedra respectively. Octahedron and tetrahedron may not be realized independently of one another.</p> <p>"Tetrahedron is inherently positive or negative. It is not multidimensionally modulatable except in frequency greater than two, which is unity. Tetrahedron cannot be realized out of tetra alone; ergo, has an octahedron."</p> <p style="text-align: right;">- Citation & context at <u>Multidimensionality</u>, (1), 11 Sep'63</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron: XYZ Coordinates:</u> (1)</p> <p>"Here we take an octahedron which has a volume of four. An octahedron has six vertexes and it is symmetrical because they are all equilateral triangles and all the edges are the same. Therefore we know by it being symmetrical that if we interconnect its opposite vertexes, being six of them, there will be three axes between the six opposite vertexes. Those three axes would be the well-known XYZ coordinate system and the XYZ coordinates then do exist inside the octahedron. If I cut the octahedron through one of the four planes, one of the planes of its equator, it makes me two half-octahedra. If the volume of an octahedron in respect to a tetrahedron is four, then a half-octahedron has a volume of two, and $2 + 2 = 4$."</p> <p style="text-align: right;">- Cite Oregon Lecture #6, p.214. 10 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Octahedron-Tetrahedron System:</u></p> <p>"An assemblage of octahedrons and tetrahedrons in face to face relationship. Thus when four tetrahedrons are grouped to define a larger tetrahedron, the resulting central space is an octahedron; together, these figures are comprised in a single, or 'common,' octahedron-tetrahedron system."</p> <p style="text-align: right;">- Cite Patent No. 2,986,241, May 30, 1961 SYNERGETIC BUILDING CONSTRUCTION</p>	<p>RBF DEFINITIONS</p> <p><u>Octahedron: ██████████ XYZ Coordinates:</u> (2)</p> <p>"There is a center of gravity of the octahedron and it has eight equilateral triangular faces and there is a little pyramid, or irregular tetrahedron which can be formed on one of the faces of the octahedron whose interior apex is at the center of gravity of the octahedron. . . . Because there are eight such faces and it is at the center of volume, there are eight of these that make up one octahedron so this is a one-eighth octahedron. If the volume of an octahedron is four, the one-eighth of an octahedron has the volume of one-half of one tetrahedron."</p> <p>"Each of the one-eighth octahedra has interiorly 90-degree angles because they are the XYZ coordinates and when the XYZ coordinates cross, it is 90 degrees. They have a central angle of 90 degrees and the external angles are 60 degrees each. . . ."</p> <p style="text-align: right;">- Cite Oregon Lecture #6, p. 215. 10 Jul'62</p>

Synergetics Dictionary

<p><u>Octahedron: XYZ Coordinates:</u> (1)</p> <p>See XYZ Quadrant at Center of Octahedron</p>	<p><u>Octahedron:</u> (3)</p> <p>See Octahedron as Annihilation Model Octahedron as Conservation & Annihilation Model Octahedron: Eighth-octahedra Octahedron: Energy Holding Pattern Octahedron: Half Octahedron Octahedron: Half Octahedron: Lening Model Octahedron Model of Doubleness of Unity Octahedron: Nuclear Asymmetric Octahedron Octahedron: Super Octahedron Octahedral Tensegrity Octahedron-tetrahedron System Octahedron: Volume of Cube as Three Octahedron: XYZ Coordinates Octahedron as Photosynthesis Model Octa Edge</p>
<p><u>Octahedron: XYZ Coordinates:</u> (2)</p> <p>See Planck's Constant, 16 Aug'70 Spherical Octahedron, 29 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Octant:</u></p> <p>"3×10^{41} : 300 thirteen-billion SSRCD : 312,858,158,319,499, 960,973,208,642,615,613,036,800,000, i.e., all of the prime numbers in 45^0, which is one 'octant' of trigonometry, which covers all general systems relationships."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1238.80, 20 Jul'73 (From RBF holograph revision of WORLD pieceof 27 Mar'73)</p>
<p><u>Octahedron:</u> (1)</p> <p>See Allspace Filling: Octahedron & Tetrahedron Allspace Filling: Octahedron & Vector Equilibrium Complexocta Domain of Octahedron Prime Structural Systems Spherical Octahedron XYZ Quadrant at the Center of Octahedron Hadra Coupler: Nuclear Asymmetric Octahedron Tetra, Octa & Icosa Dihedral Angles of Tetra & Octa Superoctahedron Precession of Octa Edge-vector Tetra, Octa & VE Universal Fabric Joint = Octahedron</p>	<p>RBF DEFINITIONS</p> <p><u>Octantation:</u></p> <p>"Indig congruences demonstrate that nine is zero and that number system is inherently octave and corresponds to the four positive and four negative octants of the two polar domains (obverse and reverse) of the octahedron-- and of all systems-- which systematic polyhedral octantation limits also govern the eight 45^0 angle constituent limits of 360^0 unity in the trigonometric function calculations.</p> <p>"The inherent +4, -4, 0, +4, -4, 0 --- of number also corresponds to the octantation of "The Coupler" (see section 954.20) by its eight allspace-filling Mites (AAB Modules) which, being inherently plus-or-minus biased, though superficially invariant, i.e., are conformationally identical, altogether provides lucidly synergetic integration (at a kindergarten comprehensible level) of cosmically basic number behavior, quantum mechanics, synergetics, nuclear physics, wave phenomena in general, and topologically rational accountability of experience in general."</p> <p style="text-align: right;">- Cite RBF holograph in SYNERGETICS draft at Secs. 1221, 113, 14 May'73</p>
<p><u>Octahedron:</u> (2)</p> <p>See Allspace Filling, 10 Jul'62 Constant Relative Abundance, 29 Nov'72* Holding Patterns of Energy, Apr'72 Indig, 3 Mar'73* Insideoutable, 22 Apr'71* Physics as Internal Affairs of the Atom, 31 May'71 Physics: Difference Between Physics and Chemistry, 31 May'71* Sphere, 25 Feb'74 Tetrahedron (2) Volumetric Annihilation, 28 Feb'71* Prism, 31 May'71 Quantum Sequence, (5)*</p>	<p>RBF DEFINITIONS</p> <p><u>Octant Zone:</u></p> <p>"Three disparately conformed, nonequilateral, polarized half-octahedra, each consisting of the same four equivolumetric octant zones occur around the three half-octants' common volumetric center. These eight octant zones are all occupied, in three possible different system arrangements, by identical asymmetrical tetrahedra, which are Mites, each consisting of the three AAB Modules."</p> <p style="text-align: right;">- Cite RBF partial rewrite of SYNERGETICS galley at Sec.954.01, 20 Dec'73; deleted by him, and restored to text by EJ4</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octant Zone:</u></p> <p>"Three disparately conformed, nonequilateral, polarized octahedra each consist of the same eight equivolumetric <u>octant zones</u> occurring around the three octants' common volumetric center. These eight octant zones are all occupied, in three possible different system arrangements, by identical asymmetrical tetrahedra, which are Nites, each consisting of the three AAB Modules."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 954.01, 27 May'72</p>	<p><u>Octavalent:</u></p> <p style="text-align: right;">See Tetrahedron: Hierarchy of Pulsating Tetrahedral Arrays, 16 Dec'73</p>
<p><u>Octant:</u> Octantation: (1)</p> <p>See Degrees: 45° Trigonometric Limit XYZ Quadrant at Center of Octahedron</p>	<p>RBF DEFINITIONS</p> <p><u>Octave:</u></p> <p>"Compression is locally expressive in discrete tones and frequencies internal to the <u>octave</u>.</p> <p>"Tension is both internal and external to the <u>octave</u> and is harmonic with either the unit <u>octave</u> or <u>octave</u> pluralities.</p> <p style="text-align: right;">- Cite Synergetics Draft at Sec. 640.70, Dec. '71.</p>
<p><u>Octant:</u> <u>Octation:</u> <u>Octantation:</u> (2)</p> <p>See Coupler, 27 Jan'75 Fourth Dimension, 29 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Octave:</u></p> <p>"The nucleus can accommodate waves without breaking up the fundamental resonance of the <u>octaves</u>."</p> <p style="text-align: right;">- Cite RBP to LJA, Fairfield, Conn., Gen Walf. 18 June 1971. - Citation at <u>Nucleus</u>, 18 Jun'71</p>
<p><u>Octa-sphere:</u></p> <p style="text-align: right;">See Spherical Octahedron, Aug'72</p>	<p>RBF DEFINITIONS</p> <p><u>Octave:</u></p> <p>"Waves are octave."</p> <p style="text-align: right;">- Cite NUMEROLOGY Draft, April 1971</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octave:</u></p> <p>"Relative to the symmetry of equilibrium it gets to be relatively asymmetrical, and I find that it goes to a maximum asymmetry and then it comes back to symmetry again.</p> <p>"I think this is why we might have something we call octaves in music. There are sort of <u>octaves</u> in our thinking. We think octavely. . . "</p> <p style="text-align: right;">- Citation and context at <u>Relative Asymmetry Sequence</u> (1), Jun'69</p>	<p>RBF DEFINITIONS</p> <p><u>Octave Wave:</u></p> <p>"The interaction of all numbers other than nine creates the wave phenomenon described, i.e., the self-invertable, self-inside-outable <u>octave</u> increasing and decreasing pulsatively, fourfoldedly, and tetrahedrally. No matter how complex a number aggregating sequence of events may be, this phenomenon is all that ever happens. There is thus a primitively comprehensive, isotropically distributive, carrier-wave order omni-accommodatively permeating and embracing all phenomena."</p> <p style="text-align: right;">[10]</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1223.44, 5 Mar'73</p>																																																
<p>RBF DEFINITIONS</p> <p><u>Octave</u> Model</p> <p>"Doubling or halving dimension Increases or decreases reactively The magnitude of volume or force By expansive or contractive Increments of eight, That is, by <u>octave values</u>."</p> <p style="text-align: right;">- Cite SYNERGETICS Corollaries Sec. 240.49.</p> <p style="text-align: right;">- Citation at <u>Dimension</u>, Oct'59</p>	<p>RBF DEFINITIONS</p> <p><u>Octave Wave Model:</u></p> <p>"The eight hedra triangles of the inside-out tetrahedron which are the same deployed eight triangles of the vector equilibrium provide a model for the octave wave limit at the number eight where the wave turns back again before the zero-nineness."</p> <p style="text-align: right;">- Cite RBF to EJA enroute Union Station, Wash., DC., 9 Apr'75</p>																																																
<p><u>Octave Limit of Variation:</u></p> <p>See Octahedron: Nuclear Asymmetric Octahedra, 1 Apr'73 Octave Wave Model, 9 Apr'75</p>	<p>TEXT CITATIONS</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Octave Wave:</u></th> <th style="text-align: left;"><u>Octantation:</u></th> <th style="text-align: left;"><u>Octation:</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>415.40-415.41</td> <td></td> <td>1221.18</td> <td>a1006.36</td> </tr> <tr> <td>421.05</td> <td></td> <td>Table 1221.20</td> <td>a1013.41</td> </tr> <tr> <td>527.22</td> <td></td> <td><u>1222:</u> 1222.10-1222.32</td> <td></td> </tr> <tr> <td>527.31</td> <td></td> <td><u>1223:</u> 1223.10-1223.15</td> <td></td> </tr> <tr> <td>905.45</td> <td></td> <td>Fig. 1223.12</td> <td></td> </tr> <tr> <td>954.46 (footnote)</td> <td></td> <td>1236.02</td> <td></td> </tr> <tr> <td>Table 962.10 note</td> <td></td> <td>1239.10</td> <td></td> </tr> <tr> <td>1011.61</td> <td></td> <td>1239.31</td> <td></td> </tr> <tr> <td>1012.01</td> <td></td> <td></td> <td></td> </tr> <tr> <td>1012.10-1012.16</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fig.1012.15</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	<u>Octave Wave:</u>	<u>Octantation:</u>	<u>Octation:</u>		415.40-415.41		1221.18	a1006.36	421.05		Table 1221.20	a1013.41	527.22		<u>1222:</u> 1222.10-1222.32		527.31		<u>1223:</u> 1223.10-1223.15		905.45		Fig. 1223.12		954.46 (footnote)		1236.02		Table 962.10 note		1239.10		1011.61		1239.31		1012.01				1012.10-1012.16				Fig.1012.15			
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Synergetics Dictionary

<p><u>Octave Wave:</u> (2)</p> <p>See Cube: Volume-3 Cube, 16 Dec '73 Pythagoras, 18 Jun '71 Scheherazade Numbers: Declining Powers Of, 1 Feb '75 Synchronization, Oct '71 Tension, 1944 Zero Wave, 9 Mar '73 Ball at the Center, 9 Mar '73 Scheherazade Numbers: Declining Powers Of, 22 May '75 Teleology: Bow Tie Symbol, 19 Jul '76</p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"The octet truss is not a priori. The octet truss is simply the most economical way of behaving relative to unity and to self. The octet truss is the evolutionary patterning, intervectoring, and intertrajectorying of the ever-recurrent 12 alternative options of action, all 12 of which are equally the most economical ways of self-and-otherness interbehaving-- all of which interbehaviors we speak of as Universe."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 540.02, 24 Sep '73</p>
<p><u>Octation: Spherical Octation:</u></p> <p>See Nonpolar Points, 29 Nov '72; 7 Nov '73</p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"The icosahedron and the octet truss display circumferential closest packing."</p> <p style="text-align: right;">(N.B. Above is not accurate. See Synergetics text at Sec. 422.03, Apr '72, and Sec. 222.52 Jan '72.)</p> <p style="text-align: right;">- Cite RBF to EJA, Fairfield, Conn. Ches Wolf, 18 June 1971.</p>
<p><u>Octave:</u> (1)</p> <p>See Number System is Inherently Octave Harmonic: Harmony</p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"In 60° coordination the angles are congruent and logically integratable with the radii."</p> <p style="text-align: right;">- Cite tape transcript RBF to EJA, Ches Wolf, 18 June 1971, p. 35.</p> <p style="text-align: right;"><u>60-DEGREE COORDINATION - SEC. 423.01</u></p>
<p><u>Octave:</u> (2)</p> <p>See Dimension, Oct '59* Geometry of Vectors, Aug '71 Nites & Quarks as Basic Notes, (2)(3) Nucleus, 18 Jun '71* Relative Asymmetry Sequence, (1)* Tension & Compression, 1944</p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>". . . The octet truss-- whose omnidirectional growth fills all space with all the lines or vectors being of identical length, and all the triangles being equilateral, and all the vertexes being omnidirectionally evenly spaced from one another. This is the pattern of closest packing of spheres."</p> <p style="text-align: right;">- Cite MEXICO '63, (Illus. #0-2-30), p. 20, 10 Oct '63</p> <p style="text-align: right;"><u>TETRAHELIX SEC. 948-01</u></p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"In the octet truss system all the vectors are of identical length and all the angles around any convergence are the same. The patterns repeat themselves consistently. At every convergence there are always 12 vectors coming together and they are always 60° in respect to the next adjacent one. (There are other angles in the system. By embracing additional angles we can find 90° relationships.) The prime relationship is with the 60° angle." ■</p> <p>- Cite Oregon Lecture #8, p. 299. 12 Jul'62</p> <p><u>ISOTROPIC VECTOR MATRIX - SEC. 423.01</u></p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"The equibrously regenerative octet truss is regenerated as fast and as extensively as man explores and experiences it. As I define Universe as the sum-total aggregate of man's experiences, then we may say that the octet truss-vector equilibrium is universally extensive. 'Universally extensive' is a term quite other than 'to infinity'-- a term which synergetic geometry may not permit. The open end of an angle is infinite, but so is its convergent end, in that the actions cannot pass instantaneously or either simultaneously through the same point. As with the vector equilibrium, infinite is only increasing degrees of experience-- meaning: more or less tunable."</p> <p>- Cite Synergetics Notes, p.9, et. seq., 1955. Incorporated at SYNERGETICS Sec. 647.20, 1 Oct'72</p>
<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"The octet truss-- a name compounded from octahedron and tetrahedron-- can be produced from complexes of tetrahedra or complexes of octahedra, whichever is economically preferable."</p> <p>- Cite DYNAMIXION WORLD OF RBF, Caption L2. 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"Octet Truss (Octahedron Plus Tetrahedron: octetruss) "Truss" - "Tres" - "Threes" Three Phase - Triangular."</p> <p>- Cite Caption of RBF Ltr to D.W. Robertson, 8 Jan '55.</p>
<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"The octet truss can be fashioned from flat ribbons by spot welding or other high-speed cohering processes. "The octet truss can be fashioned from hubs employing the 12 faces of the rhombic dodecahedron. . . "The octet truss can be woven together with continuous rods and wires, seized together by male and female turbining hubs. "The octet truss can be assembled of tubes and rhombic dodecahedron hubs having face-mounted studs to slip into and fasten to tubes. "The octet truss can be woven continuously from wire-like fencing structures."</p> <p>- Cite DYNAMIXION WORLD OF RBF, Captions L3 - L11. (1959)</p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"Considered solely as geometry of structure, the final identification of the octet truss by the chemists and physicists as 'closest packing', puts it into the universal domain as pure principle."</p> <p>- Cite RBF Ltr. to Doan W. Robertson, 8 Jan '55, p. 2. <u>OCTET TRUSS - SEC. 422.11</u></p>
<p>RBF DEFINITIONS</p> <p><u>Octet Truss:</u></p> <p>"The octet truss consist entirely of struts. No hubs are required. The x-shaped terminals of the struts unite in such a manner as to weave around the hub nuclei, forming the four planes of the vector equilibrium. The truss has phenomenal three-way 'finite' strength. "In conventional beam structure systems, the supporting units are parallel to one another. Their ends are infinite (in that they do not curve back into the system) and therefore they do not help one another. In the three-way grid octet truss system loads applied to any one point are distributed radially outward in six directions and are immediately frustrated by the finite hexagonal circles entirely enclosing the six-way-distributed load. Each circle distributes the load 18 ways to the next circle, which 'finitely' inhibits the radially distributed load. Thus the system joins together synergetically to distribute and inhibit the loads. The total loads are finally distributed three ways to the three point support." (Slightly r-written)</p> <p><u>IN PART</u> - Cite DYNAMIXION WORLD OF RBF, Caption L1A, by RBF, 1959. <u>OCTET TRUSS - SEC. 422.10</u></p>	<p>RBF DEFINITIONS</p> <p><u>Octet Truss as an Invention:</u></p> <p>"...Down to the minutest atomic components, the octet truss is therefore proved to be synergetic, and its discovery as a structure-- in contradistinction to its aesthetic or superficial appearance-- is synergetic in performance; that is, its behavior as a whole is unpredicted by its parts. This makes its discovery as a structure a true surprise, and therefore it is a true invention."</p> <p>- Cite SYNERGETICS text at Sec. 650.11, Jan'72</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Octet Truss in Yale Art Gallery:</u></p> <p>"When a Yale Professor of architecture, Louis Kahn, employed my octet truss in a design for the floor structuring throughout the new Art Gallery at Yale University, that truss, in economic compliance with the building code, had to be fabricated in reinforced concrete. But the Yale Engineering Department and its consulting engineers refused to credit my three-way beam for the task on the grounds of the invalidity of two many crisscross beams, 'because,' they said, 'three were even more redundant.' Yale, therefore, built the floors on the basis that only one axis of the truss could carry the load. They called it a 'slanting beam construction.' Result: the octet truss was reduced to a role of aesthetic nonsense-- a fantastically expensive set of lampshades.</p> <p>"Fallacy here was that the architect should not have employed a system which he could not defend structurally before the ignorance of the engineers. Result: relegation of an important new development to submergence in ignorance."</p> <p>- Cite RBF Ltr. to Donald W. Robertson, Pp.3-4, 8 Jan'55</p>	<p>RBF DEFINITIONS</p> <p><u>Odd Ball:</u></p> <p>"What we might describe as the eternal disquietude of the <u>Odd Ball</u> promulgating eternal reorderings and realignments to accommodate, in a sense, philosophically suggesting the individual viewpoint, the individual ego of the human.</p> <p>"Possibly this mathematical Odd Ball oneness inherently regenerates the ever-reborn ego. Just when you think you're negative, you find you're positive. This is the eternal wellspring of positive-negative regeneration, entropy, and everything."</p> <p>- Cite RBF in "metaphysical precession" while dictating Sec. 1051.32, 3200 Idaho, 27 Sep'72</p>
<p><u>Octet Truss:</u> (1)</p> <p>See Isotropic Vector Matrix Octahedron-tetrahedron System Truss Vector Equilibrium Model of Toothpicks & Semi-dried Peas</p>	<p><u>Odd Ball:</u></p> <p>See Single Integer Differentials</p>
<p><u>Octet Truss:</u> (2)</p> <p>See Einstein: RBF Draft Letter To, (5) Invention Sequence, (A)-(D) Rhombic Dodecahedron, 19 Apr'66 Tetrahedral Coordination of Nature, 1965 Icosahedron: Subtriangulation, (1) Bubble Bursting, 20 Jan'78</p>	<p><u>Odd Number:</u></p> <p>See Number: Even & Odd</p>
<p>RBF DEFINITIONS</p> <p><u>Odd Ball:</u></p> <p>"There is a phenomenon that we might describe as the eternal disquietude of the <u>Odd Ball</u> promulgating eternal reorderings, realignments, and inexorable transformings to accommodate the eternal regeneration integrity of intellectually-differentiable Universe, which suggests philosophically that the individual metaphysical human viewpoint-- the individual ego of the human-- is indeed an essential function of the eternally regenerative integrity of complex law-governed Universe.</p> <p>"Possibly this mathematical Odd-Ball-oneness inherently regenerates the ever-reborn ego. Just when you think you are negative you find that you are positively so. This is the eternal wellspring of positive-negative regeneration of acceleratingly heating entropy and cooling off syntropy, which is synergetically interoperative between the inherently terminal physical differentiating and the inherently eternal metaphysical integration."</p> <p>- Cite SYNERGETICS, 2nd. Ed. at Secs. 310.13 + .14, 10 Nov'74</p>	<p><u>Odor: Odors:</u> (1)</p> <p>See Perfume Smellable</p>

Synergetics Dictionary

<p><u>Odor:</u> <u>Odors:</u> (2)</p> <p style="text-align: center;">See Communications Hierarchy, (1)</p>	<p><u>Off-zero:</u></p> <p style="text-align: center;">See Nonstate, 11 Sep'75</p>
<p><u>Of:</u></p> <p style="text-align: center;">See Between and Not Of</p>	<p>RBF DEFINITIONS</p> <p><u>Office Buildings:</u> <u>Conversion to Apartments:</u></p> <p>"Before 1985 we will have abandoned the concept of having to earn a living. We will have given life-long scholarships to everyone. We will have converted all the big city buildings to apartments and will have eliminated 70 percent of local commuting while vastly increasing long-distance travel."</p> <p style="text-align: right;">- Citation & context at <u>Building Industry</u>, (10); 20 Sep'76</p>
<p><u>Off-Center:</u> (1)</p> <p style="text-align: center;">See Eccentricity Off-zero</p>	<p>RBF DEFINITIONS</p> <p><u>Office Buildings:</u> <u>Conversion to Apartments:</u></p> <p>"We have a great deal of nonsense such as occupancy. We have a law that you can't <u>Ork</u> and sleep in the same place. But we have all the typewriters sleeping with all the plumbing and all the people sleeping in the slums. All these <u>office</u> buildings are waiting to be converted. The answer is actually right here. . . Unless you have the technical solution, politics can't do anything."</p> <p style="text-align: right;">- Cite RBF at DSI Press Conference, NTC, p.19, 28 Jun'72</p>
<p><u>Off Center:</u> <u>Off-center Effects:</u> (2)</p> <p style="text-align: center;">See Aberration, 22 Nov'73 Apprehension Lags, 11 Sep'75</p>	<p><u>Office Buildings:</u> (1)</p> <p style="text-align: center;">See Buildings: Multiple Occupancy</p>

Synergetics Dictionary

<p><u>Office Buildings:</u> (2)</p> <p>See Air Space, May'65 Empty, May'70 Invented Jobs, 20 Sep'76</p>	<p>RBF DEFINITIONS</p> <p><u>Official Reality:</u> "There is an official reality which is sometimes unnatural."</p> <p>_____</p> <p>- Site CHYMOGEN AND CHANGE, Ed. W.H. Ewald, P. 350 - Limited from PHOTODUPLICATION CENTER FOR SCIENCE AND ENGINEERING</p> <p>- Citation and context at <u>Realm</u>, 1968</p>
<p><u>Office:</u></p> <p>See Carbondale Office</p>	<p><u>Official War:</u></p> <p>See War: Official & Unofficial</p>
<p><u>Official News:</u></p> <p>See Common Sense: Official News</p>	<p>RBF DEFINITIONS</p> <p><u>Ohm:</u> <u>Georg Simon</u>, (1787-1854) German Physicist</p>
<p><u>Official Panic:</u></p> <p>See War as Official Panic</p>	<p><u>Ohm:</u> <u>Ohm's Law:</u></p> <p>See Whole System: Synergetics Principle Of (1)</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Oil:</u></p> <p>"We pour 95 out of every 100 barrels of oil right down the drain-- all as a result of inefficient design decisions, all of which are avoidable."</p> <p style="text-align: right;">- Cite RBF at Penn Bell Videotaping session, Philadelphia, 22 Jan'75</p>	<p><u>Older Generation:</u> <u>Old Life:</u> <u>Older World:</u> (2)</p> <p>see Child as Laboratory (1) Evolution: Man as Evolution Modifier, May'49 Poets, 1970 Design Revolution: Pulling the Bottom Up (1)(9) Depression: Great Depression of 1930's, (1)</p>
<p><u>Oil:</u> (1)</p> <p>See Petroleum</p>	<p>RBF DEFINITIONS</p> <p><u>Old Man River Project:</u></p> <p>"With the general disarmament and the release to life-promoting account of the fabulous production capacity of the world's industrial complexes, will come one-day air-delivery of whole cities similar to the Old Man River Project wherein the operating energy efficiencies will be significantly multiplied and the social conditions provided by the omnivisible central community and the completely private deployed dwelling areas, or the air-delivery of single-family dwelling machines to the remotest sites, or of whole clusters of single-family dwelling machines to near or far sites."</p> <p style="text-align: right;">- Citation & context at <u>Building Industry</u>, (10); 20 Sep'76</p>
<p><u>Oil:</u> (2)</p> <p>See Wood Technology, (2)</p>	<p>RBF DEFINITIONS</p> <p><u>Old Man River Project:</u></p> <p>". . . Moon-crater conformed, domed-over cities on Earth (such as the Old Man River Project)."</p> <p style="text-align: right;">- Citation and context at <u>Inventability Sequence</u> (1)</p>
<p><u>Older Generation:</u> <u>Old Life:</u> <u>Older World:</u> (1)</p> <p>See Continuous Man Elders: That Doesn't Mean Young Don't Like Their Elders Growup New Life Young World Young & Elders</p>	<p><u>Old Man River Project:</u></p> <p>See Building Industry, (10)* Inventability Sequence, (1)*</p>


Synergetics Dictionary

<p><u>Omission vs. Admission:</u></p> <p style="text-align: center;">See Sin, 7 Nov'75</p>	<p><u>Omiangular:</u></p> <p style="text-align: center;">See Triangle, Aug'72</p>
<p>RBF DEFINITIONS</p> <p><u>Omni-accelerating:</u></p> <p>"By antientropy I refer to the <u>omniaccelerating</u>-acceleration of the clarifyingly differentiated and intercommunicated, experience-derived pattern cognitions of the human mind. . . "</p> <p style="text-align: center;">- Cite Doxiadis, p. 310. 20 Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Omni-Aroundness:</u></p> <p>"A system is a patterning of enclosure consisting of a conceptual aggregate of recalled experience items, or events, having inherent insiderness, outsiderness, and <u>omni-aroundness</u>."</p> <p style="text-align: center;">- Cite SYNERGETICS draft at Sec. 40Q25, 26 May'72</p>
<p><u>Omniaccommodation:</u></p> <p style="text-align: center;">See Isotropic Vector Matrix, 9 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Omni-asymmetry:</u></p> <p>"Synergetics both equates and accommodates Heisenberg's indeterminism of mensuration inherent in the <u>omni-asymmetry</u> of wavelinear physical pulsations in respect to the only metaphysical (ergo, physically unattainable) waveless exactitude of absolute equilibrium."</p> <p style="text-align: center;">- Cite SYNERGETICS text at Sec. 211.00; as rewritten by RBF on galley, 11 Oct'73</p>
<p><u>Omniadjacent:</u></p> <p style="text-align: center;">See Rhombic Dodecahedron, 22 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Omni-automation:</u></p> <p>"All the money-making drives toward omni-automation and complete unemployment. Politics keeps inventing the jobs by law."</p> <p style="text-align: center;">- Citation & context at <u>Invented Jobs</u>, 20 Sep'76</p>

Synergetics Dictionary

<p><u>Omniautomated:</u> <u>Omni-automation:</u></p> <p>See Industrial Complex, 13 Mar'73 Invented Jobs, 20 Sep'76*</p>	<p>RBF DEFINITIONS</p> <p><u>Omni-coexisting:</u></p> <p>"Because the tetrahedron is inherently the minimum structural system of universe, it provides the minimum <u>omni-coexisting</u> convexity and concavity condition in universe."</p> <p>- Cite RBF on Synergetics draft, U. Mass., Amherst, 22 July 1971. "Omnitopology," Sec. 8.10. et. seq.</p> <p>- Citation & context at <u>Convex & Concave Tetrahedron</u>, Aug'71</p>
<p><u>Omnibalanced:</u></p> <p>See Dynamic Symmetry, 31 May'71</p>	<p><u>Omnicoexisting:</u></p> <p>See Convex & Concave Tetrahedron, Aug'71*</p>
<p><u>Omicircumferential:</u></p> <p>See Big System, 5 Jun'73</p>	<p><u>Omnicohering:</u> <u>Omnicoherent:</u></p> <p>See Truth & Love, 16 Feb'73 Tunability, 19 Oct'72</p>
<p><u>Omi-closest Packing:</u></p> <p>See Nucleus, (1) Model of Toothpicks & Semi-dried Peas, (1)(2)</p>	<p><u>Omicollective:</u></p> <p>See Gravity, 23 Sep'73</p>

Synergetics Dictionary

<p><u>Omniconcurrent:</u></p> <p style="text-align: center;">See Design, 8 Sep'75</p>	<p>RBF DEFINITIONS</p> <p><u>Omnicongruence:</u></p> <p>"When two or more systems are joined vertex to vertex, edge to edge, or in omnicongruence-- in single, double, triple, or quadruple bonding, then the topological accounting must take cognizance of the congruent vectorial build in growth."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 931.10, galley rewrite, 19 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Omnicondition:</u></p> <p>"The universally infrequent meshing of wavelengths and frequencies Produces an <u>omnicondition</u> In which the new omnidirectional system's center must, as each is created, Continually occupy omnidirectionally greater domains of disorder."</p> <p style="text-align: right;">- Cite BRAIN & MIND, v.89 May 72</p>	<p><u>Omnicongruence:</u> <u>Omnicongruent;</u> (1)</p> <p>See Bonding Congruence Geometry of Vectors Omnidjacent Self-congruence Packing Quadrivalent Chemical Bonds: Quadruple Bond</p>
<p><u>Omnicondition:</u></p> <p style="text-align: center;">See System, 1971</p>	<p><u>Omnicongruence:</u> <u>Omnicongruent:</u> (2)</p> <p>See Synergetics Constant, (A) Overlapping, 30 May'75 Vector Equilibrium, 23 Oct'72</p>
<p>RBF DEFINITIONS</p> <p><u>Omnicongruence:</u></p> <p>"When two or more structural systems are joined vertex to vertex, edge to edge, or face to face or to <u>omni-congruence</u>-- in a single, double, triple or <u>quadruple</u> bonding, then the topological accounting must take cognizance of the congruent components."</p> <p style="text-align: center;"></p> <p style="text-align: right;">- Cite NASA Speech, pp. 61-62, Jun '66</p> <p style="text-align: right;"><u>TETRAHELIX- CHEMICAL BONDS - SEC. 941.01</u></p>	<p><u>Omniconsiderate:</u> <u>Omniconsideration:</u> (1)</p> <p>See Consideration for Others Not Trespassing</p>

Synergetics Dictionary

<p><u>Omniconsiderate:</u> <u>Omniconsideration:</u> (2)</p> <p>See A Priori Intellect, (1) Boltzmann Sequence, (20) Rearranging the Environment, 9 Apr'71 Universal Requirements of a Dwelling Advantage, 31 May'74 World Game, Feb'73 Mind vs. Energy, 19 May'75</p>	<p>RBF DEFINITIONS</p> <p><u>Omniconvertex:</u> "Nuclear structural systems consist internally entirely of tetrahedra which have only one common interior vertex: omniconvertex."</p> <p style="text-align: right;">- citation & context at <u>Prime Nuclear Structural Systems</u>, 27 Dec'74</p>
<p><u>Omnicontinuous:</u></p> <p>See Frequency Islands of Perception, 13 Nov'75</p>	<p><u>Omnico-Occurring:</u></p> <p>See Jitterbug, 4 Oct'72</p>
<p>RBF DEFINITIONS</p> <p><u>Omniconvergent:</u> "Omniconvergent Is the opposite of radius."</p> <p style="text-align: right;">- Cite RBF to EJA Sarasota, Florida 7 February 1971</p>	<p><u>Omnicoordinate:</u></p> <p>See Graphable, 27 May'72 Pole Vault, 2 Jul'75</p>
<p><u>Omniconvergent:</u></p> <p>See Gravity, (2) Three: Number Function of Three in a Four-axial System, 24 Jan'76</p>	<p>RBF DEFINITIONS</p> <p><u>Omnicurvilinear:</u> "Experience is omnicurvilinear."</p> <p style="text-align: right;">- Citation at <u>Experience</u>, 27 May'72 - Cite RBF marginalia at SYNERGETICS draft 9087-110.03, 29 May'72</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omnicurvilinear:</u> "Calculus treats discretely and predictively with frequency rates and discrete direction of angles of change of the <u>omnicurvilinear</u> event quanta's successively recurring positionings: fixes."</p> <p>- Prime W/R Synergetics, June, Mar '71.</p> <p>- Citation at <u>Fix</u>, Mar'71</p>	<p style="text-align: right;"><u>Omnidiametric:</u> (2)</p> <p style="text-align: center;">See Distributive, 23 Sep'73 Package, 23 Sep'73 Radiation, 23 Sep'73</p>
<p>TEXT CITATIONS</p> <p><u>Omnideployed Patterns:</u> Synergetics, Sec. 931.02 - Apr'72</p>	<p style="text-align: center;"><u>Omnidifferential Lap Rates:</u></p> <p style="text-align: center;">See Prime Dichotomy, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidiametric:</u> "Omnidiametric can be either inwardly or outwardly diametric, but it does not allow for wavelinear operation. It cannot wander; it will always be regenerative from the center. It is a special case of omnidirectional. If the outwardly omnidiametric source were in motion-- and all phenomena is in motion-- then there is a lag in the rate its output could reach a distant point. Ergo, to itself, nonwandering omnidiametric radiation would appear to be bent as the whiskers of a cat would appear to be bent backwardly of its trajectory."</p> <p>- Cite RBF to EJA, 3200 Idaho NW, 23 Sep'73</p>	<p style="text-align: center;"><u>Omnidifferentiated Rates:</u></p> <p style="text-align: center;">See Perceptual Peephole as Fraction of Reality, Dec'69</p>
<p><u>Omnidiametric:</u> (1)</p> <p style="text-align: center;">See Multidiametric Omniradial</p>	<p style="text-align: center;"><u>Omnidimensional Light Matrix:</u></p> <p style="text-align: center;">See Atomic Computer Complex, (8)</p>

Synergetics Dictionary

Omnidimensional:

See Force Lines: Omnidimensional, (2)
 Size, 22 Jun'72
 Triangle, (a)
 Fourth-dimensional Synergetics Mathematics, 14 Dec'76

RBF DEFINITIONS

Omnidirectional:

"It is surprising thing that all closest packing begins with two balls rather than omnidirectionally. Two balls coming together is where thought begins . . . it is a wedding thing. . . and it is very beautiful the way the two balls reoccur at each wave outwardly."

- Citation at Two Balls Coming Together, 19 Jun'71
- Cite RBF to EJA, Beverly Hotel, New York, 19 June 1971.

RBF DEFINITIONS

Omnidirectional:

"Omnidirectional can be chaos. It can mean everywhere, including returning upon itself. It is indiscrete. It is general case."

- Cite RBF to EJA, 3200 Idaho, 23 Sep'73

RBF DEFINITIONS

Omnidirectional:

"In book /Synergetics/ I must eliminate the words 'three-dimensional' as meaningful /sic/, and always use omnidirectional observation of multi-dimensional characteristics, with angle and frequency of cyclic reference as the only requirements."

- Citation and context at Size (2), circa 1970

RBF DEFINITIONS

Omnidirectional

"Operationally speaking the word omnidirectional involves a speaker who is observing from some viewing point. He says, 'People and things are going every which way around me.' It seems chaotic to him at first but on further consideration he finds the opposite to be true and that only inherent order is being manifest. First we observe that we cannot and do not live and experience either in a one-dimensional linear world, nor in a two-dimensional ~~linear~~ infinitely extended planar world."

- Cite SYNERGETICS draft at Sec. 1001.01, 27 Feb 1972
- Citation & context at Nucleus (1), 17 Feb'72

RBF DEFINITIONS

Omnidirectional:

". . . Energy goes in all directions, expanding as a bubble-- a spheroidal wave. A spheroidal wave is omnidirectional-- like light going in all directions from a candle. So our energy is going in all directions as a bubble, and the surface of any spherical system always increases as the second power of the linear. The rate at which the surface will grow will be 186,000 miles a second to the second power, that is, c²."

Cite MERGERS & ACQUISITIONS
 Vol. 1, No. 1, p. 46, 1965

RBF DEFINITIONS

Omnidirectional:

"Instead of omnidirectional, say timeless."

- Citation at Timeless, 19 Jun'71
- Cite RBF to EJA, Beverly Hotel, New York, 19 June 1971.

RBF DEFINITIONS

Omnidirectional:

"Our experiences are inherently omnidirectional. We ourselves are walking around like this and before we were born in the womb we were moving in all directions. Our Earth is continually rotating and our milky way is continually rotating in the heavens, and so forth."

- Cite OREGON Lecture #2 - p. 65, 2 Jul'62

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omnidirectional:</u></p> <p>"Because of the incessant wheeling about of humans first in the womb, then in the baby carriage, then on foot, in the auto and ship and plane roundabout a spinning earth in a spinning solar system within an involuting-evoluting, spirally spinning galaxy, totally inventoried experiences are inherently <u>omnidirectional</u> when considered as the sum of observational orientations."</p> <p style="text-align: center;">- Cite OMNIDIRECTIONAL HALO, p. 138, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectional:</u></p> <p>"This very initiation itself of first division of Universe into an <u>omnidirectional</u>, radially defined zone, between maxima and minima within-ness and without-ness sense and experience tunability, affects not only the local tuned-in system, but also the balance of Universe, within and without, even as does the little and big spherical triangle subdivide the system's 'surface' zoneness, circumferentially, so also here do the basic maxima and minima, radial and circumferential dichotomies, which are the basically differentiated acceleration functions and inherent reciprocal self-processors."</p> <p style="text-align: center;">(Above text closely parallels Ltr. to Donald W. Robertson, p.4, 8 Jan'55 at <u>Zoneness: System Zoneness.</u>)</p> <p style="text-align: center;">- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional:</u></p> <p>"...Omnidirectional relationships are only angularly configured and are independent of size or dimension."</p> <p style="text-align: center;">- Citation and context at <u>Brain's TV Studio</u>, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectional:</u></p> <p>"Electromagnetic wave phenomena are . . . <u>omnidirectional</u> and omnipermeative."</p> <p style="text-align: center;">- Citation at <u>Omnipermeative</u>, 9 Apr'40</p> <p style="text-align: center;">- Cite NO MORE SECOK HA HAND DOU. p. 89, 9 April</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional:</u></p> <p>"Universe, as all experience, is inherently <u>omnidirectional</u> in its observational orientations."</p> <p style="text-align: center;">- Cite OMNIDIRECTIONAL HALO, p. 138, 1960</p>	<p><u>Omnidirectional Clock:</u></p> <p style="text-align: center;">See Fourth Dimensional Modelability, 24 Feb'75</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional:</u></p> <p>"'In' is unique to individual systems. One 'out' is common to all systems and is <u>omnidirectional</u> in respect to any one system..."</p> <p style="text-align: center;">- Citation and context at <u>In and Out</u>, 4 May'57</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Closest Packing of Spheres. Synergetics Principle of:</u></p> <p>"... Frequency to the second power times ten plus two: is the number of balls in any given layer. This simple formula governing the rate at which balls are agglomerated around other balls or shells in closest packing is an elegant manifest of the reliably incisive transactions, formings and transformings of universes. I made that discovery and published it in 1944. This is the mathematics which the molecular biologists have confirmed and developed by virtue of which we can predict the number of nodes in the external proteinshells of all the viruses, within which shells are housed the DNA-RNA programmed design controls of all the biological species and individuals within those species. Although the polio virus is quite different from the common cold virus, and both are different from other viruses, all of them employ frequency to the second power times ten plus two in producing those most powerful structural enclosures of all the biological regeneration of life. It is the power of these geodesic-sphere shells that make so lethal those viruses unfriendly to man, they are almost indestructible."</p> <p style="text-align: center;">- Cite RBF marginalia, New York, 19 June 1971, to Synergetics draft, Section. 222.32.</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Closest Packing of Spheres. Synergetics Principle of:</u></p> <p>"Omnidirectional concentric closest packing of equal spheres about a nuclear sphere forms a series of vector equilibria of progressively higher frequencies. The number of vertexes or spheres in any given shell or layer is always edge frequency (F) to the second power times ten plus two.</p> <p>Equation: $10 F^2 + 2 =$ number of vertexes or spheres in any layer.</p> <p>"The equation for the total number of vertexes, or sphere centers, in all symmetrically concentric shells =</p> <p style="text-align: center;">$10 (F_1^2 + F_2^2 + F_3^2 + \dots + F_n^2) + 2F_n + 1."$</p> <p>- Cite SYNERGETICS DRAFT, "Synergetics Principles," March 1971</p>	<p><u>Omnidirectional Closest Packing of Spheres:</u> (1)</p> <p>See Closest Packing of Spheres Equation: Omnidirectional Closest Packing Of Spheres Prime Number Inherency & Constant Relative Abundance of the Topology of Symmetrical Structural Systems Concentric Layering Shell Growth Rate Vector Equilibrium</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Closest Packing of Spheres: Synergetics Principle of:</u> (1)</p> <p>"Now I am going to take an inventory of those balls in the different layers. There are 12 balls in this layer and if we count these up we find that there are 42 balls in the next layer. In this top layer there are 92 balls. If I put on another layer you will find that there are 162-- and another layer will be 252. The number of layers always comes out with the number two as a suffix. We know that this system is a decimal system of notation. Therefore we are counting in what the mathematician calls congruence in modulo ten-- a modulus of 10 units-- and there is a constant excess of two.</p> <p>"We find in algebraic work if you use a constant suffix (where you always have, say, 33 and 53, you could treat it as 50 and come out with the same algebraic conditions.) Therefore if all these come out with the number two, I can drop off the number two and not affect the algebraic relationships.</p> <p>"If I drop off the number two in that column they will all be zeros; so this would read, 10, 40, 90, 160, 250, and if I had another one it would be 360. I see each one of these are 10's,"</p> <p>- Cite Oregon Lecture #7, pp.238-239, 11 Jul'62</p>	<p><u>Omnidirectional Closest Packing of Spheres:</u> (2)</p> <p>See Powering, 11 Jul'62 Powering: Fifth Dimension, 29 Nov'72 Synergetics, 29 Nov'72 Mite as Model for Quark, 3 May'77</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Closest Packing of Spheres: Synergetics Principle of:</u> (2)</p> <p>"so I divide each one by 10 and then I have 1, 4, 9, 16, 25 and you recognize that it is a progression of second powering. The next one would be 36, then 49. Each one of these are two to the second power, three to the second power, and so forth.</p> <p>"We then discover that the number of balls in any one layer-- we could call it frequency, or radius, because we have found that they are the same words. In the vector equilibrium the number of units coming from the center outwardly are exactly the same as the edge units; so I can say <u>frequency to the second power times ten plus two</u>: that is how many balls there will always be in a given layer. It is a very simple kind of formula-- frequency to the second power, times 10, plus 2. That is the formula I have discovered regarding the rats at which balls are agglomerated around other balls or shells. I made that discovery and published it in 1944.</p> <p>"And that was the mathematics that the molecular biologists discovered that I had developed by virtue of which I was able to predict the number of external shell members they found were following this form in the virus, and that is when they really"</p> <p>- Cite Oregon Lecture #7, pp.238-239, 11 Jul'62</p>	<p><u>Omnidirectional Frame of Reference:</u></p> <p>See Vector Equilibrium, 19 Nov'74</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Closest Packing of Spheres: Synergetics Principle of:</u> (3)</p> <p>"began to get their clues. All the different viruses had different kinds of protein shells and so the polio virus was quite different from the other-- as was the common cold virus, but all of them were some kind of frequency brought out in this system, and the mathematics of it was cleanly predictable."</p> <p>- Cite Oregon Lecture #7, pp.238-239, 11 Jul'62</p>	<p><u>Omnidirectional Games:</u></p> <p>See Heaven, 23 May'72 How Little I Know, 1 Feb'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Growth:</u></p> <p>"A cone is simply a tetrahedron being rotated. <u>Omnidirectional growth</u>-- which means all life-- can only be accommodated by tetrahedron."</p> <p>- Cite RBF to EA, Sec. Ireland, 25 August 1971.</p> <p>- Citation at <u>Tetrahedron</u>, 25 Aug'71</p>	<p><u>Omnidirectional Halo:</u> (2)</p> <p>See Epistemology, 9 May'62</p>
<p><u>Omnidirectional Growth:</u></p> <p>See Fireworks, (2)</p>	<p><u>Omnidirectional Infoscope:</u></p> <p>See Infoscope, 13 Nov'75</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Halo:</u></p> <p>"Any conceptual thought is a system and is structured tetrahedrally. This is because all conceptuality is polyhedral. The sums of all the angles around all the vertexes-- even crocodile, or a 10,000 frequency geodesic (which is what the Earth really is)-- will always be 720° less than the number of vertexes times 360°."</p> <p>- Cite RBF answer to Hugh Kenner query, 2 Mar'72 - incorporated in SYNERGETICS draft at Sec. 501.10, 14 Mar'72</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectionality:</u></p> <p>"The connection between the six degrees of freedom and <u>omnidirectionality</u> is, of course, the vector equilibrium, which combines the threeness of the cube in relation to 20 as unity = VE." . . .</p> <p>"Experience is inherently <u>omnidirectional</u>."</p> <p>- Cite RBF to EA, Sec. Ireland, 25 August 1971.</p> <p>- Citation & context at <u>Experience</u>, 25 Aug'71</p>
<p><u>Omnidirectional Halo:</u> (1)</p> <p>See Halo: Halo Concept Omnihalo</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectionality:</u></p> <p>"Empirically we have only <u>omnidirectionality</u> without any fixed universal reference points."</p> <p>- Cite RBF holograph with old Synergetics Manuscript, circa 1970</p>

Synergetics Dictionary

Omnidirectional Observation:

See Center, 21 Jan '75

RBF DEFINITIONS

Omnidirectional: Physical Existence Environment Surrounds: (2)

A FALSE CONCEPTION BY ESTABLISHMENT

"The observer's unfamiliarity with the phenomena which he is observing, and the multiplicity of items of interaction and their velocity of transformations and their engulfing occurrences tend to dismay the observer's hope of reasonable or immediate understanding. Therefore observer's are often induced to ~~hasten~~ their attempts at technical comprehension of their experience-- which surrender of the drive to comprehend fills the observer with a sense of chaos, which sensation he then subconsciously converts into ~~an~~ ~~inherently~~ chaotic, ergo inherently incomprehensible. Thus he satisfies himself that he is super-reasonable, and that the Universe ~~is~~ annoyingly disorderly; ergo frequently dismissable, which seemingly warrants his invention of whatever kind of Universe seems momentarily most satisfying to him.

PRACTICE COMPREHENSIBLE YOU CAN FIND

"The more humanity probes and verifies experimentally by reducing its theories to demonstrable practice in order to learn whether their theories are valid or not, the more clearly does Universe reveal itself as being generated and regenerated only upon a complex of entirely orderly relationships. The inherent spherical center viewpoint

RBF CHARACTERISTICS
9 FEB '75

- Cite SYNERGETICS draft at Secs. 1001.03+04, 27 Feb '72

RBF DEFINITIONS

Omnidirectional Pattern:

"The Department of Mathematics at M.I.T states categorically the following:

Mathematics is the science of structure and pattern.

"I will state our case in the terms of an omnidirectional pattern- an isotropic vector matrix-- rather than in the more usually employed linear or planar patterns, and thus satisfy M.I.T.'s primary mathematical premise of structural patterning, which structure is inherently an omnidirectional plural wavelength and frequency event system."

- Cite Ltr. to Jim Fitzgibbon (?), Raleigh NC, pp.J3-J4, undated

RBF DEFINITIONS

Omnidirectional: Physical Existence Environment Surrounds: (3)

"with which each individual is endowed generates its own orderly radii of observation in a closed finite system of event observations which are subject to orderly angular subdividing, recording, and interrelating in spherically trigonometric computational relationships to the observer's inherently orderly sphere of reference."

- Cite SYNERGETICS draft At Sec. 1001.04, 27 Feb '72

Omnidirectional Pattern:

See Angle & Frequency Design Control, Jul '71

Omnidirectionality vs. Polarization:

See Cornucopia, 24 Feb '72

RBF DEFINITIONS

Omnidirectional: Physical Existence Environment Surrounds: (1)

"Omnidirectional means that a center of a movable sphere of observation has been established a priori by Universe for each individual's life's inescapably mobile viewpoint which, like humans' shadows, move everywhere silently with them. These physical existence environment surrounds of life events spontaneously resolve into two classes:

- (1) those events which are passing tangentially by the observer, and
- (2) those events ~~are~~ entities other than self which are moving radially either towards or away from the observer.

"The tangentially passing energy events are always and only moving in lines perpendicular to the radii of the observer, which means that the multiplicity of his real events does not produce chaos: it produces discretely apprehendable experience increments all of which can be chartingly identified by angle and frequency data."

- Cite SYNERGETICS draft at Sec. 1001.02, 27 Feb '72

RBF DEL 7164 9 FEB '73

RBF DEFINITIONS

Omnidirectional Precession:

"Omnidirectional precession is generalized."

- Citation and context at General Case, 16 Feb '73

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Shutterable Sieve:</u></p> <p>"We need an omnidirectional shutterable sieve where we can increase or reduce the magnitudes of our omnidirectional valve openings.</p> <p>"Since we wish to be able to see in any direction and likewise be able to obscure in any direction, we recognize that it is difficult to make an opaque wall transparent but it is very easy to opaque a transparent wall by curtaining and shuttering."</p> <p>- Citation & context at <u>Environmental Controls (2)</u>, 31 May'74</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Typewriter:</u> (2)</p> <p>"larity, as in the Dymaxion map where any star remains in exact perpendicularity over the point on the map of the world. The same triangles are going to come out flat and the same stars are in exact zenith over that point, as the radii remain perpendicular to the system independent of whether the triangular area edges are arcs or chords. This is an extraordinary mathematical transformation in which you can have omnidirectionality phenomena of all systems-- all gravitation, radiation, stars, fishes, everything-- all coming into coordinate printout in one flat ribbon map.</p> <p>"What we have is an actual literal model of an <u>omnidirectional typewriter</u> providing a complete convergent-divergent modelability for the data. When you put the data on such a strip it is identified specifically in the transformation wherever it is at all times.</p> <p>"This can really identify the largest of all the computers on the Earth due to the fact that it reflects the pattern of the great-circle railroad tracks of energy. In other words, if you want to go from here to there in Universe, you've got to go through"</p> <p>- Tape transcript, Phila. Pa., pp. 4-8, 15 Jun'74; SYNERGETICS draft new Sec. 1130, 10 Sep'74</p>
<p><u>Omnidirectional Shutterable Sieve:</u></p> <p>See Membrane Occulting Membranes</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Typewriter:</u> (3)</p> <p>"the points of intertangency of the 25 great circles of fundamental symmetry which apply to all the atoms and their association as crystals in all the seven of the fundamental symmetry subsets. The 31 great circles of the icosahedron always shunt energies into local holding great-circle orbits, while the vector equilibrium opens the switching to omniverse energy travel. The icosahedron is red light, holding, No-Go; whereas vector equilibrium is a green light Go. The six great circles of the icosahedron act as holding patterns for energies. The 25 great circles of the vector equilibrium all go through the 12 tangential contact points of the 12 atomic spheres always closest packed around any one spherical atom domain. The 25 great circles of the vector equilibrium are the only railroad tracks of energy in the Universe, and as they get opened up some of them go through the 12 points just twice per circuit; whereas some of them go through the 12 points six times per circuit. That is each of the four sets of great circles of the vector equilibrium's total of 25 (3, 4, 6, 12 = 25) have different numbers of local switch-off points per great-circle circuiting. With all these beautiful switches and stop-go controls, we comprehend the"</p> <p>- Tape transcript, Phil., Pa. pp.4-8, 15 Jun'74; SYNERGETICS draft new Sec. 1130, 10 Sep'74</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Terminal Case Corner:</u></p> <p>"Since the central or nuclear sphere has no outer layer and is only the nucleus, its frequency of layer enclosures is zero. Following our symmetrically and convergently diminishing uniform rate of contraction to its inherent minimum and terminal frequency case of zero, and applying our generalized formula $10 F^2 + 2$, we have $0^2 + 2 = 2$, $0 + 10 = 10$, $0 + 2 = 2$, we discover that unity is two. This single nuclear sphere consists of both its concave inside and its exterior convex sphere, its inbounding turnaround to become outboundness consequently co-occurring. Unity is plural and at minimum two. That the nuclear ball is inherently two has been incontrovertibly discovered by getting nature into her omnidirectional terminal case corner."</p> <p>- Cite SYNERGETICS, 2nd. Ed. at Sec. 261.04; 13 Nov'75</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Typewriter:</u> (4)</p> <p>"method by which nature can shunt, valve, hold, and transmit all information in Universe. This is the information control system of the Universe. This is the way spheres transmit through closest packing patterns. This is why transistors work; that's how somebody suddenly discovered this little piece of metal valving energy with reliable regularities. Science stupidly called it 'solid State' physics because they couldn't see those beautiful little atoms and electrons' railroad tracks and their great-circle energy holding patterns.</p> <p>"So we have here the design for an omnidirectional info-storing-and-retrieving and printout typewriter for communicating all acquirable info. Synergetics mathematics has the ability to take the spherical and pull it out in the flat. The least distorted transformational projection of the Dymaxion airocean world map is an icosahedron, but the simplest frame of reference is the spherical tetrahedron which provides the omnitriangulated grid, strip-wrapped tetrahedron.</p> <p>"This is how you bring the omnidirectional into a flat projection. This is how the tetrahedron, the basic structural system of"</p> <p>- Tape transcript, Phila. Pa., pp.4-8, 15 Jun'74; SYNERGETICS draft new Sec. 1130, 10 Sep'74</p>
<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Typewriter:</u> (1)</p> <p>"All model studies are mainly probability studies and nearly always deal with linear probability. But my problems are not linear; they are omnidirectional. I am dealing with total system. That's what the world is not paying any attention to and that's why we're in trouble: Synergy shows that you cannot solve comprehensive problems by exclusively local linear models.</p> <p>"We must begin with the general coordinating system used by nature in the closest packing of atoms such as the coordinates of the Dymaxion airocean world map. Another example is the omnitriangulated strip whose width exactly equals the altitude of the tetrahedron. You can completely spool-wrap all four faces of the tetrahedron; and the tetrahedron so wrapped has an axis running through it and out through the two unwrapped edges of the tetrahedron spool. Being a tetrahedron, this spool may be endlessly wrapped as an omnidirectionally closed system. Ergo, we have a device for recording all of the omnidirectionally occurring and observed data into a minimum system which is unwrappable into a flat ribbon printout with four-dimensional coordination."</p> <p>"In this way of doing things everything remains in perpendicu-"</p> <p>- Tape transcript, Phila. Pa. pp.4-8; SYNERGETICS draft new Sec. 1130, 10 Sep'74</p>	<p>RBF DEFINITIONS</p> <p><u>Omnidirectional Typewriter:</u> (5)</p> <p>"Universe, unwraps linearly to an infinity of varying frequencies of angle and frequency modulation. Here we have a conceptual model that you can program: that is exactly what all the theoretical computer model specialists have been missing, ergo the chasm between their projective strategies and mine; they are running blindly into catastrophe but they need not do so."</p> <p>- Tape transcript, Phila., Pa. pp.4-8, 15 Jun'74; SYNERGETICS draft new Sec. 1130, 10 Sep'74</p>

Synergetics Dictionary

<p><u>Omnidirectional Typewriter:</u></p> <p style="text-align: center;">Atomic Computer Complex See Tetrahelix: Continuous Pattern Strip</p>	<p style="text-align: right;"><u>Omnidirectional:</u> (2A)</p> <p>See Bird's Nest as A Tool, (A)(B) Brain's TV Studio, 1960* Child, 1970 Cyclic Bundling of Experiences, May'49 Directionless, 19 Jun'71 Ecology, 16 Feb'73 Experiences, 25 Aug'71*; 20 Dec'71 Fuller, R.B.: His Writing Style, 22 Jan'75 In & Out, 4 May'57* Inhibit, 29 Oct'72 Linear & Curvilinear, Jun'66 Min-Max Limits, 22 Jun'75 Nucleus, (1)* (2) Omnipermeative, 9 Apr'40* Radial Depth, 20 Dec'74 Resolution, 12 May'75 Size, (2)* Individuality & Degrees of Freedom, (1)</p>
<p><u>Omnidirectional Wave:</u></p> <p style="text-align: center;">See Wave Pattern of a Stone Dropped in Liquid, (1)</p>	<p style="text-align: right;"><u>Omnidirectional:</u> (2B)</p> <p>See Tetrahedron, 25 Aug'71* Timeless, 19 Jun'71* Two Balls Coming Together, 19 Jun'71* Vector Equilibrium, 30 Oct'73; 25 Aug'71 Twilight Zone, 22 Jun'75 Four Interrelated Mobility Freedoms, 2 Nov'73 Human Beings at the Center, (1) Human Beings & Complex Universe, (14)(15)</p>
<p><u>Omnidirectional Wheel:</u></p> <p style="text-align: center;">See Stone as Omnidirectional Wheel</p>	<p style="text-align: right;"><u>Omnidirectional:</u> (3)</p> <p>See Omnidirectional Clock Omnidirectional Closest Packing of Spheres Omnidirectional Frame of Reference Omnidirectional Games Omnidirectional Growth Omnidirectional Halo Omnidirectionality Omnidirectional Observation Omnidirectional Pattern Omnidirectional: Physical Existence Environment Surrounds Omnidirectionality vs. Polarization Omnidirectional Precession Omnidirectional Shutterable Sieve Omnidirectional Typewriter Omnidirectional Wheel Omnidirectional Wave</p>
<p><u>Omnidirectional:</u> (1)</p> <p>See Closest Packing of Spheres Force Lines: Omnidirectional Lines Of Halo Concept Inhibit = Omnidirectional Indrinking Inwardness vs. Omnidirectional Omnidirectionality & Polarization Radial-circumferential Coordination Radiation Shell Growth Rate Spherical Wave Supradirectional Television: Omnidirectional TV Set Wave Propagation Wow: The Last Wow Field of Omnidirectional Nothingness Sphericity Experience in the Round Linear vs. Omnidirectional Wave Pattern of a Stone Dropped in Liquid</p>	<p><u>Omnidivergent:</u></p> <p>See Three: Number Function of Three in a Four-axial System, 24 Jan'76</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omnidynamic</u>:</p> <p>"The vector equilibrium produces conservation of <u>omnidynamic</u> Universe despite many entropic local energy dissipations of star tetrahedra."</p> <p>- Cite RBF dictation, Washington, DC, 7 Oct. '71 incorporated in Synergetics Text at 'Antitetrahedron,' Sec. 638.02.</p> <p><u>ANTITETRAHEDRON - SEC. 638.02</u></p>	<p><u>Omnieconomic</u>:</p> <p>See Interaccommodate, 30 Jan'73 Scheme of Reference, 24 Sep'73 Energy Event, Mar'71</p>
<p><u>Omnidynamic</u>:</p> <p style="text-align: right;">(1)</p> <p>See Conservation of Omnidynamic Universe</p>	<p><u>Omniegalitarian</u>:</p> <p>See Revolution, Jan'72</p>
<p><u>Omnidynamic</u>:</p> <p style="text-align: right;">(2)</p> <p>See Air Space, May'65 Future of Synergetics, 19 Apr'66 Star Tetrahedron & VE, 9 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Omnibracing</u>:</p> <p>"Gravity is circumferentially omnibracing and is never partial, but is always whole."</p> <p>"It is the sum of all the no-points embracing all the points; and it compounds at the surface-embracing second-power rates of the linear proximity gains. All the no-points no-points (novents) are always embracing all the points."</p> <p>- Citation and context at <u>Integrity of Universes</u>, 23 Sep'73</p>
<p><u>Omnicoology</u>:</p> <p>See Trespassing: Not Trespassing (a)</p>	<p>RBF DEFINITIONS</p> <p><u>Omnibracing</u>:</p> <p>"Gravity is <u>omni-embracing</u> and is not focusable."</p> <p>- Cite Synergetics draft, Sec. 276, August 1971</p> <p>- Citation at <u>Gravity</u>, Aug'71</p>

Synergetics Dictionary

RBF DEFINITIONS

Omnibracing vs. Permeating:

"Joseph Needham's 'above and below' and his 'higher and lower' are linear.

"'Out' expressly is the containing and the contained: in synergetics, the omnibracing and the permeating."

- Citation & context at Synergetic Hierarchy, 5 May'74

Omniequiangularity:

See Trisection of an Angle, 22 Nov'73
Model of Toothpicks & Semi-dried Peas, (1)

Omnibracing Squeeze:

See Inward Explosion, 8 Apr'75

Omniaqui-divisible:

See XYZ Quadrant at Center of Octahedron, 14 May'75

Omnibracing:

(1)

See Gravity
Linear vs. Omnibracing
Love
Omnibracing vs. Permeating
Truth

Omniequilateral:

See Normal to Universe, 10 Sep'74
Model of Toothpicks & Semi-dried Peas, (1)

Omnibracing:

(2)

See Ecology, 16 Feb'73
Generalization, 8 Mar'73
Gravity, Aug'71*
Integrity of Universe, 23 Sep'73*
Prime Structural Systems (1)
Principle, 5 Jun'73
Truth & Love, 16 Feb'73
Spherical Quadrant Phases, 9 Jul'75

Omniequi-economic:

See Hierarchy of Constellar Configurations, 1959

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omniequilibrium:</u> (1)</p> <p>"I seek a word to express most succinctly the complexly pulsative, inside-outing, integrative-disintegrative, counter-rolling behaviors of the vector equilibrium. 'Librium' represents the degrees of freedom. Universe is <u>omnilibrious</u> because it accommodates all the every-time-recurrent, 12-alternatively-optional degrees of equieconomical freedoms. <u>Omniequilibrium</u> means all the foregoing.</p> <p>"The sphere is a convex vector equilibrium, and the spaces between closest-packed unradius spheres are the concave vector equilibria or, in their contractive form, the concave octahedra. In going contractively from vector equilibrium to equi-vector-edged tetrahedron ..., we go from a volumetric 20-ness to a volumetric oneness, a twentyfold contraction. In the vector-equilibrium jitterbug, the axis does not rotate, but the equator does. On the other hand, if you hold the equator and rotate the axis, the system contracts. Twisting one end of the axis to rotate it terminates the jitterbug's 20-volume to 4-volume octahedral state contraction, whereafter the contraction momentum throws a torque in the system with a leverage force of 20 to 1. It contracts until it becomes a"</p> <p>- Cite SYNERGETICS text at Secs. 1030.10 & .11, 27 Dec'73</p>	<p><u>Omni-equi-optimum:</u></p> <p>See Tensegrity: Icosahedron Tensegrity, Dec'61</p>
<p>RBF DEFINITIONS</p> <p><u>Omniequilibrium:</u> (2)</p> <p>"volume of one as a quadrivalent tetrahedron, that is, with the four edges of the tetrahedron congruent. Precessionally aided by other galaxies' mass-attractive tensional forces acting upon them to accelerate their axial, twist-and-torque-imposed contractions, this torque momentum may account for the way stars contract into dwarfs and pulsars, or for the way that galaxies pulsate or contract into the incredibly vast and dense, paradoxically named 'black holes.'"</p> <p>- Cite SYNERGETICS text at Sec. 1030.11, 27 Dec'73 (RBF galley rewrite)</p>	<p><u>Omniexpanding:</u> (1)</p> <p>See Expanding Physical Universe</p>
<p><u>Omniequilibrium:</u> <u>Omniequilibrium:</u> (1)</p> <p>See Centers of Equilibrium Symmetry Omnilibrium</p>	<p><u>Omniexpanding:</u> <u>Omniexpansive:</u> (2)</p> <p>See Entropy, (p.90) May'72 Gravity, (2) Universal Integrity: Second-power Congruence of Gravitational & Radiational Constants, 9 Jan'74</p>
<p><u>Omniequilibrium:</u> <u>Omniequilibrium:</u> (2)</p> <p>See Basic Triangle: Basic Equilibrium 48 LCD Triangle, 16 Dec'73</p>	<p><u>Omniexperienceable:</u></p> <p>See Integer, 15 Oct'72</p>

Synergetics Dictionary

Omniplicable:

See Skinner, B.F.

Omnifreedom:

See Powering: Fourth & Fifth Dimensions, 18 Nov'72

Omnifavorable:

See Artifacts, (1)

Omnifrequency:

See Individuality & Degrees of Freedom, (1)

RBF DEFINITIONS

Omnifinite:

"Universe is finite because it is the aggregate of omnifinite local experiences. All experiences begin and end. Physics has found no continuums; instead it has found only discrete omniseperate, finite quanta.

"Meaningful segments of scenario Universe are finitely furnished with omnifinite experiences."

- Cite RBF rewrite of Finite Furniture, 1960, done at Sarasota, Fla., 11 Feb'71

Omnifunction:

See Generalised Principle, (4)

Omnifinite:

See Twenty-foot Earth Globe & 200-foot Celestial Sphere, (11)

Omnigear:

See Irreversibility, 4 May'57

Synergetics Dictionary

RBF DEFINITIONS

Omnigeometric:

"... A tethered ball on a long string is free to describe any omnigeometric forms of circles, spheres, or giraffes, but it cannot get away from the Universe."

- Cite SYNERGETICS draft at Sec. 401.02, 27 May'72

Omni-humanity:

See Cosmic Accounting, 20 Sep'76

Omnigram: Omnigramming:

See Kinetic Omnigramming

Omni-idealized:

See Frame of Reference, 4 Oct'72

RBF DEFINITIONS

Omnihalo:

"The considered relevancy within the zone of lucidity consists of one tetrahedron or more. For each 'considered tetrahedron,' there are three complementary always and only co-occurring parametric tetrahedra. We discover that our omnihalo epistemological accounting consists entirely of rational tetrahedral quantation."

- Cite SYNERGETICS text at Sec. 535.07; RBF rewrite of "Omnidirectional Halo," p.153, Nov'71

Omni-inbound:

See Point: Inbound Point, 23 Sep'73

Omnihalo:

See Halo Concept

Omninclusive:

See Love, May'72; Oct'72
Truth & Love, 16 Feb'73

Synergetics Dictionary

Omninexorable:

See Artifacts, (1)

Omnintegrality:

See Design, 13 Mar'73
Whole System, 28 May'72

RBF DEFINITIONS

Omninnate:

"I have powerful reasons for assuming that genius is omni-innate. Our first child was born at the time of World War I [and so on, into the Alexandra Theme] . . . "

- Cite Address to Am. Assn. of Museums, p.-1. 2 Jun'71
- Citation at Genius, 2 Jun'71

~~RBF DEFINITIONS~~

Omnintellectual:

See God, May '72

Omnintegrating: Omnintegration:

See Ecology Sequence (G)
Life Alters Environment & Environment Alters Life,
16 Aug'70
Sciences: Comprehensive Integration of the Sciences,
4 Apr'73
Precession & Degrees of Freedom, (1)
Unsettling vs. Settlements, 20 Sep'76

Omninteraccelerating:

See XYZ Coordinate System, (A)

RBF DEFINITIONS

Omnintegrality:

"But within the mystery
Lies the region
Of humanly discovered phenomena
Whose whole region
Is progressively disclosing
An omni-integrality of orderliness,
Of interactive and interaccommodative
Generalized principles."

- Cite INTUITION, pp.39-40 May '72

RBF DEFINITIONS

Omninteraccommodation:

"And the why-for and how-come
Of omni-interaccommodation
Of all the known family
Of weightless, eternal, generalized principles--
Thus far discovered
By scientific observation
To be metaphysically governing
In elegant mathematical order
All Scenario Universe's
Interrelationships, transformations and transactions,
Without one principle contradicting another--
Are all and together
Absolute mystery."

- Cite INTUITION, p.42 May '72

Synergetics Dictionary

RBF DEFINITIONS

Omni-interaccommodative:

"... The complex code of eternal metaphysical principles is omni-interaccommodative. That is it has no intercontradiction."

- Cite Dreyfuss Preface, "DECEASE OF MEANING," 28 Apr '71, pp 4-5.

Omniinteractions: Omniinteracting:

See Halo Concept, Jun'71

Omniinteraccommodation: Omniinteraccommodative:

See Eternal Principles, 22 Nov'73
Generalized Principle, (3)
Regularity, 2 Nov'72
Syncretic Integral, May'72
Topological Aspects: Inventory Of, 9 Feb'73
Design, 8 Sep'75
Words & Coping, 7 Nov'75

Omniinteraltering:

See Acceleration: Angular & Linear, 1960

RBF DEFINITIONS

Omni-interacting:

"The Universe is the minimum as well as the maximum closed system of omni-interacting, precessionally transforming, complementary transactions of synergetic regeneration. . . ."

- Cite OMNIDIRECTIONAL HALO, p. 135. 1960

Omni-inter-between:

See Gravity, 11 Feb'76

RBF DEFINITIONS

Omni-interactive:

". . . The orderly complex of omni-interactive, pure, weightless and apparently eternal principles. . . ."

- Cite Doxiadis, p. 310. 20 Jun'66

Omniintercomplementation:

See Export-import Centers, 20 May'75

Synergetics Dictionary

Omnintercoordinating:

See Ecology Sequence, (F)

Omnintermeshed:

See Gear Train: Locking & Blocking, 18 Nov'72

Omninterdependence:

See Young World, (1); 4 Jul'72

Omninterorderliness:

See Ninety-two Elements: Periodic Regularities Of,
4 Jan'70

Omnintereffective:

See Precession, 13 Nov'69

Omninterpulative:

See Scenario Universe, Jan'72

Omninterfering:

See Geosocial Revolution, (3)

Omninterrelationships:

See Crystallization, 28 Oct'64
God as Verb of Optimum Understanding, (1)

Synergetics Dictionary

Omninterrelevant:

See Conceptual Systems, 27 May'75

Omnintertransformative:

See Synergetics, 26 May'72
 Universal Integrity: Principle Of, 23 Sep'73

Omninterresonated:

See Seven Axes of Symmetry, 13 May'73
 Precession & Degrees of Freedom, (2)

Omnintertriangulated:

See Comprehension, 16 Feb'73
 Curvature: Compound, 25 Jan'73
 Stable & Unstable Systems, 2 Nov'73; 23 Jan'72
 Universal Integrity: VE & Icosa, (2)
 Structural System, 9 Nov'73
 Model of Toothpicks & Semi-dried Peas, (1)

RBF DEFINITIONS

Omn-intertangency:

"Systems are individually conceptual polyhedral integrities. Human awareness's concession of 'space' acknowledges a nonconceptually-defined experience. The omniorderly integrity of omnidirectionally and infinitely extensible, fundamentally coordinating, closest packing of uniradius spheres and their ever coordinately uniform radial expandibility accommodates seemingly remote spherical nucleations which expand radially into omni-intertangency. Omn-intertangency evidences closest sphere packing and its inherent isotropic vector matrix, which clearly and finitely defines the omnirational volumetric ratios of the only concave octahedra and concave vector equilibria discretely domaining all the in-betweenness of closest-packed-sphere interspace. The closest-packed-sphere interspace had been inscrutable a priori to the limit phase of omni-intertangencies; which limit phase is, was, and always will be, omnipotential of experimental verification of orderly integrity of omni-intercomplementarity of the space-time, special-case, local conceptualizing and the momentarily unconsidered seeming nothingness of all otherness."

- Cite SYNERGETICS draft at Sec. 1006.13, 17 Feb'73

Omninvisible:

See Life, 5 Jun'75

Omnintertransformable: Omnintertransformabilities:

See Horseshit, 9 Feb'73
 Vector Equilibrium as Starting Point, 8 Apr'75
 Model of Nonbeing, 11 Sep'75

Omnikinetic:

See Rearrange the Scenery, (p.92) May'72

Synergetics Dictionary

<p><u>Omniknowing:</u></p> <p style="text-align: center;">See Metaphysical Intellect, May'72</p>	<p><u>Omnimanifest:</u></p> <p style="text-align: center;">See Radiation-gravitation Sequence, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Omnilibrium:</u></p> <p>"I want a word to express the integrative-disintegrative balance of the vector equilibrium. 'Librium' represents the degrees of freedom. <u>Omnilibrious</u>: Universe is omnilibrious because it accommodates all the degrees of freedom. Omnilibrious means we do not have to use degrees of freedom any more.</p> <p>"The sphere is the convex vector equilibrium and the spaces between are the concave vector equilibrium or, in its contractive form, the octahedron.</p> <p>"We go from a 20-ness to a fourness: a fivefold contraction. . . . as pulsars, stars go to dwarfs. It's a five-power acceleration. . . . In the jitterbug the axis does not rotate, but the equator does. On the other hand, if you hold the equator and contract the system, you force the axis to twist; it throws a torque in it at a 20-to-1 leverage. It contracts until it becomes the tetrahedron. This is the way galaxies intersperse. The nebula plunge through zero and become negative, invisible, the black hole."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 19 Feb '72</p>	<p>RdF DEFINITIONS</p> <p><u>Omnimedium Transport Sequence:</u> (1)</p> <p>"There are two kinds of flying: (a) soaring-- like a gull (b) running on water-- like a duck. You've seen a duck taking off the water or landing: it's like a hammerthrower or a pole vaulter: jet stilting.</p> <p>"Fruits and seeds are also streamlined, not just birds. Seeds are tubes designed to withstand the frost, to work down into the Earth, and also to come up at the right time....</p> <p>"A naked man jumps his own height in the high jump. With a pole vault he can jump about three times his own height, even though he is weighted down by the pole, by running he can build up momentum into the situation. If he could grab another pole each time he could keep up the momentum and vaulting indefinitely.</p> <p>"A duck keeps falling but builds it up into more altitude. Like a plane launched from a carrier, the first thing it does is to nose down for increased speed. Jet stilts. A duck has two jet stilts; it then builds up the lift like a blimp flier.</p> <p style="text-align: right;">- Cite RdF at Penn Bell videotaping, Philadelphia, 29 Jan'75</p>
<p><u>Omniliterate:</u></p> <p style="text-align: center;">See Revolution, Jan'72</p>	<p>RdF DEFINITIONS</p> <p><u>Omnimedium Transport Sequence:</u> (2)</p> <p>"All this suggests that we could build an omnimedium vehicle without wings; therefore it could be much lighter and be propelled by twin-angled jet stilts. Omnimedium twin-jet orientable stilts. It could have a turbine jet effect with liquid oxygen for jet propulsion and with wheels. The stilts would converge just above your head. Like stilt walking: when you move the stilt forward it becomes the third compression member which is always initiatable. You'd be hanging from the vectors which converge above your head. A tetrahedron.</p> <p>"There was not enough capital available for a proper design solution to the housing shortage; nor was there enough capital for the development of a full omnimedium transport system. I saw that the first artifact could suggest only one phase of a full omnimedium transport system. The Dymaxion car was not designed as just a new type of automobile; it was designed to test the ground-taxiing quality of an omnimedium transport system. The most dangerous condition of flying is when you make contact with the earth. The fairing and streamlining has to be superb. It was difficult to control the Dymaxion car with wind on the highway and you had to learn how to manage it."</p> <p style="text-align: right;">- Cite RdF at Penn Bell videotaping, Philadelphia, 29 Jan'75</p>
<p><u>Omnilocal:</u></p> <p style="text-align: center;">See Heres & Theres, 4 Jun'72 History, 27 Dec'73 Rain, 11 Feb'76</p>	<p>RdF DEFINITIONS</p> <p><u>Omnimedium Transport Sequence:</u> (3)</p> <p>"I did not design an automobile; I was not putting a car into production. I was merely designing a prototype omnimedium vehicle. The propulsion was up forward and the steering was in the rear-- for rudderin': that's the way nature does it-- with front traction and rear steering.</p> <p>"Take a wheelbarrow. You push it and a bad bump will hit you in the stomach. But if you pull a wheelbarrow it will not skid... The front-steered car, due to kingpins, can only turn at about 3/4 degrees, without a rudder post. But with a rudder post you can turn at 90 degrees. And the center of gravity was so low that you could not turn it over; it was like a gun carriage. At 15 m.p.h. the inboard wheel could turn on a one-foot radius.</p> <p>"It could carry eleven passengers. It was 19 feet long. But it tended to head into cross winds. So very fine controls were needed. So we had all custom hardware and shivs. The tires would tend to distort.</p> <p>"One of the oldest creatures known to man is the horseshoe crab. It is designed to go across streams. It is shaped in"</p> <p style="text-align: right;">- Cite RBF at Penn Bell videotaping, Philadelphia, 29 Jan'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omnimedium Transport Sequence:</u> (4)</p> <p>a 120-degree crescent with single-tail focus, thus able to use its secondary tail to go across currents. So I made the second Dymaxion with its rear wheel on an extensible boom that retracts when the car slows down. It went 122 m.p.h. I just wanted to see whether the principles were right. It had a beautiful fairs underbelly. And the car could waltz: it really could waltz.</p> <p>"I worked with Starling Burgess. He understood that the navy is world and the army is local. At one stage we had what Burgess called the 'flying bedstead': he thought it could work at low altitude, just above water, with JATO and ram-jets. The ideal would be to put humans in harness with jet stilts."</p> <p>- Cite RBF at Penn Bell videotaping, Philadelphia, 29 Jan'75</p>	<p><u>Omnimobilization:</u></p> <p>See Desoversignization Sequence, 15 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Omnimedium Transport:</u></p> <p>"In the 1930's I first used the term omnimedium transport to describe an automotive system adopted to land, sea, and air."</p> <p>- Cite RBF to EJA & BO'R, 3200 Idaho, 18 Feb'72</p>	<p>RBF DEFINITIONS</p> <p><u>Omnimotions:</u></p> <p>"Precession is uniquely dependent Upon the entirely unexplained, Ergo mystically occurring, <u>Omnimotions</u> of Universe Successfully hypothesized by Einstein In contradistinction To Newton's assumed A priori cosmic norm of 'at rest.'"</p> <p>- Cite INTUITION, pp.30-31 May '72</p>
<p><u>Omnimedium Transport:</u> (1)</p> <p>See Dymaxion Car</p>	<p><u>Omnimotion:</u></p> <p>See Fourth Dimension, 12 Jul'62 Motion Apprehension, 1968 Powering: Fourth & Fifth Dimensions, 18 Nov'72</p>
<p><u>Omnimedium:</u> <u>Omnimedium Transport:</u> (2)</p> <p>See Humans as Machines, (2)</p>	<p><u>Omniordearly:</u></p> <p>See Design, 22 May'73 Ecology Sequence, (A) Scheme of Reference, 26 Sep'73 Success as Norm of Today & Tomorrow, May'72</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Omni-orientation:</u> "Omni-orientation of focal points of structure is at most symmetrical equivalence of interdistancing."</p> <p>- Citation and context at <u>Radome Sequence (1)</u>, 29 Dec'58</p>	<p>TEXT CITATIONS</p> <p><u>Omnipersistent:</u> Synergetics text at Sec. 206</p>
<p><u>Omniorientation:</u> <u>Omnioriented:</u></p> <p>See Halo Concept, Nov'71 Radome Sequence, (1)*</p>	<p><u>Omni-phase-bond-integration:</u></p> <p>See Tetrahedron: Hierarchy of Pulsating Tetrahedral Arrays, 16 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Omnipermeative:</u> "Electromagnetic wave phenomena are . . . omnidirectional and <u>omnipermeative</u>."</p> <p>- Cite NO MORE SECOND HAND GOD, p. 89. 9 Apr'40</p>	<p><u>Omniplanetary:</u></p> <p>See Economic Accounting System, (D)</p>
<p><u>Omnipermeative:</u></p> <p>See Generalization, 8 Mar'72 God, (p.176) May'72 Principle, 5 Jun'73</p>	<p><u>Omnipotence:</u> (1)</p> <p>See Omniscience Transcendental of Omnipotence</p>

Synergetics Dictionary

<p><u>Omnipotence: Omnipotentia</u>: (2)</p> <p>See A Priori Intellect, (1) Limit Case: Closet-packed Symmetry, 17 Feb'73</p>	<p><u>Omnipresent</u>:</p> <p>See Gravity, 23 Sep'73; 12 May'75</p>
<p><u>Omnipotent-energy Phase</u>:</p> <p>See Tensegrity, 20 Oct'72</p>	<p><u>Omniproximities</u>:</p> <p>See Invention, (a)</p>
<p><u>Omnipowerful</u>:</p> <p>See Metaphysical Intellect, May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Omnipulative Asymmetry</u>:</p> <p>"The difference between the physical and the metaphysical is the omnipulative asymmetry of all the physical oscillation in respect to the equilibrium."</p> <p>- Citation & context at <u>Metaphysical & Physical</u>, 28 Feb'71</p> <p>- Ours RBF dictation to EJA for SYNERGETICS draft Sec. 205.3, Oct'71</p>
<p><u>Omniprecessional</u>:</p> <p>See Structure, 29 Dec'58</p>	<p><u>Omnipulative</u>:</p> <p>See Seven Axes of Symmetry, 13 May'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Omniradial:

"Omniradial is a special case of omnidiametric. It is very discrete. It permits only one direction: inwardly OR outwardly. Omnidiametric permits two directions: inwardly AND outwardly."

- Cite RBF to EJA, 3200 Idaho NW, 23 Sep'73

Omniradiant:

See Gravity, (2)
Jitterbug, 4 Oct'72

RBF DEFINITIONS

Omniradially:

"Tension is omniradially conversive and is both electromagnetically and gravitationally tensive because eternally and integrally comprehensive."

- Cite Synergetics Draft, at Sec. 640.70, Dec. '71.

Omniradiational:

See Isotropic Vector Matrix, 13 Nov'69

Omniradial:

(1)

See Omnidiametric

RBF DEFINITIONS

Omnirandomness:

See Crystallization, 28 Oct'64

Omniradial:

(2)

See Focus = Beamable = Wirable, 1 Apr'72

RBF DEFINITIONS

Omnirational Control Matrix:

"The great-circle subdivision of the 48 basic equilibrium LCD triangles of the vector equilibrium may be representationally draw within the 120 basic disequilibrium LCD triangles of the icosahedron, thus defining all the aberrations-- and their magnitudes-- existing between the equilibrium and disequilibrium states, and providing an omnirational control matrix for all topological, trigonometric, physical, and chemical accounting."

- Cite RBF marginalia at p.483 incorporated in SYNERGETICS, 2nd. Ed. at Sec. 901.19, 12 May'75

Synergetics Dictionary

<p><u>Omnirational Control Matrix:</u></p> <p>See Coordinate System Grid Matrix Spherical Grid Information Control System</p>	<p style="text-align: right;"><u>Omnirationality:</u> (2)</p> <p>Generalization & Special Case, 23 Jan'77 See Isotropic Vector Matrix, 30 Nov'72 Oscillation, 21 Dec'71 Powering: Fourth Dimension, 18 Nov'72 Powering: Sixth Powering, 26 Nov'72 Synergetics, 1959 XYZ Quadrant at Center of Octahedron, 14 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Omnirationality:</u></p> <p>"While nature oscillates and palpitates asymmetrically in respect to the frame of the <u>omnirational</u> vector equilibrium, the plus and minus magnitudes of asymmetry are rational fractions of the <u>omnirationality</u> of the equilibrium state..."</p> <p style="text-align: center;">- Citation & context at <u>Vector Equilibrium</u>, 21 Dec'71</p>	<p><u>Omniregenerative:</u></p> <p>See Fail-safe, 5 Jun'73 God, (p.176) May'72 Isotropic Vector Matrix, 9 Mar'73 Export-Import Centers, 20 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Omnirationality:</u></p> <p>"... The proton group and the neutron group account rationally for all physical structures.</p> <p>"Chemistry's <u>Omnirationality</u>. When I first sought to find the comprehensive coordinate system employed by nature's <u>omnirational</u> associating and disassociating-- always joining in whole low order numbers, as for instance, H₂O, and never H₂O-- persuaded me that nature's comprehensive coordination must be <u>omnirational</u> despite geometry's transcendental irrational number and other 'pure' non-experimentally demonstrable incommensurable inter-integer relationships."</p> <p style="text-align: center;">- Cite NASA Speech, pp. 64, Jun '66</p> <p style="border: 1px solid black; padding: 2px; margin-top: 10px;">CLOSEST PACKING OF SPHERES - SEC. 410.01</p>	<p><u>Omniresonant:</u></p> <p style="text-align: center;">See Life is a Sumtotal of Mistakes, (2)</p>
<p><u>Omnirationality:</u> (1)</p> <p>See Bubbles in the Wake of a Ship Nature Has No Separate Departments Low Order Prime Numbers Rational Whole Numbers Synergetic Hierarchy Unity: Principle Of</p>	<p><u>Omnisameness:</u></p> <p style="text-align: center;">See Isotropic Vector Matrix, Jun'66</p>

Synergetics Dictionary

RBF DEFINITIONS

Omniscience:

"What I mean by omniscience
Is synergetically transcendental
Even to Einstein."

- Cite RBF to EJA
Sarasota, Florida
7 February 1971

RBF DEFINITIONS

Omniscience Transcendent of Omnipotence:

"The synergetic anticipatory capabilities of intellect...
imply the possibility of a velocity transcendence of
omniscient functioning over omnipotence functioning,
which could mean an intellectually regenerated evolutionary
extension of Universe in generalized synergetical integrity."

- Citation and context at Anticipatory, 1960

RBF DEFINITIONS

Omniscience:

"Omniscience is evidently of comprehensively transcendental
alacrity to the speed of light whose relatively slow
articulations in Universe are readily anticipated by
intellectually initiated and disciplined computation of
mind."

- For citation and context see ██████████ Intellection, 1960

Omniscience Transcendent of Omnipotence:

(1)

See Metaphysical Transcendent of Physical

RBF DEFINITIONS

Omniscience Transcendent of Omnipotence

"There is a question-asking possibility that metaphysical
omniscience may be transcendental in its velocity to that
of omnipotence, i.e., the definitive physical speed of
energy as radiation."

- Cite OMNIDIRECTIONAL HALE, p. 103, as rewritten by RBF in
Washington DC, 21 Dec, 1971
- Citation at Metaphysical and Physical, 21 Dec '71

Omniscience Transcendent of Omnipotence:

(2)

See Anticipatory, 1960*
Energy, 28 Apr '48
Future of Synergetics, 1960*
Intellect: Equation Of, 28 Apr '48
Metaphysical & Physical, 21 Dec '71*

RBF DEFINITIONS

Omniscience Transcendent of Omnipotence:

"There is a question-asking-possibility that omniscience
may be transcendental in velocity to the definitive
physical speed of energy omnipotence."

* Citation & context at Future of Synergetics, 1960
- Cite OmniDirectional Hale, p. 163, 1960

Omniscience vs. Ego:

See Local vs. Comprehensive (2)

Synergetics Dictionary

<p><u>Omniscience:</u> (1)</p> <p>See Ego: Separating Ego out of Omniscience Omniknowing Competence: A Knowing Competence Greater than That of Humans</p>	<p><u>Omnistructured:</u></p> <p>See Model of Toothpicks & Semi-dried Peas, (1)</p>
<p><u>Omniscience:</u> (2)</p> <p>See A Priori Intellect, (1) Intellections, 1960 Local vs. Comprehensive, (1)(2)</p>	<p><u>Omnisubconscious:</u></p> <p>See Invisible Architecture, (E)</p>
<p><u>NEW DEFINITIONS</u></p> <p><u>Omnisimilar:</u></p> <p>See Spherical Octahedron, Aug'72</p>	<p><u>Omnisuccess:</u></p> <p>See Design Revolution, 7 Nov'67; 6 Mar'74 Economic Accounting System, 18 Feb'71 Industrialization, (p.95) May'72</p>
<p><u>Omnispecialized:</u></p> <p>See Pollution, Oct'70</p>	<p><u>Omnisurface:</u> (1)</p> <p>See Embracement</p>

Synergetics Dictionary

<p><u>Omnisurface</u>: (2)</p> <p style="text-align: center;">See Radiation-gravitation: Harmonics, 3 Jan'75</p>	<p><u>Omnisymmetrically Generated</u>:</p> <p style="text-align: center;">See Isotropic Vector Matrix, 30 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Omnisurround</u>:</p> <p>"... of such sizes that the crocodile is large enough to <u>omnisurround</u> or swallow the 20-foot miniature Earth globe. . ."</p> <p style="text-align: center;">- Citation and context at <u>Twenty-Foot Earth Globe and 200-Foot Celestial Sphere</u> (4)</p>	<p><u>Omnisymmetrical</u>: (1)</p> <p style="text-align: center;">See Prime Structural Systems</p>
<p>RBF DEFINITIONS</p> <p><u>Omnisymmetrical</u>:</p> <p>"Poles are symmetrical to each other, but not <u>omnisymmetrical</u> like the icosahedron and tetrahedron."</p> <p style="text-align: center;">- Cite RBF to EJA, 3200 Idaho, Wash DC, 17 Feb '72</p>	<p><u>Omnisymmetrical</u>: <u>Omnisymmetry</u>: (2)</p> <p style="text-align: center;">See <u>Asymmetry</u>, 31 May'71* Atom, 3 Nov'73 Isotropic Vector Matrix, 16 Nov'72 Life, 31 May'71 System Totality, 7 Mar'73 Tetrahedron, 7 Mar'73 Vector Equilibrium, 3 Nov'73</p>
<p>RBF DEFINITIONS</p> <p><u>Omnisymmetrical</u>:</p> <p>"Symmetrical means having no local asymmetries. <u>Omnisymmetrical permits local asymmetries</u>. Universe is omnisymmetrical. A three-bladed propeller is dynamically symmetrical (three pear-shaped blades at 120° to each other inscribed in an equilateral triangle). The propeller blade is locally asymmetrical."</p> <p style="text-align: center;">- Cite RBF to LJA, Blackstone Hotel, Chicago, 31 May 1971. - Citation & context at <u>Asymmetry</u>, 31 May'71</p>	<p>RBF DEFINITIONS</p> <p><u>Omnisynergetic</u>:</p> <p>"This omnirational, omnidirectional comprehensive coordinate system of Universe is omnisyergetic."</p> <p>"This coordinate system is ever regenerative in respect to the nuclear centers all of which are rationally accounted for by synergetics."</p> <p style="text-align: center;">- Cite SYNERGOLITICS draft at Sec. 1004.11, 30 Jan'73</p>

Synergetics Dictionary

<p><u>Omnisynergetic:</u> (1)</p> <p>See Synergy of Synergies:</p>	<p><u>Omnitrahedral:</u></p> <p>See Viral Steerability, 1960</p>
<p><u>Omnisynergetic:</u> (2)</p> <p>See Principle, 5 Jun'73</p>	<p>RBF DEFINITIONS</p> <p><u>Omnitopology:</u></p> <p>"The conceptual-system geometries of omnitopology are defined only by the system withinness and withoutness differentiating a plurality of loci occurring approximately midway between the most intimate proximity moments of the respectively convergent-divergent wavelinear vectors, orbits, and spin equators of the system."</p> <p style="text-align: right;">- Citation and context at <u>Interference: You Really Can't Get There From Here</u>, 19 Dec'73</p>
<p><u>Omnisystem:</u></p> <p>See Prime Nuclear Structural Systems, 27 Dec'74</p>	<p>RBF DEFINITIONS</p> <p><u>Omnitopology:</u></p> <p>"Omnitopology differs from Euler's superficial topology in that it extends its concerns to the topological domains of non-nuclear closest-packed spherical arrays and with the domains of the non-nuclear-containing polyhedra thus formed. Omnitopology is concerned, for instance, with the individually unself-identifying concave octahedra and concave vector equilibria volumetric space domains betweeningly defined within the closest-packed sphere complexes; as well as with the individually self-identifying convex octahedra and convex vector equilibria, which latter are spontaneously singled out by the observer's optical comprehensibility as the finite integrities and entities of the locally and individual-spherically-closed systems dividing all the Universe into all the macrocosmic outsidersness and all the microcosmic insidersness of the observably closed, finite, local systems-- in contradistinction to the undefinability of the omnidirectional space nothingness frequently confronting the observer."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1006.11, 17 Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Omnitensional:</u></p> <p>"Universe is <u>omnitensional</u> integrity."</p> <p style="text-align: right;">- Cite Synergetics Draft (Dec '71) at Sec. 650.07. Sec. 700.04, 14 Oct'72</p>	<p>RBF DEFINITIONS</p> <p><u>Omnitopology:</u></p> <p>"In contradistinction to, and in complementation of, Eulerian topology, omnitopology deals with the generalized equatabilities of a priori generalized omnidirectional domains of vectorially articulated linear interrelationships, their vertexial interference loci, and consequent uniquely differentiated areal and volumetric domains, angles, frequencies, symmetries, asymmetries, polarizations, structural-pattern integrities, associative interbondabilities, intertransformabilities, and transformative-system limits, simplexes, complexes, nucleations, exportabilities, and omninteraccommodations."</p> <p style="text-align: right;">- Synergetics text at Sec. 1007.15, 9 Feb'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Omnitopology:

"In omnitopology the domains of volumes are the minimum volumes topologically enclosable by the fewest points."

- Cite Synergetics draft, Sec. ~~100.21~~, August 1971, 1011.03, Apr '72

RBF DEFINITIONS

Omnitopological Domains:

"Topological domains are clearly defined in terms of the systems involved having unique centrally angled insiderness and surface-angle-defined outsiderness."

- Citation at Central Angles & Surface Angles, 20 Dec'71

RBF DEFINITIONS

Omnitopology:

"Omnitopology differs from Euler's superficial topology in that it extends its concerns to the topological domains of non-nuclear closest packed spherical arrays and with the domains of the non-nuclear containing polyhedra thus formed. Omnitopology is concerned, for instance, with the concave octahedra and concave vector equilibria volumetric spaces defined within the closest-packed sphere complexes."

- Cite SYNERGETICS draft at Sec. 1011.01, Apr '72

TEXT CITATIONS

Omnitopological Domains:

Synergetics ; Sec. 1006.20

RBF DEFINITIONS

Omnitopology:

"Omnitopology differs from Euler's superficial topology, omnitopology being nuclear."

- Cite RBF to EJA, Fairfield, Conn., Ches Wolf.
18 June 1971.

Omnitopology:

(1)

See Nucleated Systems
Topology: Synergetic & Eulerian

RBF DEFINITIONS

Omnitopological Domains:

"Omnitopological domains are defined in terms of the system's unique central-angle-defined insiderness and its unique surface-angle-defined outsiderness."

- Cite SYNERGETICS, 2nd. Ed., at Sec. 1074.21, 27 Dec'74

Omnitopology:

(2)

See Prime Enclosure, 17 Feb'73

Synergetics Dictionary

<p><u>Omnitransforming:</u> <u>Omnitransformative:</u></p> <p>See Universe, spring '71; 1971 Phase & Interphase, 9 Feb '76</p>	<p>RBF DEFINITIONS</p> <p><u>Omnitriangulation:</u></p> <p>"If you find all the connections between all the points, the system is <u>omnitriangulated</u>. A spherical polyhedron is a high-frequency geodesic polyhedron."</p> <p>- Cite Synergetics draft, Sec. 411.4, August 1971 - Citation & context at <u>Geodesic Sphere</u>, (2), Aug '71</p>
<p>RBF DEFINITIONS</p> <p><u>Omnitriangulation:</u></p> <p>"Omnitriangulation is the most intimate interchording. The ends of the chords emerge outside the sphere because the centers of the chords are closer to the center of the sphere."</p> <p>- Cite RBF at Penn Bell videotaping session Philadelphia, PA., 20 Jan '75</p>	<p>RBF DEFINITIONS</p> <p><u>Omnitriangulation:</u></p> <p>"It will be discovered . . . that all the polygons formed by the interacting vectors consist entirely of equilateral triangles and squares-- the latter occurring as the cross-sections of the octahedra and the triangles as the external facets of both the tetrahedra and octahedra."</p> <p>- Cite NARRU SPEECH, p. 24, 13 Nov '69</p> <p><u>ISOTROPIC VECTOR MATRIX - SEC 420.06</u></p>
<p>RBF DEFINITIONS</p> <p><u>Omnitriangulation:</u></p> <p>"By structure, we mean a self-stabilizing pattern. The triangle is the only self-stabilizing polygon.</p> <p>"By structure, we mean <u>omnitriangulated</u>. The triangle is the only structure. Unless it is self-regeneratively stabilized, it is not a structure.</p> <p>"Everything that you have ever recognized in Universe as a pattern is re-cognized as the same pattern you have seen before. Because only the triangle persists as a constant pattern, any recognized patterns are inherently recognizable only by virtue of their triangularly structured pattern integrities. Recognition is as dependent on triangulation as is original cognition. Only triangularly structured patterns are regenerative patterns. Triangular structuring is a pattern integrity itself. This is what we mean by structure."</p> <p>- Cite SYNERGETICS text at Secs. 610.01-.02-.03; 3 Oct '72</p>	<p>RBF DEFINITIONS</p> <p><u>Omnitriangulation:</u></p> <p>"The sphere is complex unity and the triangle simplex unity. Here and here alone lie the principles governing <u>finite</u> solution of all structural and general systems theory problems. Local isolations of infinite open-ended, plane and linear edged (seemingly 'flat' and infinite) segments of what are, in reality, vast spherical systems-- when taken out of context-- are hopelessly special-cased, indeterminate situations.</p> <p>"Unfortunately engineering has committed itself in the past exclusively to these locally infinite and inherently indeterminate systems and have had to rely essentially on the test proven, local behaviors of small systems such as columns, beams, levers, et. al., opinionatedly fortified with 'safely guesstimated' complex predictions. Not until we have universal <u>finite</u>, <u>omnitriangulated</u>, nonredundant, structural system comprehension can we enjoy the advantage of powerful physical generalizations concisely describing all structural behaviors."</p> <p>- Cite RBF Ltr. to Shoji Sadeo, 15 Feb. 1966, p. 5. - Citation and context at <u>Spherical Barrel: Sphere As Complex Unity</u>, etc. 15 Feb '66</p>
<p>RBF DEFINITIONS</p> <p><u>Omnitriangulation:</u></p> <p>"We start with tetrahedron, octahedron, cube; and the cube has been triangulated because cubes would not stand up by themselves. So I make it structural. And then we get into vector equilibrium and it has to be triangulated. All I am doing is deliberately <u>omnitriangulating</u>. We have a square face and we simply put one XXXXXXXXXX diagonal in. We take the square face of the cube and put a diagonal in and XXXX that is all you have to do so that it has structural stability."</p> <p>- Cite OREGON Lecture #7, 11 July '62, p. 274</p>	<p>RBF DEFINITIONS</p> <p><u>Omnitriangulation:</u></p> <p>"The largest volume, least event, <u>omnitriangular</u> system is the icosahedron and its multiple subtriangulated geodesic patterning . . . what I call geodesic structuring."</p> <p>- Cite RBD Ltr. to Dr. Urmston, 8 Oct. '64, p. 2.</p>

Synergetics Dictionary

<p><u>Omnitriangularly Oriented Evolution:</u> (1) See Jitterbug</p>	<p><u>Omniumiform:</u> See Isotropic Vector Matrix, 16 Nov'72</p>
<p><u>Omnitriangularly Oriented Evolution:</u> (2) See Quanta Loss by Congruence, (2)</p>	<p style="text-align: center;">██████████ <u>TEXT CITATIONS</u></p> <p><u>Omni-unique:</u> See Synergetics Draft, Feb '72 at Sec. 952.71</p>
<p><u>Omnitriangulation:</u> (1) See Intertriangulated Minimum Omnitriangulated Differentiator Omniintertriangulated Omni-selftriangulating Prime Structural Systems Surface Triangle Structures Triangulate: Triangulation</p>	<p><u>Omniversal:</u> See Relationship Analysis, (1) Spherical Interstices, 18 Nov'72</p>
<p><u>Omnitriangulation:</u> <u>Omnitriangulated:</u> (2) See Four Color Theorem, 23 Sep'73 Frequency, 15 Oct'72 Radome Sequence, (1) Twelve Universal Degrees of Freedom, Feb'72 Radial Depth, 20 Dec'74 Geodesic Spheres, (2)* Stable & Unstable Structures, 7 Jun'72 Vector Equilibrium, 8 Sep'77</p>	<p><u>Omnivalidity:</u> See Earning a Living, Dec'72</p>

Synergetics Dictionary

Omnivisible:

See Old Man River Project, 20 Sep'76

Omniholeness:

See Quantum Wave Phenomena Sequence, (1)

Omnivariability:

See Change, 9 Nov'72
Vector Equilibrium, 16 Oct'72

Omnizerophase:

See Zerophase, 23 Dec'68
Truth, 22 Jun'75

Omnivave:

See Vector Equilibrium, 30 Oct'73

RBF DEFINITIONS

One:

"Here we may be identifying the cosmic bridge between the
equilibrrious prime number one of metaphysics and the
disequilibrrious prime number one of realizable physical
reality."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 954.51, 20 Dec'73

Omnivavilinear:

See Frame of Reference, 27 Feb'72
Nucleus, (1)

RBF DEFINITIONS

One:

"One is subfrequency."

- Citation and context at Prime, 17 Feb'73

Synergetics Dictionary

RBF DEFINITIONS

One:

Unity is plural and at minimum two. There is a prime one, but it is half of unity."

- Cite RBF to EJA, Beverly Hotel, New York, 26 Jan '72

RBF DEFINITIONS

Oneness:

"Twoness and oneness can't make a system. They don't have insideness and outsidene^sss at all."

- Cite Oregon Lectur- #7, p. 248. 11 Jul'62

RBF DEFINITIONS

One:

"In structural systems, the tetrahedron uniquely articulates the prime number 1, and is therefore logically to be identified as the most economic quantation unit in universal energy accounting."

~~- Cite Wicks, p. 28, 1960~~

- Citation at Tetrahedron, 1960

RBF DEFINITIONS

One-dimensional Polarity:

"Two individual unresolvable somethings identify a line: one dimensionality, which has inherent polarity of the two line-defining somethings."

- Cite SYNERGETICS, 2nd. Ed. At Sec. 1013.13, 11 Sep'75

RBF DEFINITIONS

One:

"The concept one as unity is only available in respect to one-half of twoness."

- Citation and context at Experience, Feb'50

One = None:

See Initial Frequency, 6 Nov'72
Nine = None = Zero, 3 Mar'73

RBF DEFINITIONS

Oneness:

"Tetrahedra have a fundamental prime number: oneness."

~~- Cite Carbondale Draft
Return to Modelability, p. V.7~~

- Cite NASA Speech, p.73, Jun'66

One as a Prima:

(1)

See Prime One

Synergetics Dictionary

<p><u>One as a Prime:</u> (2)</p> <p>See One, 20 Dec'73 Unity Is Plural, 26 Jan'72 Prime Number, 16 Feb'78</p>	<p>TEXT CITATIONS</p> <p><u>One-Town World:</u> Nine Chains to the Moon, p.49ff - 1938</p>
<p><u>One as Not a Prime:</u></p> <p>See Trigonometric Limit: First 14 Primes, 14 Jan'74</p>	<p><u>One-town World:</u> (1)</p> <p>See Earth Shrunk to One-town Dimension Global Village One-world World-around</p>
<p>RBF DEFINITIONS</p> <p><u>One-Town World:</u></p> <p>"... The inexorable development of a one-town world and its progressively crossbreeding world citizenship lying around the spherical bottom of the sky ocean. Modern technology has terminated the fundamental isolation of any part of the Spaceship Earth's surface from another part. It is effectively integrating humanity as its individuals live ever more dynamically around our Spaceship Earth's spherical deck."</p> <p>- Citation and context at <u>Miller, Edna St. Vincent</u> (3), 1968</p>	<p><u>One-town World:</u> (2)</p> <p>See Ekistics, [redacted] 11 Nov'75 World Man, 6 Jul'62</p>
<p><u>One-town World of 1927:</u></p> <p>See Ekistics, 11 Nov'75</p>	<p>TEXT CITATIONS</p> <p><u>One as Unity:</u> Synergetics : Sec. 502.03, (2nd. Ed.)</p> <p style="text-align: center;">■</p>

Synergetics Dictionary

<p><u>One as Unity:</u></p> <p>See One, Feb'50 Sphere of Unit Vector Radius, 20 Nov'75</p>	<p><u>One World Management:</u> (2)</p> <p>See Electronic Referendum, 9 Jan'75</p>
<p><u>One Way vs. Round Trip:</u> (1)</p> <p>See Linear vs. Orbital Radial vs. Orbital</p>	<p><u>One vs. Zero:</u></p> <p>See Novent, 23 Sep'73</p>
<p><u>One Way vs. Round Trip:</u> (2) ■</p> <p>See Circuitry: Thermionic & Political Analogy, 23 Jan'72 Unicentricity & Realization, 1 Apr'49 Most Economical, 15 Jun'74 Scrap Sorting & Mongering (2)(3) Decentralize vs. Centralize, 1 Apr'49</p>	<p><u>One: Oneness:</u> (1)</p> <p>See Approximately One Plus One Prime One Tetrahedron: One Tetrahedron Unity Universe: Toward Oneness Frequency ≠ One One vs. Zero Plus-and-minus One Twelve-around-One No One Six - Five = One Frequency as One</p>
<p><u>One-world Management:</u> (1)</p> <p>See City Management Concept of World Government Making the World Work</p>	<p><u>One: Oneness:</u> (2)</p> <p>See Building Blocks (1)(2) Disparate, 22 Mar'73 Experience, Feb'50* Intereffects, 25 Sep'73 Prime, 17 Feb'73* Tetrahedron, 1960* Zero Volume Tetrahedron, 10 Dec'75 Human Beings & Complex Universe, (9)</p>

Synergetics Dictionary

<p><u>Onerousness of Ownership:</u></p> <p>See Ownership</p>	<p><u>Opaque:</u> <u>Opacity:</u> (1)</p> <p>See Omnidirectional Shutterable Sieve Occulting</p>
<p><u>Only & Inescapable:</u></p> <p>See Reality: Structurings as the Only & Inescapable Reality</p>	<p><u>Opaque:</u> <u>Opacity:</u> (2)</p> <p>See Light, 29 Dec'58 Walls, 29 Jan'75 Human Beings & Complex Universe, (9)</p>
<p><u>Only the Whole Big System Works:</u></p> <p>See Big System, 5 Jun'73</p>	<p><u>Open Circuit:</u></p> <p>See Equiinterval, 17 Feb'73 Rememberable Numbers, 14 Jan'74</p>
<p><u>Only:</u></p> <p>See Always & Only Only & Inescapable</p>	<p>RBF DEFINITIONS</p> <p><u>Opening:</u></p> <p>"Our definition of an opening is that it is surrounded, that is framed, by trajectories. Every trajectory in a system will have to have at least two crossings. These are always <u>as viewed</u>, because the lines could be at different levels from other points of observation."</p> <p style="text-align: right;">- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971</p> <p style="text-align: right;"><u>NOVENT- SEC. 524.31 514.03</u></p>

Synergetics Dictionary

RBF DEFINITIONS

Openings:

"There are no surfaces. Therefore there are no areas.
 So Euler's topological aspects have to be altered to
 read: "lines" = trajectories; "vertexes" = crossings; and
 "areas" = openings, i.e., where there are no trajectories
 or crossings. This relates to systems."

- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971

NOVENT - SEC. 524.31

Open Systems:

(2)

See General Systems Theory, 8 Nov'73
 XYZ Coordinate System, Jun'66

Opening:

See Area
 Face
 Noncrossing
 Crossings, Openings & Trajectories

RBF DEFINITIONS

Open Triangular Spirals:

"Triangular Spiral Events Form Polyhedra: Open triangular
 spirals may be combined to make a variety of different figures.
 Note that the tetrahedron and icosahedron require both left-
 and right-handed (positive and negative) spirals in equal
 numbers, whereas the other polyhedra require spirals of only
 one-handedness. (See Sec. 452, Great Circle Railroad Tracks
 of Energy.) If the tetrahedron is considered to be one
 quantum, then the triangular spiral equals one-half quantum.
 It follows from this that the octahedron and cube are each two
 quanta, the icosahedron five quanta, the
 two-frequency spherical geodesic is 15 Quanta."

- Cite SYNERGETICS text at Sec. 613.01; Nov'71

RBF DEFINITIONS

Open Systems:

"The arbitrary open parameters of infinite systems can never
 be guaranteed to be adequate statements of all possible
 variables."

- Citation and context at General Systems Theory, 8 Nov'73

Open Triangular Spirals:

See Basic Evenet
 Three-vector Teams
 Z Cobras

Open Systems:

(1)

See Closed Systems
 Closed Systems & Open Systems
 Infinite Systems
 Pollution: Infinite Room to Pollute

Open: Openings:

(1)

See Area
 Face
 Plane
 Areas = Openings
 Crossings, Openings & Trajectories
 No Open Endings
 Window

Synergetics Dictionary

<p><u>Open: Openings:</u> (2)</p> <p>See Triangle, 5 Jul'62; Nov'71 Angle, 7 Nov'75 Human Beings & Complex Universe, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Operational:</u></p> <p>"The Greeks defined a triangle as an area bound by a closed line of three edges and three angles. A triangle drawn on the earth's surface is actually a spherical triangle described by three great-circle arcs. It is evident that the arcs divide the surface of the sphere into two areas each of which is bound by a closed line consisting of three edges and three angles, ergo dividing the total area of the sphere into two complementary triangles. The area apparently 'outside' one triangle is seen to be 'inside' the other. Because every spherical surface has two aspects-- convex if viewed from outside, concave if viewed from within-- each of these triangles is, in itself, two triangles. Thus one triangle becomes four when the total complex is understood. 'Drawing' or 'scribing' is an operational term. It is impossible to draw without an object upon which to draw. The drawing may be by depositing on, or by carving away, that is, by creating a trajectory or tracery of the operational event. All the objects upon which drawing may be operationally accomplished are structural systems having insiderness and outsiderness. The drawn upon object may be symmetrical or asymmetrical, a piece of paper or a blackboard system having insiderness and outsiderness."</p> <p>- Cite RBF holograph revised caption for Synergetics Illustration #18 (EJA Master Set), typed up 3 Jan'72. (Secs. 811, 812 + 813.)</p>
<p><u>Operant Psychology:</u> (1)</p> <p>See Behavioral Science Behavioral Scientists Conditioning Psychology Behavior & Environment</p>	<p>RBF DEFINITIONS</p> <p><u>Operational:</u></p> <p>"We cannot produce constructively and operationally, a real experience-augmenting operational system, with less than four points, i.e., a fourth point not in the plane of the first three points. It takes three points to define a plane. The fourth point not in the plane of the first three produces a tetrahedron having insiderness and outsiderness corresponding with the reality of <u>operational</u> experience."</p> <p>- Cite SYNERGETICS draft "Antitetrahedron," 7 Oct. '71. p. 1. (dictated to EJA.)</p>
<p><u>Operant Psychology:</u> (2)</p> <p>See Design Science, 2 Jun'71 Human Tolerance Limits, (B)(D)</p>	<p>RBF DEFINITIONS</p> <p><u>Operational:</u></p> <p>"We got to that big definition of Universe and we discovered that it was the only way we could state it and be faithful to our rule of this game, which is what Bridgman called <u>operational</u>, that is, we must state whatever we have to state in terms of our personal experience. Some of the philosophers of a century ago were calling it pragmatism. At any rate they were stating what we know about our life in terms of a description of the events themselves, the most faithful description of the events themselves that precipitated any thought in any way we could think about it. Faithfulness of the description of our own experiences, so we were not interested in what somebody said they thought was significant."</p> <p>- Cite Oregon Lecture #8, p. 276. 12 Jul'62</p>
<p><u>Operating Manual for Spaceship Earth:</u></p> <p>See Spaceship Earth, (c)</p>	<p>RBF DEFINITIONS</p> <p><u>Operational:</u></p> <p>"Percival Bridgman at Harvard gave a name to Einstein's strategy of consideration which he called '<u>operational</u>.' Bridgman said Einstein became purely operational because he thought only in terms of experience."</p> <p>- Cite OREGON Lecture #2 - p. 72, 2 Jul'62</p>

Synergetics Dictionary

RBF DEFINITIONS

Operational Construction:

"Our operational construction method employs the constant radius and identifies every point on the circumference and every point on the internal radii. This is in contradiction to analytical geometry in which the identification is only in terms of the XYZ coordinates and the perpendiculars to them. Analytic geometry disregards circumferential construction, ergo is unable to provide for the direct identifications of angular accelerations."

"Mathematics," Wash. DC, 7 Oct. '71.

- Cite RBF diccaationto EJA for SYNERGETICS, "Operational

RBF DEFINITIONS

Operational Mathematics:

"Operationally speaking we always deal only in systems and all systems are characterized projectionally by spherical triangles which control all our experiential transformations."

- Citation at Spherical Triangle, 1971

- Cite SYNERGETICS, "Operational Mathematics, One Spherical Triangle Considered as Four."

Operational Field:

(1)

See Unified Operational Field

RBF DEFINITIONS

Operational Mathematics:

See Skimming
Foldability

Operational Field: Operational Evolvement Field:

(2)

See Field of Cosmic Formabilities, 28 Jan'73
Synergetics Constant, (A)
Trisection of an Angle, 22 Nov'73

Operational - Physically Realized:

See Structure, 27 Dec'74

RBF DEFINITIONS

Operational Geometry:

"Operational Geometry invalidates all bias."

- Cite SYNERGETICS, "Operational Mathematics, One Spherical Triangle Considered as Four."

RBF DEFINITIONS

Operational Procedure:

"... We found out the disparity ourselves by examining the limit-case conditions, which can only be discovered by physical experience. This method of discovery is called operational procedure."

* Citation and context at Human Sense Ranging and Information Gathering (2), 22 Nov'73

Synergetics Dictionary

<p><u>Operational Procedure:</u> (1)</p> <p style="text-align: center;">See Rules of Operational Procedure</p>	<p><u>Operations Research:</u> <u>Operational Research:</u> (2)</p> <p style="text-align: center;">See Synergetics vs. Model (D) General Systems Theory, ■ (B)</p>
<p><u>Operational Procedure:</u> (2)</p> <p style="text-align: center;">See Universe (1)</p>	<p>RBF De.FINITIONS</p> <p><u>Operational Science:</u></p> <p>The "always and only coexisting functions of experience and experiments embrace the fundamental parameters of <u>operational science</u>."</p> <p style="text-align: right;">* Cite SYNERGETICS Draft 'Structures' Mar '71</p> <p style="text-align: center;">- Citation & context at <u>Axis of Conceptual Observation</u>, 25 Mar'71</p>
<p><u>Operational Realizations:</u></p> <p style="text-align: center;">See Prime Number Inherency & Constant Relative Abundance, 27 Dec'74</p>	<p><u>Operational Science:</u></p> <p style="text-align: center;">See Environmental Inventory, 28 Apr'77</p>
<p><u>Operations Research:</u> <u>Operational Research:</u> (1)</p> <p style="text-align: center;">See Bridgman General Systems Theory Operational</p>	<p><u>Operational:</u> <u>Operative:</u> (1)</p> <p style="text-align: center;">See Operational = Physically Realized Potential vs. Operative Trisection of an Angle Interoperativeness Rules of Operational Procedure</p>

Synergetics Dictionary

<p><u>Operational: Operative:</u> (2)</p> <p>See Analytical Geometry, 7 Oct'71 Drawing, 1971 Franklin, Ben, 22 Jan'73 Human Sense Ranging & Information Gathering, (2) Mother: Infant Nursing at Mother's Breast, 18 Nov'72 Spherical Triangle Sequence, (a)(e) Vectorial Geometry Field, 22 Nov'73 Axis of Conceptual Observation, 25 Mar'71* Proofs, 7 Oct'75</p>	<p><u>Opposite: Opposition:</u> (1)</p> <p>See Alternate: Alternative Complementary Dynamic Opposition Reversibility Face Congruence with Opposite Vertex No Opposites Action-reaction: Equal & Opposite Enantiodromia</p>
<p><u>Opinion:</u> (1)</p> <p>See Public Opinion Polls</p>	<p><u>Opposite:</u> (2)</p> <p>See Energy, 16 Sep'67 Positive & Negative, 4 May'57 Zero Weight, 1968* Triangle, Nov'71</p>
<p><u>Opinion:</u> (2)</p> <p>See General Systems Theory, 4 Jan'70 Excluded Answer Resources, Oct'66</p>	<p>RBF DEFINITIONS</p> <p><u>Optical:</u> "Optical means we're using disorderly radiation to identify the positioning of the stars. . ."</p> <p style="text-align: right;">- Citation and context at <u>Radiation Sequence</u> (1), Jun-Jul'69</p>
<p>RBF DEFINITIONS</p> <p><u>Opposite:</u> "Every fundamental component of Universe has its <u>opposite</u>."</p> <p style="text-align: right;">- Citation and context at <u>Zero Weight</u>, 1968</p>	<p>RBF DEFINITIONS</p> <p><u>Optical Motion Spectrum:</u> (1)</p> <p>"There are a myriad of economic trends and other vital evolutionary events taking place today which are invisible to humanity only because they are too fast or too slow for man to apprehend and to comprehend them. We will be able to accelerate or decelerate such evolutionary events by electronic controls as played visibly as played on our football-field-sized playing surface.</p> <p>"Humanity has a very limited optical spectrum, wherefore man can see today only one-millionth of the total physical 'reality' as the latter is evidenced by the full range of the electromagnetic spectrum. Man used to think of reality as everything that he could sense with his eyes, ears, nose, taste, and touch. We have learned only since about 1930-- when the first technical chart of the great electromagnetic spectrum was published-- that man has sensorial tunability and is sensorially aware of only one millionth of physical reality. The little rainbow color band of human 'seeing' is less than one-millionth of the stretched-out reality of the invisible colors of all the 92 regenerative chemical elements of associative energy or of the various radiations"</p> <p style="text-align: right;">- Cite SLWATE HEARING, p.6, 4 Mar'69</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Optical Motion Spectrum:</u> (2)</p> <p>"of energy in its disassociative phase.</p> <p>"In addition to the electromagnetic frequencies spectrum we have also a <u>motion spectrum</u>. The sense of motion is produced by an overlapping continuity of afterimages of a plurality of optically tunable separate and sequentially occurring electromagnetic frequency events just as music is produced for the hearing by a metrically momentumated sequence of both separate and resonantly overlapped sound frequency notes. Motion is visual music made possible by the spontaneous retention in the brain of a series of separate still picture frames of our separate sense experiences scanned and reviewed in the brain at a vastly accelerated sequence rate. Our brain discovers that each successive electromagnetic picture is just a little different from the ones before before and our dawning awareness of that increasing difference constitutes our motion sense."</p> <p>"The overall range of our human motion spectrum is even more limited in respect to the full range of cosmic motions than is our <u>optical frequency spectrum</u> tunability in respect to the total electromagnetic spectrum. We can't see the atoms in"</p> <p>- Cite SENATE HEARINGS, p.6, 4 Mar'69</p>	<p><u>Optical Rainbow Range:</u> (1)</p> <p>See Color Spectrum Electromagnetic Spectrum Sensorial Spectrum Tunability</p>
<p>RBF DEFINITIONS</p> <p><u>Optical Motion Spectrum:</u> (3)</p> <p>"motion; we can't see the stars move, though their motions are thousandsfold faster than our fastest rockets; we can't see the trees grow; we can't see the hands of the clock move. Most important of all we cannot see the abstract weightless thoughts in the minds of other men. When we survey the total inventory of motions and informations which we can sense, we find it to be very limited. The significance of all the foregoing is appreciated when we realize that it is only by such phenomena as can be seen to be moving or changing by the public that are politically recognized and heeded. That is why public opinion and vote sampling has come into ever more reliable use.</p> <p>"Our computerized world game is designed to accelerate the too slow and to decelerate the too fast of all the known vital trends and thereby to bring them dramatically within popular consideration and our world game's solution. The game will show clearly how the trends will affect everybody's lives everywhere around Earth and how they could be taken advantage of in ways favorable to all humanity."</p> <p>- Cite SENATE HEARINGS, p.6, 4 Mar'69</p>	<p><u>Optical Rainbow Range:</u> (2)</p> <p>See Conceptual Tuning, 24 May'72 Manifest: Two, 1973 Sweepout: Spherical, (1)(2)</p>
<p><u>Optical Motion Spectrum:</u> (1)</p> <p>See Invisible Motion Motion Apprehension</p>	<p><u>Optical Tuning & Scanning:</u></p> <p>See Brain's TV Studio; (1); 6 Jun'69</p>
<p><u>Optical Motion Spectrum:</u> (2)</p> <p>See Lags (1)(2) Visual Symphony (2)</p>	<p><u>Optical:</u> <u>Optics:</u> (1)</p> <p>See Visual Optical Rainbow Range Seeing Sight Vision: Visual Range Finding</p>

Synergetics Dictionary

<p><u>Optical: Optics:</u> (2)</p> <p>See Energetic Words, 1 Jul'62 Senses, 9 Apr'40 Radiation Sequence (1)* Sweepout: Spherical Sweepout (1)(2)</p>	<p><u>Optimism: I Am Not an Optimist:</u></p> <p>See Stillbirth of Humanity, 10 Dec'73 Options, 13 May'77</p>
<p>RBF DEFINITIONS</p> <p><u>Optimism: I Am Not an Optimist:</u></p> <p>"People think that I am an optimist, but all that I am doing is simply to point out that humans do have options. You don't have to know anything to be negative; but you have to know really quite a lot in order to be positive."</p> <p style="text-align: right;">- Cite RBF to Ben Forgey, Wash Star, Jefferson Hotel, Wash. DC: 26 Apr'77</p>	<p><u>Optimism:</u> (1)</p> <p>See Reverse Optimism Survival Sequence: Love Options ≠ Optimism</p>
<p>RBF DEFINITIONS</p> <p><u>Optimism: I Am Not an Optimist:</u></p> <p>"I often find myself being called an optimist. I am anything but an optimist. An optimist is as unbalanced as a pessimist. The point is, I'm able to give you some knowledge you didn't have before. You have an option. You can make it. You better do it. Thank you."</p> <p style="text-align: right;">Forum</p> <p style="text-align: right;">- RBF concluding remarks to Harvard Law School, 10 Dec'73</p>	<p><u>Optimism:</u> (2)</p> <p>See Children as Only Pure Scientists, (B) News & Evolution, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Optimism: I Am Not an Optimist:</u></p> <p>"I say I'm not an optimist at all. Now the fact that I'm the first person to know by technical and resource information that it's possible for humanity to be a success is quite different from wishing or dreaming that humanity could be successful. Because I can show people it's feasible for humans to be successful, they acquire new hope, which they had lost. They then feel optimistic and say I am an optimist. I could tell them many reasons why humanity may not succeed despite its potential."</p> <p style="text-align: right;">- Cite RBF quoted in HOUSE & GARDEN Interview by Beverly Russel, p. 202, May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Optimum: Confluence of Optimum Factors:</u></p> <p>"Tensegrity is a confluence of optimum factors."</p> <p style="text-align: right;">- Cite MBP to HUD Engineers, Washington, DC, 26 Jan'73 - Citation at Tensegrity, 26 Jan'72</p>

Synergetics Dictionary

<p><u>Optimum Limit:</u></p> <p style="text-align: center;">See Sphere, 2 Mar'68</p>	<p>RBF DEFINITIONS</p> <p><u>Options:</u></p> <p>"I don't try to promote my ideas, but rather to make clear the options to let human beings have the tools around when it comes to an emergency, which this clearly is.... I'm not an optimist at all. What I do know--that many people don't-- is that we have the options to make it. Whether we will or not, I really don't know. But my hope that we'll make it lies with the young world."</p> <p style="text-align: right;">- Cite RBF to Susan Watter in <u>W</u> (women's Wear Daily); 13 May'77</p>
<p><u>Optimum:</u> (1)</p> <p>See Determinability: Optimum Degree Of God as Verb of Optimum Understanding Omni-equi-optimum</p>	<p>RBF DEFINITIONS</p> <p><u>Options:</u></p> <p>"...Truth is ever approaching a catalogue of alternate transformative options of ever more inclusive and refining degrees."</p> <p style="text-align: right;">- Citation and context at <u>Truth</u>, 10 Nov'72</p>
<p><u>Optimum:</u> (2)</p> <p>See Limit Structural Transformative Tendencies, Nov'52 Prime Number Inherency & CRA: Principle Of, 1959 Tensegrity, 26 Jan'72*</p>	<p>RBF DEFINITIONS</p> <p><u>Option:</u></p> <p>"Women and their clothes are like poets. They anticipate. All <u>options</u> are open."</p> <p style="text-align: right;">- Cite RBF quoted in Queen, May '70</p>
<p>RBF DEFINITIONS</p> <p><u>Optional:</u></p> <p>". . . There is a vast plurality of alternate and <u>optional</u> patterns of realizability of the change. By adequate thinking the individual can discover many of the <u>optional</u> patterns of controlability of evolutionary change. Because of the vast range of frequencies, magnitudes and angular directions the number of <u>options</u> is astronomical."</p> <p style="text-align: right;">- Cite Museums Keynote Address Denver, p.3. 2 Jun'71</p>	<p><u>Options ≠ Optimism:</u></p> <p style="text-align: right;">See Womb of Permitted Ignorance, (2)</p>

Synergetics Dictionary

<p><u>Options:</u> <u>Optional:</u> (1)</p> <p>See <u>Alternate:</u> <u>Alternative</u> Catalog of Alternate Transformative Options Degrees of Freedom Electable Nature Has So Many Options Multioptioned Twelve Alternative Options of Action</p>	<p><u>Oranges:</u> (2)</p> <p style="text-align: center;">See Model vs. Photograph, 12 May'77</p>
<p><u>Options:</u> (2)</p> <p>See Economic Accounting System, Sep'72 Optimism: I Am Not an Optimist, 10 Dec'73; 26 Apr'77 Prospect for Humanity, 2 Feb'75 Stillbirth of Humanity, 10 Dec'73 Trespassing: Not Trespassing, (a)-(c) Truth, 10 Nov'72* Vectorial Orientation, Mar'71 World Game, (1); Jun-Jul'69 Children as Only Pure Scientists, (B) Womb of Permitted Ignorance, (2) Man as a Function of Universe, 30 Apr'78 Will, (1)(2)</p>	<p>RdF DEFINITIONS</p> <p><u>Orbit:</u></p> <p>"Orbits mean tensive restraints. A composite of all the other pulls..."</p> <p style="text-align: center;">- Citation & context at <u>Ellipse</u>, 20 Jan'75</p>
<p><u>Oranges:</u></p> <p>"...Oranges are icosahedrally based..."</p> <p style="text-align: center;">- Citation & context at <u>Twelve Pentagons</u>, Aug'71</p>	<p>RdF DEFINITIONS</p> <p><u>Orbit:</u></p> <p>"What the physicists have failed to elucidate to themselves is that linear acceleration is also <u>orbital</u> but constitutes release from co-orbiting (or critical proximity <u>orbiting</u>) into the generalized <u>orbiting</u> of all Universe."</p> <p style="text-align: center;">- Cite SYNERGETICS draft at Sec. 1009.66, 14 Feb'73</p>
<p><u>Oranges:</u> (1)</p> <p>See <u>Stacking of Oranges</u></p>	<p>RdF DEFINITIONS</p> <p><u>Orbiting:</u></p> <p>"...We are not going to survive unless we become spherically integrated and go into cosmically normal, individual orbiting, which is always inherently considerate of the rest of the Universe. Knowledge is orbital...."</p> <p style="text-align: center;">- Citation and context at <u>Ecology Sequence (G)</u>, 5 Jun'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Orbiting:</u></p> <p>"Ninety-nine point nine-nine percent of the bodies in motion in physical Universe are operating orbitally; therefore normally...."</p> <p style="text-align: right;">- Citation at <u>Normal</u>, 6 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Orbiting:</u></p> <p>"Critical proximity occurs where there is a 90° angular transition from falling back in at 180° which is precession."</p> <p style="text-align: right;">(This is RBF's explanation of precisely what happens at the moment that an earth satellite goes into orbit.)</p> <p style="text-align: right;">- Cite RBF to EJA Beverly Hotel, New York 28 Feb 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Orbiting:</u></p> <p>"As the Sun's pull on the Earth produces orbiting, orbiting electrons produce directional field pulls."</p> <p style="text-align: right;">- Citation and context at <u>Mass Attraction</u>, 6 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Orbiting:</u></p> <p>"And the transition from being an entity to being a plurality of entities is precession which is a peeling off into <u>orbit</u> rather than falling back into the original entity."</p> <p style="text-align: right;">- Cite RBF to EJA Beverly Hotel, New York 28 Feb 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Orbiting:</u> (1)</p> <p>"Unlike ninety-nine point nine nine nine Percent of all humans, Coddard, carefully heeding the laws Of both mass attraction and precession, Realized that an object, Rocket-propelled or accelerated, Into a different velocity-- And into a different direction To that of the Earth's Speed and course around the Sun-- Would have its gravitational pull Toward the Earth Reduced fourfold Every time it doubled Its distance away from the Earth; Only a hundred miles out From our Earth's surface The attraction would be So diminished That it would permit the Moon's pull To become significant, At which distance"</p> <p style="text-align: right;">- Cite INTUITION, p.32 May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Orbiting:</u></p> <p>"Each local system has its own <u>orbiting</u>, and its own frequencies, and so forth . . ."</p> <p style="text-align: right;">- Citation and context at <u>Relative Asymmetry Sequence</u> (1), Jun'69</p>
<p>RBF DEFINITIONS</p> <p><u>Orbiting:</u> (2)</p> <p>"The rocketed object Would lose its tendency To fall back into the Earth, And now affected dominantly By the integrated mass attractions Of all other celestial bodies, Would go into <u>orbit</u> Around our Earth."</p> <p>"And to understand How little is that One-hundred-mile distance Out from Earth's surface At which <u>orbiting</u> Replaces the tendency To fall back into the Earth, We note that the The thickness of a matchstick Out from the surface Of a twelve-inch diameter Household 'World Globe' Is the distance at which Our first rocketed objects Do go into <u>orbit</u>."</p> <p style="text-align: right;">- Cite INTUITION, pp.32-33, May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Orbit = Circuit:</u></p> <p>"The reality is always orbital. Orbit = circuit. All critical paths orbit the Sun. No path could possibly be linear. The Universe never reverts to the smaller and simpler circuits."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash., DC, 10 Sep'74</p>

Synergetics Dictionary

<p><u>Orbital Closure:</u></p> <p>See Events & Novents, 10 Sep'74</p>	<p>RBF DEFINITIONS</p> <p><u>Orbital Escape from Critical Proximity:</u> (1)</p> <p>"Human mind, while discovering generalized principles, eternally persisted in special-case experience sequences, but has gradually developed the capability to employ those principles and then self into such acceleration as to escape the fall-back-in proximity and to escape the general ecological fall-in program of invisible interorbiting regeneration.</p> <p>"As each human being discovers self and others and employs more principles more and more consciously to the advantage of others, the more effectively does the individual retain the integrity of his own unique orbiting in Universe. Local though it may seem aboard our planet, his unique orbiting brings him into a vast variety of critical-proximity fall-ins. Man has progressively acquired enough knowledge to raise his vision from the horizontal to the vertical, to stay first atop the watery ocean and next atop the airocean heights, and most recently to orbit beyond the biosphere with ever greater independence, with ever greater competence, and with ever greater familiarity with the reliability of the generalized principles."</p> <p>* Cite SYNERGETICS text at Secs. 1009.70 & .71; RBF galley rewrite of 29 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Orbits Are Elliptical:</u></p> <p>"All the experimentally harvested information says that the 'field' must now be recognized as a complex of never-straight lines, which, at their simplest, always will be very great circular orbits. And the orbits are all elliptical due to the fact that unity is plural and at minimum two. There will always be at least one other critical proximity aberration with both of its diametric alterations of orbit."</p> <p>- Citation and context at Field, 14 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Orbital Escape from Critical Proximity:</u> (2)</p> <p>"Little individuals in orbit around little berry patches, fruit trees, nut piles, and fishing holes are instinctively programmed to pick up rocks and pile up walls around the patches, orchards, and gathering places. Some men floating on the waters and blown by the wind were challenged to respond to the accelerating frequency of stress and high-energy impacts, and they went into vastly longer orbital voyages. Others went into lesser and slower orbits on camels and horses, or even slower orbits on their own legs. The effect of human beings on other human beings is always precessional. All of us orbit around one another in ever greater acceleration, finally going into greater orbits. The critical-proximity fall-in and its 99,9999 percent designed-in programming becomes no longer in critical-proximity evidence, while all the time the apprehending and comprehending of the generalized principles elucidates their eternal integrity in contrast to the complex inscrutability of the local critical-proximity aberrations permitted and effected in pure principle whenever the frictional effect on the two stones lying before us overcomes their tendency to fall into one another-- with naught else in Universe but two stones-- which statement"</p> <p>- Cite SYNERGETICS text at Sec. 1009.72; RBF galley rewrite of 29 Dec'73</p>
<p><u>Orbits Are Elliptical:</u> (1)</p> <p>See Aberration Eccentric: Eccentricity Otherness Restraints & Elliptical Orbits</p>	<p>RBF DEFINITIONS</p> <p><u>Orbital Escape from Critical Proximity:</u> (3)</p> <p>"In itself discloses our proclivity for forgetting all the billions of atoms involved in the two stones, and their great electron orbits around their nuclei; guaranteeing the omniacceleration, yet synergetically and totally cohered by the mass-interattractiveness, which is always more effective (because of its finite closures) than any of the centrifugal disintegrative effects of the acceleration. All the inter-aberrations imposed on all the orbits bring about all the wave-frequency phenomena of our Universe. The unique wave frequencies of the unique 92 chemical elements are unique to the local critical-proximity event frequency of the elemental event paterings locally and precessionally regenerated. Finally, we must recall that what man has been calling 'linear' is simply big orbit arc seemingly attained by escaping at 90 degrees from local orbit. There are only two kinds of acceleration, greater and lesser, with the greater being like the lesser, with the lesser being like the radius of the nucleus of an atom in respect to the diameter of its electron shell."</p> <p>- Cite SYNERGETICS text at Sec. 1009.72; RBF galley rewrite of 29 Dec'73</p>
<p><u>Orbits Are Elliptical:</u> (2)</p> <p>See Field, 14 Feb'73*</p>	<p>RBF DEFINITIONS</p> <p><u>Orbital Escape from Critical Proximity:</u> (4)</p> <p>"Humanity at this present moment is breaking the critical-proximity barrier that has programmed him to operate almost entirely as a part of the ecological organisms growing within the planet Earth's biosphere. His visit to Moon is only symptomatic of his total local social breakout from a land-possessing, fearful barnacle into a world-around-swimming salmon. Some have reached deep-water fish state, some have become world-around migrating birds, and some have gone out beyond the biosphere. Long ago man's mind went into orbit to understand a little about the stars. And little man on little Earth has now accumulated in the light emanating from all the stars a cosmic inventory of the relative abundance of each of the 92 regenerative chemical elements present in our thus-far-discovered billion galaxies of approximately a hundred billion stars each, omnidirectionally observed around us at a radius of 11 billion light years. Man can always go into infinitely great, eternal orbit. Mind always has and always will."</p> <p>- Cite SYNERGETICS text at Sec. 1009.73; RBF galley rewrite of 29 Dec'73</p>

Synergetics Dictionary

Orbital Escape from Critical Proximity:

See Critical Proximity Threshold
 Fall-in Proclivity
 In-ness Proclivity

Orbital Feedback Circuitry vs. Critical Path:

See Local vs. Comprehensive
 Local Radius vs. Wide Arcs
 Linear vs. Orbital
 Radial vs. Orbital

RBF DEFINITIONS

Orbital Feedbacks:

"Conventional 'critical path' conceptioning is 'linear' and self-underinformative. Only orbital feedbacks are valid. Orbital, critical feedback circuits are pulsative, tidal, importing and exporting. Critical path elements are not overlapping linear modules in a plane. Each step survives after completion; like a building, they are regenerative feedbacks, circuits."

- Cite RBF to EJA, 3200 Idaho, Wash. DC, 10 Sep'74

SECS, 1130.21 + 1130.22

Orbital Interlinking:

See Ninety-degreeness, 5 Jun'73

RBF DEFINITIONS

Orbital Feedback Circuitry vs. Critical Path:

"Orbital feedback circuits are pulsative, tidal, importing and exporting.
 "Each circuit is a year. Years are not linear.
 "Critical path conceptioning is 'linear' and self-misinformative."

- Cite RBF holograph, Wash. DC: 9 Sep'74

Orbiting Magnitudes:

(1)

See Astro & Nucleic Interpositioning
 Atom as Solar System
 Chords & Arcs
 Physics as Internal Affairs of the Atom
 Rules of Interval
 Relative Activity Diameters of Stars & Electrons
 Human Sense Ranging & Information Gathering
 Sweepout
 Local Radius vs. Wide Arc
 Nucleus & Nebular: Nucleus & Galaxies
 Orbital Feedback Circuitry vs. Critical Path

TEXT CITATIONS

Orbital Feedback Circuitry vs. Critical Path:

s535.20 - 19 Nov'74
 1009.56
 s1130.20 - 15 Jan'74
 1032.23
 RBF holograph, Santa Barbara 12 Feb'73

TEXT CITATIONS

Orbiting Magnitudes:

Synergetics, Sec. 1009.20, 1009.30, 1051.51

Synergetics Dictionary

<p><u>RBF DEFINITIONS</u></p> <p><u>Orbiting Magnitudes:</u> (2)</p> <p>See Compound: Difference Between Atoms & Compounds, 27 Dec'73 Acceleration, 15 Feb'73 Radiation: Speed Of (C)(D) Event, 8 Mar'73 Field, 14 Feb'73 Constellar, 3 Oct'72 Pneumatic Structures, 10 Jul'62 Internal Designing Capability Sequence (1) Subconscious, 14 Feb'72 Tunability, Mar'66 Gravity: Circumferential Leverage, (2) Orbital Escape from Critical Proximity, (2)(3)</p>	<p><u>Orbit: Orbiting:</u> (3)</p> <p>See Orbits are Elliptical Orbital Feedbacks Orbitally Interlinking Orbiting Magnitudes Orbital Closure Orbital Phase Orbital Escape from Critical Proximity Orbital Feedback Circuitry vs. Critical Path</p>
<p><u>Orbital Phase:</u> (1)</p> <p>See Umbilical Cord, 4 Mar'73</p>	<p><u>Orchestra: Orchestration:</u></p> <p>See Symphony</p>
<p><u>Orbit: Orbiting:</u> (1)</p> <p>See Birth: When You are Born You Go into Orbit Circle Co-orbiting Co-orbiting of Earth & Moon Around Sun Critical Proximity Co-orbiting Ellipse Linear vs. Orbital Motion: Six Positive & Negative Motions Multiorbital Radial vs. Orbital Spinning & Orbiting Unwrap the Orbitals Interorbiting Otherness Restraints & Elliptical Orbits Local Orbit</p>	<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"There is no true 'noise' or 'static.' There are only as yet undifferentiated and uncomprehended frequency and magnitude orders. Chaos and ignorance are both conditions of the <u>Wain's</u> <u>only-sense-harvested</u> and stored information, as yet unenlightenedly reviewed and comprehendingly processed by the order-seeking and -finding mind."</p> <p>- Cite SYNERGETICS text at Sec. 532.13; RBF galley rewrite 7 Nov'73</p>
<p><u>Orbit: Orbiting:</u> (2)</p> <p>See Acceleration of Change (1) Cone, 22 Sep'73 Critical Proximity, 15 Feb'73; 10 Feb'73 Ecology, 15 Feb'73 Ecology Sequence (G)* Field, 14 Feb'73* Einstein: General Theory & Special Theory, 4 Mar'73 Dancing, 6 Jul'62 Gravity (b) Line, 7 Nov'72 Mass Attraction, 6 Mar'73* Normal, 6 Mar'73*; 22 Jan'73 Precession, 24 Sep'73 Relative Asymmetry Sequence (1)* Radiation: Speed Of (D) Unity is Plural, 14 Feb'73* In, Out & Around Experiences, (1) Four Intergearred Mobility Freedoms, 2 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"Science has been cogently defined by others as the attempt to set in order the facts of experience. When science discovers order subjectively it is pure science. When the order discovered by science is objectively employed it is called applied science. The facts of experience are always special cases. The order sought for and sometimes found by science is always eternally generalized; that is, it holds true in every special case. The scientific generalizations are always mathematically stable as equations with one term on one side of the equation and a plurality of at least two terms on the other side of the equation."</p> <p>- Cite RBF Ltr. to Karan Singh (draft) incorporated in SYNERGETICS at Sec. 161, 13 Mar'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"I am not a creator. I am a swimmer and a dissembler of irrelevancies. Everything we need to work with is already around us, although most of it is initially confusing. To find <u>order</u> in what we experience we must first inventory the total experiences, then temporarily set aside all irrelevancies. I do not invent my thoughts. I merely separate out some local patterns from a confusing whole. . . . Flight was the discovery of the lift-- not the push."</p> <p style="text-align: center;">┌ For full text see Robt. W. Marks citation, 1960. ┐</p> <p>- Cite RBF quoted by William Kuhns in "The Post-Industrial Prophets: Interpretations of Technology," Harper- Colophon, p.222, 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"We become more aware of this uniqueness of organizing principle in the Universe, in science. The long held myth that science wrests order out of chaos is fast disappearing in due ratio to the extent that all great scientists have found the Universe to exhibit an a priori orderliness. All the various specialties are discovering that their variously remote studies which seemingly 'ordered' local aspects of nature are converging within progressively simpler and more comprehensive patterns. The 'ordering' is coming together. When we refer to the computer and automation taking over we refer really to man's externalization of his internal and organic functions into a total organic system which we call industrialization. This metabolic regenerating automated organism is going to be able to support life in an extraordinary way. The machines will increasingly assume various specialized functions. Man who was born spontaneously comprehensive but was focused by survival needs into specialization is now to be brought back to comprehensivity."</p> <p>- Citation and context at <u>Population Sequence</u> (5), Feb'67</p>
<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>". . . Nature proceeds from the obviously orderly and symmetrical to the nonobviously, but always orderly transformation phases known as asymmetries which, having gone through their maximum or peak positive phase asymmetry . . . always return transformatively thereafter through an orderly progression of decreasing asymmetry to the fleeting passing through the condition of obvious symmetry or equilibrium popularly recognized as 'order.'"</p> <p>- Cite Synergetics Draft, "Symmetry," Sec 532:02, July 1971.</p>	<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"Order is achieved through-- positive and negative-- Magnitude and frequency controlled alteration Of the successive steering angles."^a We move by zig-zagging control from From one phase of physical universe evolution to another."</p> <p>- Cite HOW LITTLE, p. 71. - Also cite AAUW Journal, May '65.</p>
<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"What the scientists have always found by physical experiment was an a priori <u>orderliness</u> of 'nature' or 'universe' always operating at an elegance level which made the discovering scientists' own working hypotheses seem so crude by comparison to the discovered reality as to seem relatively disorderly."</p> <p>- Cite Synergetics Draft, "Symmetry," Sec 532:0T, July 1971.</p>	<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"As man becomes less of a subconscious function in the universe, which he has been, and consciously employs his faculty to differentiate experiences and to reassociate them in preferred ways, he will become more and more effective. By becoming more conscious and developing more and more <u>orderliness</u>, he simply discovers more facets of the universe. Neither he nor the universe are getting more complex." As he learns more, man is becoming more orderly, more understanding, and more understandable."</p> <p>(The question was: "Do you believe the world is getting more complex?")</p> <p>- Cite AAUW JOURNAL, May 1965, P. 176</p>
<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"All the biologicals are antientropic. A baby couldn't grow to be entropic; the child would shrink, getting smaller and smaller. But a child get's bigger, so it's antientropic. And it's absolutely order-- the most beautiful pair of two eyes doing whatever. Everything about it is antientropic. And everything about a human being that makes you sit where you're sitting in a quiet way is because we're seeking to understand and put in order. Understanding is finding order."</p> <p>- Citation and context at <u>World Game</u> (7), RBF to World Game at NY Studio School, from Saturn tape #327, p.13, Jun-Jul'69</p>	<p>RBF DEFINITIONS</p> <p><u>Order:</u></p> <p>"<u>Order</u> is achieved through positive and negative, magnitude and frequency-controlled alteration of the successive steering angle. We move by zigzagging control from one phase of physical Universe evolution to another."</p> <p style="text-align: right;">-Cite AAUW JOURNAL, May 1965, P. 176-</p> <p>- Citation and context at <u>Ruddering: Rudder Concept</u>, May'65</p>

Synergetics Dictionary

RBF DEFINITIONS

Order:

The "Extraordinary world of weightless, invisible waves is governed by mathematical laws and not by the opinions of men. The magnificent orderliness of that ever individually and uniquely patterning weightless wave universe is not of man's contriving. The infinite variety of evolutionary complexities, inherent to the orderliness of complementary principles operative in the universe, is of unending synergetic uniqueness."

- Cite MEXICO, p. 102, 10 Oct'63

RBF DEFINITIONS

Order & Disorder:

"...There is a great deal of difference between absolute disorder, i.e., chaos, and the only one-sidedly considered, Relative asymmetry, whose pulsative balancing At a later time with other systems was not awaited By the too hasty and biased observer. On the contrary, I am convinced by comprehensively considered experience That a total integrity of order prevails..."

- Cite BRAIN & MIND, p.91 May '72

RBF DEFINITIONS

Order:

"The actual fact is that each scientist penetrating into his own area, when he has made a discovery, has always discovered orderliness. Orderliness was a priori. There was no beginning of orderliness. He went from a rather rough disorderly hypothesis and had enough conviction to set up an apparatus to make an experiment and after the experiments were made he found orderliness. Now they are beginning to discover that gradually they are all coming into the same room, and all the orderliness is permeated, so the orderliness is all interrelated. They are suddenly coming into a comprehensive coordinate system employed by nature, which apparently, as far as any scientist could possibly tell you, if you were to talk comprehensively, has always been operative. There is no beginning about it."

- Cite Oregon Lecture #4, p. 128. 6 Jul'62

RBF DEFINITIONS

Order & Disorder:

"The seeming disorder of physical entropy is only superficial and explains why metaphysical thought can always find the orderliness which engulfs disorderliness. Disorderliness is nonthinking."

- Citation & context at Relationship Analysis (1)(2), Jun'66
- Cite NASA Speech, p.95, Jun'66

RBF DEFINITIONS

Order:

"I am not a creator. I am a swimmer and a dismitter of irrelevancies. Everything we need to work with is around us, although most of it is initially confusing. To find order in what we experience we must first inventory the total experiences, then temporarily set aside all irrelevancies. I do not invent my thoughts. I merely separate out some local patterns from a confusing whole. The act is a dismissal of pressures. Flight was the discovery of the lift-- not the push."

- Cit Robt. W. Marks DYNAMION WORLD OF RBF, p.63, 1960

RBF DEFINITIONS

Order & Disorder:

"Men of the Einstein Age are discovering the universal orderliness of constant, comprehensive transformation, utterly transcendental in the exquisite and magnificent orderliness of its wavelength and frequency when compared to the crude disorderly, conscious thinking and articulation of mere humans."

- Citation & context at New York City (12); 1964

RBF DEFINITIONS

"Order & Disorder:

"Order is obviously the complementary, but not mirror-image, of disorder."

- Citation and context at Syntropy & Entropy, 5 May'74

RBF DEFINITIONS

Order & Disorder:

"We don't have any idea of the relative depth of the heavens. The fact that the heavens seem to be a sort of array which we are familiar with is extremely deceiving. Where those stars really are we don't hardly know at all. They seem to be rather disorderly in the sky. They may be in fabulously orderly array if we were able to get better kinds of reports. When we begin to get into the macrocosm this same kind of feeling about this disorderly chaos obtained for a long time. Men's minds have been confused and therefore they have thought of the Universe as confused. Not being a nonsimultaneously conceptual affair gets the human mind into a lot of troubles. At any rate, man thought of the universe as chaotic. . . ."

"We find that the portion of the Universe that is still chaos is rapidly diminishing. As fast as we get a telescope or microscope, the orderliness is discovered and it begins to be fairly much in evidence that the Universe was at all times orderly. The only idea of disorderliness was in the human mind. We are dealing in a finite Universe of extraordinary order and which was always orderly and the only thing which has ever been disorderly is in man's mind."

- Cite GREEN Lecture 3 - pp. 104-105, 5 Jul'62

Synergetics Dictionary

<p><u>Order & Disorder:</u> (1)</p> <p>See Symmetry & Asymmetry Syntropy & Entropy Wow: The Last Wow Expanding Physical Universe vs. Contracting Metaphysical Universe Information vs. Entropy Meshing & Nonmeshing</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: right;"><u>Orderliness Operative in Nature:</u> (1)</p> <p>"... All of these specialists, we get more and more of them in there, and even though each one is getting finer and finer, each of them are shoulder to shoulder representing a larger and larger angle and they begin to overlap. I spoke of them all discovering themselves rally in the same Universe and they were not in separate departments of nature. They began then to have to divide up the work, and every one of them had made an important discovery, recognizing that in his line he had discovered a <u>greater orderliness operative in nature</u> than he had supposed was there; and then they are finding an integrity of all those informations.</p> <p>"... In the immediate decade ahead you are going to hear more and more from the world of science, stating that it is clearly discovering a comprehensive operational integrity, a very complex plurality of clearly differentiable principles, such as tension and compression that are complementary and utterly reliable in their total interactions and the whole thing is clearly not something that has come out of the ooze at all but the pure principles were generalizable and of no weight at all. The principles were always there and the generalizable had nothing to do with the special case. The generalized was</p> <p style="text-align: right;">Cite Oregon Lecture #5, pp.162-163, 9 Jul'62</p>
<p><u>Order & Disorder:</u> (2)</p> <p>See Baseball, 11 Feb'73 Extraterrestrial Humans, 23 Aug'70 Games, 13 Dec'73 Pendulum Model vs. Scenario Model, 23 Dec'68 Relationship Analysis, (1)(2)* Syntropy & Entropy, 5 May'74* Vector Equilibrium, (I) Wow, (2) Macro-micro, 1964 New York City, (12)*</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: right;"><u>Orderliness Operative in Nature:</u> (2)</p> <p>"always present in the special case, but it had nothing to do with the avoiddupois, for it is not weighable. Mathematics weighs nothing and this is mathematics. It is a mathematical correspondence."</p> <p style="text-align: right;">- Cite Oregon Lecture #5, pp. 162-163, 9 Jul'62</p>
<p><u>Order Finds Itself:</u> (1)</p> <p>See Entropy as Lack of Information Information Field</p>	<p style="text-align: right;"><u>Order Underlying Randomness:</u> (1)</p> <p>See Connections and Relatedness Number: Tetrahedral Number Relationship Analysis</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Order Finds Itself:</u> (2)</p> <p>See Chaos, Jun'66</p>	<p style="text-align: right;"><u>Order Underlying Randomness:</u> (2)</p> <p>See Relationships, 15 Oct'64</p>

Synergetics Dictionary

<p><u>Order:</u> (1)</p> <p>See Absolute Order Antientropic Ordering Principles Chaos: Myth that Scientists Wrest Order from Chaos Disorder Eternal Orderliness Generalization: Law of Contractively Orderly Generalizations Local Order Omniorderly: Omniinterorderliness Order & Disorder Primordial Progressive Order: Law Of Manifest Rearrange Elemental Order Sorting Nature's Subvisible Order</p>	<p>RBF DEFINITIONS</p> <p><u>Organic:</u> "Organic means regenerative system integrity."</p> <p style="text-align: right;">- Citation and context at <u>Unit</u>, 26 May'72</p>
<p><u>Order:</u> (2A)</p> <p>Ecology, 5 Jul'62 See Generalization Sequence (1) Instrumentation, 1963 Intellect, 6 Jul'62 Life, 22 Apr'68 Man's Conscious Participation in Evolution, May'65 Mind, Dec'72 Number: Tetrahedral Number, May'65 Omnidirectional, 27 Feb'72 Population Sequence (5)* Proton & Neutron, 22 Jul'71 Rudderling: Rudder Concept, May'65* Seed, Dec'72 World Game (7)* Synergetics, 20 Jan'75; 17 Oct'77 Large Pattern, 22 Jan'75 Truth, Jan'72 Invisible Operation of Thousands of Radio Programs, (a) Syntropy & Time, 14 May'75 Nucleus, 13 Nov'75</p>	<p>RBF DEFINITIONS</p> <p><u>Organic:</u> "... There is original integral and metabolic regeneration which we call <u>organic</u>."</p> <p style="text-align: right;">- Cite THIS IS YOUR GRAND STRATEGY, 4 Feb '68, p. 32.</p>
<p><u>Order:</u> (2B)</p> <p>See Mutual Survival Principles, (3)</p>	<p>RBF DEFINITIONS</p> <p><u>Organic Chemistry:</u> "It could be that organic chemistries do not require nuclei."</p> <p style="text-align: right;">- Cite SYNERGETICS Draft at Sec. 4.15.20, 22 Jun'72</p>
<p><u>Ordinates:</u></p> <p>See Coordinates: Coordinate System Subordinate & Superordinate</p>	<p>RBF DEFINITIONS</p> <p><u>Organic Chemistry:</u> "The cube relates to <u>chemistry</u>, the external affairs of the atom/ <u>Organic chemistry</u> begins with the cube: carbon. The tetrahedron, octahedron and icosahedron relate to physics, the ^{1/4}external affairs of the atom."</p> <p style="text-align: right;">- Cite RBF to LJA, Blackstone Hotel, Chicago, 31 May 1977. - Citation as <u>Physics: Difference Between Physics and Chemistry</u>, 31 May'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Organic Chemistry:</u></p> <p>"Apparently, all the chemical compounding in the organic chemistry relates to the polarized system."</p> <p style="text-align: right;">(1)</p> <p>- Cite Oregon Lecture #7, p. 235. 11 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Organic & Inorganic:</u></p> <p>"The scientist as specialist in isolation of phenomenon from phenomena has now come-- by progressive reduction of the superficially remote behavior complexities of the organic and inorganic worlds-- to discover simplified common component behavior phases of each world respectively. Here the energetic interactions of the resultant structures are uniform. Here the man-controlled original inorganic growth is in all ways congruent with the animate, organic 'de-grown' by man, or separated out toward primary functions of the original totality: Universe."</p> <p style="text-align: right;">(1)</p> <p>- Cite TOTAL THINKING, (I&I), p.226, May'49</p>
<p><u>Organic Chemistry:</u></p> <p style="text-align: right;">(1)</p> <p>See Hex: Chemical Hex Inorganic Chemistry Organic & Inorganic Chemistry van't Hoff</p>	<p>RBF DEFINITIONS</p> <p><u>Organic & Inorganic Chemistry:</u></p> <p>"What Linus Pauling found for the inorganic chemistry . . . van't Hoff found for the <u>organic chemistry</u>."</p> <p style="text-align: right;">(1)</p> <p>- For citation and context see <u>Tetrahedroning</u>, 10 Jul '62</p>
<p><u>Organic Chemistry:</u></p> <p style="text-align: right;">(2)</p> <p>See Universal Joint: <u>Tetrahedron</u>, 9 Nov'73</p>	<p><u>Organic & Inorganic:</u></p> <p style="text-align: right;">(1)</p> <p>See Animate & Inanimate</p>
<p>RBF DEFINITIONS</p> <p><u>Organic & Inorganic:</u></p> <p>"Organic chemistry and inorganic chemistry are both tetrahedrally coordinate. This relates to the thinking process where the fundamental configuration came out a tetrahedron. Nature's formulations here are a very, very high frequency thing. Nature makes viruses in split seconds. Whatever she does has very high frequency. We come to the tetrahedron as the first spontaneous aggregate of the experiences. We discover that nature is using tetrahedron in her fundamental formulation of the organic and inorganic chemistry. All structures are tetrahedrally based and we find our thoughts resolving themselves spontaneously into the tetrahedron as it comes the the generalization of the special cases which are the physics or the chemistry."</p> <p style="text-align: right;">(2)</p> <p>- Cite SYNERGETICS draft at Sec. 620.08, Nov'71</p>	<p><u>Organic & Inorganic:</u></p> <p style="text-align: right;">(2)</p> <p>See <u>Tetrahedron</u>, 2 Jul'62 <u>Tetrahedroning</u>, 10 Jul'62 Social Problems: <u>Tetrahedral Coordination Of</u>, 4 May'57</p>

Synergetics Dictionary

RBF DEFINITIONS

Organic Model: Biological World as Model for Society:

"We have to look on our society
As we look on the biological world in general
Recognizing, for instance,
The extraordinary contributions
Of the fungi, the manures, the worms, et.al.--
In the chemical reprocessing
And fertility upgrading of the earth.
We must learn to think
Of the functions of the trees' roots
As being of equal importance
To the leaves' functions.
We tend to applaud
Only the flower and the fruit
Just as we applaud only the football player
Who makes the touchdown
And not the lineman
Who opened the way."

- Cite HOW LITTLE, p. 69. Oct. '66
- Cite AAUW JOURNAL, p. 174, May '65

RBF DEFINITIONS

Organics and the Nucleus:

"It could be that organics doesn't require the nucleus...
that you and I are the nucleus. The first nuclear cube comes
in at 14."

- Cite RBF to EJA, 3200 Idaho, Wash. DC (1st draft), 28 May'72

Organic Model:

See Epigenetic Landscape
Metabolic Flow
Social Sciences: Analogue to Physical Sciences

Organic Tunability:

See Space as Nontuned Angle & Frequency Information,
22 Feb'77

RBF DEFINITIONS

Organics and the Nucleus:

"It could be that organics doesn't require the nucleus;
that whatever the mysterious, weightless phenomenon regenerative
life may be, may be the nucleus of all biological species
including you and me. The first closest-packed, omnitri-
angulated, ergo structurally stabilized, cube has 14 spheres,
but without a nucleus. This could be carbon. And carbon is
the initially closest-packed, omnisymmetrical, polyhedral
fourteenness to present a surface of triangular nest availability
for mounting hydrogen structurally to produce all organic
matter."

- Cite RBF to EJA, 3200 Idaho, Wash. DC (3rd draft), 28 May'72
incorporated in SYNERGETICS at Sec. 415.21

RBF DEFINITIONS

Organism:

"Clearly all organisms consist physically and in entirety
of inherently inanimate atoms."

- Cite RBF correction in margin of "Chronicle" sequence, p.14,
SYNERGETICS, in EJA car enroue Charlottesville-Wash, 3 Jun'72

RBF DEFINITIONS

Organics and the Nucleus:

"It could be that organics doesn't require the nucleus;
that whatever the mysterious weightless phenomenon regenerative
life may be, may be the nucleus of all biological species
including you and me. The first closest-packed, omnitri-
angulated, ergo structurally stabilized, cube has 14 spheres,
but without a nucleus. This could be carbon. And carbon has
the polyhedral nest availability for mounting hydrogen of all
organic matter."

- Cite RBF to EJA, 3200 Idaho, Wash. DC (2nd draft), 28 May'72

RBF DEFINITIONS

Organisms:

"What is inanimate is clearly the whole physical world.
But what is animate they lost track of altogether. The
organics are information processing devices. The
creatures and the trees adjust to information. But life
is none of these things. The organism gets information
for life, but it is not life. Man has confused the
telephones with the people talking on the telephones."

- Cite RBF to EJA, 3200 Idaho, DC, 12 Feb '72

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Organism:</u></p> <p>"The Universe is The min-max, self-regenerative <u>organism</u>."</p> <p>"Human <u>organisms</u> are Universe's Most complex local technologies."</p> <p>"<u>Organisms</u> are machines, Life is not the organism-machine. The organic residues progressively disassociate And reassociate chemically. Only the physical reassociations Are organic machines which are inherently temporary Evolutionary formulations."</p> <p style="text-align: center;">- Cite Dreyfus Preface, "Decease of Meaning," 28 April 1971, pp, 1, 2, and 3.</p>	<p><u>Organic:</u> <u>Organica:</u> <u>Organism:</u> (2)</p> <p>See Compounding of Systems, 10 May'76 House as Terminal of Community Mechanism, 20 Sep'76 Industrialization, (A); Feb'72; Jun'66 Intuition: Hot Line Of, Jan'72 Minimum Awareness, (1) Physics: Difference Between Physics & Chemistry, 31 May'71* Regenerativity, 17 Jan'75 Space as Nontuned Angle & Frequency Information, 22 Feb'77 Turtle Hex-pent, 12 May'75 Unit, 26 May'72* Vector Equilibrium: Polarization, (1)(2) Environment, 29 Mar'77 Subconscious, 20 Feb'77 Human Beings at the Center, (1)(2)</p>
<p><u>Organism ≠ Life:</u> (1)</p> <p>See Life is Not Physical Metabolic Flow ≠ Man</p>	<p><u>Organic:</u> <u>Organica:</u> <u>Organism:</u> (3)</p> <p>See Organic Organic Chemistry Organic & Inorganic Organic Model: Biological World as Model for Society Organica & the Nucleus Organic Tunability Organism ≠ Life</p>
<p><u>Organism ≠ Life:</u> (2)</p> <p>See Information, 12 Feb'72 Life is Not Physical, 20 Feb'77 Human Beings, 22 Jun'77 Womb of Permitted Ignorance, (1)(2)</p>	<p><u>Organizing Principle:</u></p> <p>See Order, Feb'67</p>
<p><u>Organism:</u> (1)</p> <p>See Animate & Inanimate Life Organism ≠ Life Community as Unit Mechanical Organism Human Organism</p>	<p><u>Organization:</u> <u>Organizational Structure:</u> (1)</p> <p>See Self-organizing Principle Social Organization Social Problems: Tetrahedral Coordination Of Will of Organizations No Organization</p>

Synergetics Dictionary

<p><u>Organization: Organizational Structure:</u> (2) See Wealth, 20 Sep'76</p>	<p>RBF DEFINITIONS</p> <p><u>Originality:</u> "It is found in cybernetics that <u>original</u> questions, asked either by humans or computers, are always produced by unexpected interferences."</p> <p>- Citation at <u>Interference</u>, May'65 - CITE ARJW JOURNAL; May 1965, p. 176.</p>
<p><u>Oriental Feeling About Death:</u> See Death, 1970</p>	<p><u>Origin: Original Event:</u> (1)</p> <p>See Beginning Life's Original Event Question: Original Question</p>
<p><u>Orientability: Orientation:</u></p> <p>See Four-dimensional Reality Multidimensional Accommodation Observation: Observing Time-angle-size Aspects Vectorial Orientation Axis of Conceptual Observation Omnitriangularly Oriented No Up & Down In, Out & Around System Center of Observation</p>	<p>RBF DEFINITIONS</p> <p><u>Original Sin:</u> "The concept of Original Sin is completely invalid. It is a denial of regenerativity. It derives from failure to appreciate the aberration of lags, the differential rate of recalls."</p> <p>- Cite RBF to EJA, 3200 Idaho, Wash DC, 29 May'72</p>
<p>RBF DEFINITIONS</p> <p><u>Originality:</u> "An 'original' or 'prime' event is conceptual. . . originality being inherently complex integrals."</p> <p>(For later context see <u>Energy Event</u>, May'71)</p> <p>- Cite RBF marginalia, Synergetics Draft at Sec. 511.01 (Nov) done at Boston in April 1971.</p>	<p><u>Original Sin:</u> (1)</p> <p>See Perfection: Utter Perfection Unattainable by Humans Physical: Corruptibility Of Residual Error Truth as Progressive Diminution of Original Error Residual Ignorance</p>

Synergetics Dictionary

<p><u>Original Sin:</u> (2)</p> <p style="text-align: center;">See Local vs. Comprehensive (1)(2)</p>	<p>RBF DEFINITIONS</p> <p><u>Oscillation:</u></p> <p>"So what we call life is oscillation between varying degrees of asymmetry, or lags in conceptioning, which bring about what seems to be the temporal."</p> <p style="text-align: right;">- Cite RBF to EJA, Beverly Hotel, NYC, 13 Mar'71 - Citation & context at <u>Life</u>, 13 Mar'71</p>
<p><u>Origin: Original Event: Originality:</u> (2)</p> <p style="text-align: center;">See Isotropic Vector Matrix, 30 Nov'72 Spherics, 30 Nov'72 Interference, May'65* Genius: Children Are Born Geniuses, 8 Apr'75</p>	<p>RBF DEFINITIONS</p> <p><u>Oscillations & Pulsation:</u></p> <p>" . . . The difference between the physical and the metaphysical is the omnipulsative asymmetry of all the physical <u>oscillation</u> in respect to the equilibrium. . . "</p> <p style="text-align: right;">- Cite RBF dictation to EJA for SYNERGETICS, Sec. 205.3, Oct. '71. - Citation at <u>Omnipulsative Asymmetry</u>, Oct'71</p>
<p>RBF DEFINITIONS</p> <p><u>Oscillation:</u></p> <p>"While nature <u>oscillates</u> and palpitates asymmetrically in respect to the frame of omnirational vector equilibrium, the plus and minus magnitudes of asymmetry are rational fractions of the omnirationality of the equilibrious state, ergo, omnirationally commensurable and modelable to the sixth power, which order of powering embraces all experimentally disclosed physical behavior."</p> <p style="text-align: right;">- Citation & context at <u>Vector Equilibrium</u>, 21 Dec'71 - Cite RBF to EJA, 3200 Idaho Ave, Washington DC, 21 Dec. '71</p>	<p>RBF DEFINITIONS</p> <p><u>Oscillations & Pulsation:</u></p> <p>"Physics finds only waves. Some are of exquisitely high frequency, but inherently discontinuous because consisting of separate event packages. They are <u>oscillating</u> to and from negative Universe, that is to say, in <u>pulsation</u>."</p> <p style="text-align: right;">- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971 - Citation & context at <u>Wave</u>, 22 Apr'71</p>
<p>RBF DEFINITIONS</p> <p><u>Oscillation:</u></p> <p>" . . . the disappearance, or the isolating aspect, of our Universe . . . is always present. It <u>oscillates</u> with what you call the tetrahedra as unit measure. . . "</p> <p style="text-align: right;">- Citation and context at <u>Invisible Tetrahedron</u>, 1 May'71</p>	<p>RBF DEFINITIONS</p> <p><u>Oscillations & Pulsation:</u></p> <p>" . . . Temporality is time and the relative asymmetries of <u>oscillation</u> are realizable only in time-- in the time required for <u>pulsative</u> frequency cycling. . . "</p> <p style="text-align: right;">- Cite RBF dictation for SYNERGETICS, Beverly Hotel, New York, 24 Feb. '71. See Sec. 205.5 of Oct. '71. - Citation & context at <u>Time</u>, 28 Feb'71</p>

Synergetics Dictionary

<p><u>Oscillation & Pulsation:</u> (1)</p> <p>See Inward & Outward Twoness Triangular-cammed Model</p>	<p><u>Osculation:</u></p> <p>See Posterioral Osculations Kissing</p>
<p><u>Oscillation & Pulsation:</u> (2)</p> <p>See Calculus, Jul'71 Omnipulsative Asymmetry, Oct'71* Time, 28 Feb'71* Wave, 22 Apr'71* Inward & Outward Twoness, Aug'71 Vector Equilibrium Field, 20 Dec'73 Nonstate, 11 Sep'75</p>	<p><u>Osmosis: Osmotical:</u></p> <p>See Ecology Sequence, (1); (a)</p>
<p><u>Oscillation:</u> (1)</p> <p>See Boltzmann Sequence Discontinuity Energetic Functions Meshing Nuclear & Nebular Zonal Waves Observing vs. Articulation Pulsation Radial-circumferential Vector Equilibrium: Field of Energy Wave-angle Oscillating Extremes Wow: The Last Wow Pulse: Pulsive: Pulsivity Interoscillate</p>	<p>RBF DEFINITIONS</p> <p><u>Other:</u></p> <p>"Humanity can only survive by complete regard for all of humanity. Humans are beginning to learn, 'No other, no me.'"</p> <p style="text-align: right;">- Citation and context at <u>Ecology Sequence</u> (G), 5 Jun'73</p>
<p><u>Oscillation:</u> (2)</p> <p>See Calculus, Jul'71 Cosmic Discontinuity & Local Continuity, 15 Jan'74 Invisible Tetrahedron, 1 May'71* Inward & Outward Twoness, Aug'71 Omnipulsative Asymmetry, Oct'71* Plastic Flowers, Oct'70 Reciprocity (3), May'49 Time, 28 Feb'71* Transformation, 10 Oct'50 Style, 31 May'71 Vector Equilibrium, 21 Dec'71* Twoness, 23 May'72 Prime Dichotomy (1)(2) Metaphysical & Physical Tetrahedral Quanta, 25 Mar'71 Finite Minus De-finite, Nov'71 Six Motion Freedoms & Degrees of Freedom, (5)(6) Energetic Functions, 8 Aug'77</p>	<p>RBF DEFINITIONS</p> <p><u>Other:</u></p> <p>"There will always be at least one other."</p> <p style="text-align: right;">- Citation and context at <u>Field</u>, 14 Feb'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Other:</u></p> <p>"Unity relates to realizable experience which is omnidirectional. Ergo, there is not just one 'other.' There are always at least 12 'others.' Ergo, vector equilibrium, which is subfrequency."</p> <p style="text-align: right;">- Cite RBF to EJA, Bear Island, 25 August 1971.</p>	<p>RBF DEFINITIONS</p> <p><u>Otherness:</u></p> <p>"Without <u>otherness</u> there is no consciousness and no direction. If there were only one entity-- say it is a sphere called 'me'-- there would be no Universe: no <u>otherness</u>: no awareness: no consciousness: no direction. Once another entity, let's say a sphere, is sighted, there is awareness and direction. There is no way to tell how far away the other sphere may be, nor what its size may be. Size sense comes with comparative experience."</p> <p style="text-align: right;">- Cite SYNERGETICS draft At Sec. 411.03, 28 May '72</p>
<p>RBF DEFINITIONS</p> <p><u>Other:</u></p> <p>". . . Twoness is the beginning and essence of consciousness, with which human awareness begins: consciousness of the <u>other</u>, the <u>other</u> experience, the <u>other</u> being, the child's mother. . . . Early humanity's concept of the minimum increment of time was the second, because time and awareness begin with the second experience after the other. . . . Life and the universe that goes with it begins with two spheres: you and me. . . and you are always prior to me."</p> <p style="text-align: right;">- Cite RBF marginalis on Synergetics draft, Sec. 223.31 - 19 Jun '71.</p>	<p>RBF DEFINITIONS</p> <p><u>Otherness:</u></p> <p>"Universe is a scenario of events, The regenerative interactions Of all <u>otherness</u> and me."</p> <p style="text-align: right;">- Cite A Definition of Evolution, p. 1. 15 Sep '71</p>
<p>RBF DEFINITIONS</p> <p><u>Otherness:</u></p> <p>"Only the tetrahedron can accommodate the otherness which is the aberration, otherness being essential to awareness and awareness being the minimum statement of the experience life."</p> <p style="text-align: right;">- Citation & context at <u>Tetrahedron as Primitively Central To Life</u>, 3 Mar '77</p>	<p>RBF DEFINITIONS</p> <p><u>Otherness:</u></p> <p>"Consciousness means an awareness of <u>otherness</u>."</p> <p style="text-align: right;">- Cite SYNERGETICS, "Universe," Sec. 302, 1971 - Citation at <u>Consciousness</u>, 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Otherness:</u></p> <p>"Neither Euclid nor Euler credited the surface on which they were scribing. They failed to identify the surface with the otherness."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash., DC; 8 Feb '76</p>	<p>RBF DEFINITIONS</p> <p><u>Otherness:</u></p> <p>"Communicated means informing self or others."</p> <p style="text-align: right;">- Cite SYNERGETICS, "Universe," Sec. 302, 1971 - Citation at <u>Communication</u>, 1971</p>

Synergetics Dictionary

RBF DEFINITIONS

Otherness:

"The a priori otherness of comparative awareness inherently requires time."

- Cite RBF marginalia on Synergetics draft, Sec. 223.31- 19 Jun '71.

Otherness: At Least Twelve Others:

See Self & Otherness, 19 Nov'74
Initial Frequency, 6 Nov'72
Other, 25 Aug'71
Six Degrees of Freedom, Dec'71

RBF D&FINITIONS

~~Otherness:~~

"Life is the difference between temporality and eternity. . . . Instantaneity would eliminate otherness, time, and self-and-other-awareness. Instantaneity and eternal are both timeless: they are the same."

~~- Cite RBF to EdA
Severly Hotel, New York
13 March 1971~~

- Citation & context at Life, 13 Mar'71

TEXT CITATIONS

Otherness: At Least Twelve Others:

Synergetics : Sec. 502.25

537.12

RBF DEFINITIONS

Other: At Least One Other:

"... Unity is plural and at minimum two. There will always be at least one other critical proximity aberration..."

- Citation and context at Orbits Are Elliptical, 14 Feb'73

RBF DEFINITIONS

Otherness Point:

"Because of discontinuity, the otherness points and subpoints may be anywhere. We start always with any point-- event points being as yet noncomprehended; ergo, initially only as an apprehended otherness entity. Synergetics, as a strategy of converting apprehension to discrete comprehension, always proceeds vectorially."

- Cite SYNERGETICS draft at Sec. 540.07, 24 Sep'73

Otherness: At Least One Other:

See Unity Is Plural, 14 Feb'73
Outside, 26 Jan'73
Aberration, 19 Dec'73

RBF DEFINITIONS

Otherness Restraints & Elliptical Orbits:

(1)

"Angular acceleration is the local accumulation of momentum; angular deceleration is the local depletion of momentum.

"Release from angular acceleration appears to be linear acceleration but the linearity is only theoretical. Linear acceleration is the release from the restraint of the nearest accelerator over to the angularly accelerative or decelerative restraint of the integrated vectorial resultant of all the neighborly dominant forever-otherness restraints in Universe. Linear acceleration never occurs because there is never innocence of otherness.

"The hammer thrower releases his 'hammer's' ball-and-rod assembly from his extended arm's-end grasp seemingly to allow the hammer to take a linear trajectory, but Earth's gravitational pull immediately takes over and converts the quasi-straight trajectory into an elliptical arc of greater orbiting radius than before, but an arc of ever-decreasing radius as the Earth's gravity takes over and the hammer thrower's steel ball seemingly comes to rest on the Earth's surface which is, however, in reality to travel around the Earth's axis in"

- Cite SYNERGETICS, 2nd. Ed. at Secs. 826.11-13, 20 May'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Otherness Restraints & Elliptical Orbits:</u> (2)</p> <p>"synchronized consonance with the other together-huddled atoms of the Earth's surface which, if near the Earth's equator would be at a circular velocity of approximately 1000 miles an hour and, if near the Earth's poles, of only inches an hour around the Earth's axis; but as yet traveling at 60,000 miles an hour around the Sun at a radial restraint of approximately 92 million miles, with the galaxies of the Universe's other nonsimultaneously generated restraints of all the othernesses' overlappingly effective dominance variations, as produced by degrees of neighboring energy concentrations and dispersions. It is the pulsation of such concentrations and dispersions that brings about the elliptical orbitings.</p> <p>"This is fundamental complementarity as intuited in Einstein's curved space prior to the scientific establishment of <u>generalized complementarity</u>, which we may now also speak of as the 'generalized otherness' of Universe. This is why <u>there can only be curved space</u>.</p> <p>"Isaac Newton's first law of motion, 'A body persists in a state of rest or in a straight line except as affected by other forces,' should now be restated to say, 'Any one'</p> <p>- Cite SYNERGETICS, 2nd. Ed. at Secs. 826.13-15, 20 May'75</p>	<p><u>Other Side of the Universe:</u></p> <p>See Annihilation Rubber Glove</p>
<p>RBF DEFINITIONS</p> <p><u>Otherness Restraints & Elliptical Orbits:</u> (3)</p> <p>"considered body persists in any one elliptical orbit until that orbit is altered to another elliptical orbit by the ceaselessly varying interpositionings and integrated restraint effects imposed upon the considered body by the generalized cosmic otherness.' A body is always responding orbitally to a varying plurality of otherness forces."</p> <p>- Cite SYNERGETICS, 2nd. Ed. at Sec. 826.15, 20 May'75</p>	<p><u>Other: Otherness:</u> (1A)</p> <p>See Awareness Balls Coming Together Consideration for Others Dichotomy Eternity: Equation Of Madonna Theme No Otherness & No Awareness No Other, No Me Observer & Otherness Prime Otherness Pulsatively Precessed by the Otherness Self Selfishness Self & Otherness Shape Awareness Swallow the Otherness Previous Otherness No Innocence of Otherness For/ver-otherness</p>
<p>RBF DEFINITIONS</p> <p><u>Otherness We Call 'Space':</u></p> <p>"The closest-packed symmetry of uniradius spheres is the mathematical limit case which inadvertently 'captures' all the previously unidentifiable otherness of Universe whose inscrutability we call 'space.'"</p> <p>- Citation & context at <u>Limit Case: Closest Packed Symmetry As Limit Case</u>, 17 Feb'73</p>	<p><u>Other: Otherness:</u> (1B)</p> <p>See Future Otherness Past Otherness Present Otherness Integral Otherness Secondness = Otherness Macro-micro Otherness Plural Otherness Single Otherness</p>
<p>RBF DEFINITIONS</p> <p><u>Other Side of the Universe:</u></p> <p>"The other side of the Universe is not like the other side of a river, but an inside-outing."</p> <p>- Citation & context at <u>Inside-outing</u>, 17 Jun'75</p>	<p><u>Other: Otherness:</u> (2A)</p> <p>See Communication, 1971* Conceptualize, 17 Feb'73 Consciousness, 1971* Ecology Sequence, (G)* Field, 14 Feb'73* Geometry of Thinking, 16 Dec'73 Eternity, 27 May'72 Isotropic Vector Matrix, 6 Nov'72 Life, 13 Mar'73* Limit Case: Closest Packed Symmetry, 17 Feb'73 Love, May'72; 15 Oct'72 Mother, 17 Oct'72 Motion, 27 May'72 Nature Permits It Sequence, (3) Orbits Are Elliptical, 14 Feb'73* Full, 22 Jun'72 Sensorial Identification of Reality, (1) Somethingness, 16 Nov'72 We-Me Awareness, 31 May'74 Prospects for Humanity, 1 Feb'75 Womb, 20 Feb'73</p>

Synergetics Dictionary

<p>Other: <u>Otherness</u>: (2B)</p> <p>See Visibility & Invisibility of Systems, (1) Individuality & Degrees of Freedom, (2) Pronouns: I = We = Us, (1) Irrelevancies: Dismissal Of, 8 Feb'76 Children as Only Pure Scientists, (2) Tetrahedrons Primitively Central to Life, 3 Mar'77 Environment, 28 Apr'77 Sensings & Eventings, 28 Apr'77 Energetic Functions, 8 Aug'77</p>	<p>RBF DEFINITIONS</p> <p><u>Out</u>:</p> <p>"There is only omnidirectional nonconceptual '<u>out</u>' and the specifically directioned conceptual 'in.' . . ." "'In' is always a direction. 'Out' is not a direction."</p> <p>- Citation & context at <u>In & Out</u>, May'71 - Cite SYNERGETICS draft - "Conceptuality-Space" - May, 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Out</u>:</p> <p>"<u>Out</u> is directionless and timeless."</p> <p>- Cite RBF to EJA, Beverly Hotel, New York, 19 June 1971. - Citation and context at <u>Directionless</u>, 19 Jun'71</p>	<p>RBF DEFINITIONS</p> <p><u>Out</u>:</p> <p>"All the word '<u>out</u>' means is that you are not inside a system. '<u>Out</u>' is not a direction."</p> <p>- Cite RBF to EJA, Beverly Hotel, New York, 24 April 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Out</u>:</p> <p>"<u>Out</u> is nondirectional because it is anydirectional."</p> <p>- Cite SYNERGETICS draft at Sec.524.05; RBF rewrite of 19 Jun'71</p>	<p>RBF DEFINITIONS</p> <p><u>Out</u>:</p> <p>"We . . . realize conceptually the finite, yet non-sensorial, <u>out-ness</u> which can be converted into sensorial in-ness by the inside-outing process."</p> <p>- Cite NEHRU SPEECH, p. 12. 13 Nov'69</p>
<p>RBF DEFINITIONS</p> <p><u>Out</u>:</p> <p>"You are always in Universe. You cannot get <u>out</u> of Universe. You can only get <u>out</u> of systems."</p> <p>- Cite tape transcript RBF to EJA and BO'R, Chicago, 1 June 1971.</p>	<p>RBF DEFINITIONS</p> <p>"<u>Out</u>" as the Containing & the Contained:</p> <p>"Joseph Needham's 'above and below' and his 'higher and lower' are linear. "'Out' expressly is the containing and the contained: in synergetics, the omniembracing and the permeating."</p> <p>- Citation & context at <u>Synergetic Hierarchy</u>, 5 May'74</p>

Synergetics Dictionary

<p><u>Out:</u> (1)</p> <p>See Anydirectional In & Out In, Out & Around Point: Outbound Point Outside</p>	<p><u>Outbreeding:</u></p> <p>See Inbreeding, Jun'66</p>
<p><u>Out:</u> (2)</p> <p>See Directionless, 19 Jun'71*</p>	<p><u>Outdividual:</u></p> <p>See Events & Nonevents, 16 Dec'73</p>
<p><u>Outbound Packaging of Human Food Waste:</u> (1)</p> <p>See Resources: Fresh vs. Waste Valuable Chemistry</p>	<p><u>Outdoors:</u></p> <p>See Indoors vs. Outdoors</p>
<p><u>Outbound Packaging of Human Food Waste:</u> (2)</p> <p>See Dymaxion Artifacts, (1) Wichita House, (2) Scrap Sorting & Mongering, (3)(4)</p>	<p>MBF DEFINITIONS</p> <p><u>Outlaw:</u></p> <p>"Three-quarters of the spherical Earth's surface is water and men's dry-land-made laws were unenforceable upon the seas. Those whose lives were lived on the sea lived outside any man-made laws and were inherently 'outlaws,' not because they flouted other men's laws, but because they lived and operated where only the physical laws of Universe were enforced. And those laws of nature were often formidably harsh. The sailormen had to take the initiative moment upon moment, and with keenest logic, else they perished. But the sailormen of Penobscot Bay addresses as 'Darling' or 'Dear' all young people both of its own family or of the stranger's family. He didn't learn to do so from Hollywood's people. The 'Darling' custom antedates Hollywood by at least several centuries. The custom developed, we may guess, from the coastal-fisherman's chortling to idling speed his otherwise powerful and incisive capabilities. Getting angry at hurricanes won't save you. 'Easy does it,' they say."</p> <p style="text-align: right;">- Cite BEAR ISLAND STORY, galley p.17, 1968</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>The Outlaw Area:</u></p> <p>" . . . Since the last ice age three-quarters of the Earth has been water, and of the one-quarter that is land very little has been lived on. Ninety-nine percent of humanity has lived on only about five per cent of the Earth-- a few little dry spots. Now, the law has always been applicable only to this five per cent of the Earth, and anyone who went outside of it-- the tiny minority who went to sea, for example-- immediately found himself outside the law. And the whole development of technology has been in the <u>outlaw area</u>, where you're dealing with the toughness of nature. I find this fascinating and utterly true. All improvement has to be made in the <u>outlaw area</u>. You can't reform man, and you can't improve his situation where he is. But when you've made things so good out there in the outlaw area that they can't help being recognized, then gradually they get drawn in and assimilated. . . .</p> <p>"A good example of what I mean is going on right now in the space program . . . where there's no atmosphere and no water and no sewer lines and no berries to eat, for the first time in history you have to look out for man. Inadvertently, man is trying for the first time to learn how to make man a success. It's inadvertent, but it's being done."</p> <p>- Cite Calvin Tomkins, New Yorker, p.78, 8 Jan'66</p>	<p>RBF DEFINITIONS</p> <p><u>Out-lining:</u></p> <p>"Out-lining = perimentering: empty-picturing the divergent outwardness, i.e. something the nothingness: How to see or identify nothing.</p> <p>"In-lining = in-sighting: conceptualizing in the direction of multiexperience trends convergence."</p> <p>- Cite RBF holograph for EJA; Windsor Castle, Berke; 22 Mar'76</p>
<p><u>Outlaw:</u> <u>Outlaw Area:</u> (1)</p> <p>See Enterprise Frontier: Living on the Frontier Pirates: Great Pirates Laws of Nature vs. Laws of Man</p>	<p><u>Outreach:</u> (1)</p> <p>See Sweepout</p>
<p><u>Outlaw:</u> (2)</p> <p>See Up & Down Sequence, (4)</p>	<p><u>Outreach:</u> (2)</p> <p>See Middle, Feb'73</p>
<p><u>Outline:</u></p> <p>See Windowing the Nothingness, 25 Mar'76</p>	<p><u>Outset:</u></p> <p>See Dymaxion Outset Eternal Outset Beginnings Start: Starters</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Outside:</u></p> <p>"It might be argued that inside and outside are the same, but not so. While there are an infinity of insides in Experience Universe there is only one <u>outside</u> comprehensive to all insides. So they are not the same..."</p> <p style="text-align: right;">- Citation and context at <u>Spherical Triangle Sequence</u> (11), 26 Jan '73</p>	<p>RBF DEFINITIONS</p> <p><u>Outside-Out:</u></p> <p>"Now, what we call thinkable is always <u>outside-out</u>. ✓What we call <u>space</u> is just exactly as real, but it is inside-out. There is no such thing as right and left!"</p> <p style="text-align: right;">- Cite Tape Transcript RBF to BOB, Carbondale Home, 1 May 1971 - Citation at ██████████ 1 May '71 <u>Parity</u></p>
<p>RBF DEFINITIONS</p> <p><u>Outside: What's Outside Outside?:</u></p> <p>"I'm sure you have often said to yourself: I wonder what's outside <u>'outside'</u>. That question assumes a static, instant, sculptural, single-frame concept of Universe, which sculptural, static array has an <u>'outside'</u>. But you cannot have an <u>outside</u> to a scenario."</p> <p style="text-align: right;">- Cite Museums Keynote Address Denver, p. 10. 2 Jun '71</p>	<p><u>Outside-out vs. Inside-out:</u></p> <p style="text-align: right;">See Convex & Concave: <u>Law Of</u>, 27 May '72 Outside-out, 1 May '71</p>
<p><u>Outside: What's Outside Outside?:</u> (1)</p> <p style="text-align: right;">See Sight: No Man Has Ever Seen Outside of Himself Imaginary Universe vs. This Universe. Not Out of This World Shapeless: Universe Does Not Have a Shape</p>	<p><u>Outside:</u> (1)</p> <p style="text-align: right;">See Convex & Concave Insideness & Outsideness Rubber Glove Shape: Sight: No Man Has Ever Seen Outside of Himself Spherical Wave Shell Growth Rate</p>
<p><u>Outside: What's Outside Outside?:</u> (2)</p> <p style="text-align: right;">See Sculpture as Single Frame, 22 Jul '71 Shapeless: Universe Does Not Have a Shape, 1965 Measurement, (p.65) 1969 Out, 1 Jun '71 Scenario, 24 Apr '67</p>	<p><u>Outside:</u> (2)</p> <p style="text-align: right;">See Civil War, (2) Parity, 1 May '71* Spherical Triangle Sequence, (11)*</p>

Synergetics Dictionary

Outward Limit of Nuclear Phenomena:

See Vector Equilibrium: Three-frequency VE, 18 Oct '72

Ovational Clearing:

See Energetic Functions, 1954

Outward:

See Inward & Outward

RBF DEFINITIONS

Overlapping:

"Nouns can be at the same time, but verbs cannot. Events can never be omnicongruently simultaneous, which would mean having all the component-four events' beginnings and endings always simultaneous. Events occur. Occur is a time word. The overlappingness of scenario Universe makes events appear simultaneous when they are not. Events are only overlappingly co-occurrent but never omnisimultaneous."

- Cite SYNERGETICS, 2nd. Ed. at Sec. 530.12, 30 May '75

Oval:

See North Face Domes, 20 Sep '76

RBF DEFINITIONS

Overlapping:

"... That overlapping quality that gives you a continuity of life despite individual births and deaths."

- Cite RBF in Barry Farrell Playboy Interview, 1972 - Draft. p.17.

Overlap:

See Female, 20 Apr '72

RBF DEFINITIONS

Overlapping:

"Overlapping because every event has duration and their initiating and terminating are most often of different duration."

- Cite RBF marginalia
Universe draft
28 Feb '71

* Cite also SYNERGETICS, "Universe," Sec. 302. Oct. '71.

Synergetics Dictionary

<p><u>Oversight:</u> (1)</p> <p style="text-align: center;">See Science Opened the Wrong Door</p>	<p><u>Overspecialization of Biological Species:</u> (1)</p> <p style="text-align: center;">See Bird's Nest as a Tool Extinction Human Beings at the Center</p>
<p><u>Oversight:</u> (2)</p> <p style="text-align: center;">See Abstraction, 22 Apr'71</p>	<p><u>Overspecialization of Biological Species:</u> (2)</p> <p style="text-align: center;">See Divide & Conquer Sequence (1) Generalized Principle (4)</p>
<p>RBF DEFINITIONS</p> <p><u>Overspecialization of Biological Species and Nations:</u></p> <p>"At the December 1962 annual meeting of the American Association for the Advancement of Science a research paper was read which showed that biological species and nations which have become extinct did so because of their becoming <u>overspecialized</u>."</p> <p style="margin-top: 20px;">- For citation and context see <u>Computers As Specialists</u>, 13 Aug '64</p>	<p><u>Overspecialization of the Sciences:</u></p> <p style="text-align: center;">See Club of Rome: Limits to Growth, (C)</p>
<p>TEXT CITATIONS</p> <p><u>Overspecialization of Biological Species:</u></p> <p>Generalized Principles, p.3, 28 Jan'69</p> <p>Trend No. 9, The Prospect for Humanity, WBSD Doc. 3, p. 69, Aug'64</p>	<p><u>Overspecialization:</u></p> <p style="text-align: center;">See Degenius, 26 Sep'68 Pollution, 12 Jun'69 Nonsimultaneity, 7 Nov'73</p>

Synergetics Dictionary

<p><u>Ownership:</u> (1)</p> <p>See Mine: That's Mine Private Property Obsolete: Inventory of Obsolete Concepts Service Industry Cosmic vs. Terrestrial Accounting Haveness Property: You Can't Take it With You Land Exploitation Deed: {Proprty Deed) Mobile Rentability vs. Immobile Purchasing</p>	<p><u>Oxygen:</u> (2)</p> <p>See Biosphere, (1)(2) Air, 22 Jan'75 Human Tolerance Limits, (1)-(4)</p>
<p><u>Ownership:</u> (2)</p> <p>See Resources, 4 Jul'72 Design Science (B) Telephone (1)(2)</p>	
<p><u>Oxford University:</u></p> <p>See Divide & Conquer Sequence, (4)(5)</p>	
<p><u>Oxygen:</u> (1)</p> <p>See Circuit: Hydrogen & Oxygen as a Circuit Air</p>	

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Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Package:</u></p> <p>"'Package' is a thing word and I don't think things; I think verbs. I keep housecleaning my language-- but, there, 'house' is a bad word too. In my spontaneous reflexes I often use reflex thing words. I apologize."</p> <p style="text-align: center;">- Cite RBF videotaping in Philadelphia, PA., 1 Feb'75</p>	<p>RBF DEFINITIONS</p> <p><u>Package:</u></p> <p>"... Angular accelerations are in finite <u>package</u> impelments which are chordal (not Arce)..."</p> <p style="text-align: center;">- Citation and context at <u>Hexagon</u>, Nov'71</p>
<p>RBF DEFINITIONS</p> <p><u>Package:</u></p> <p>"We package our foods coming inbound: Why don't we package them going outbound? It's just exactly as easy. When nature takes so much trouble to separate liquids and solids it is preposterous to put them together again."</p> <p style="text-align: center;">- Citation & context at <u>Michita House</u>, (1)(2), 31 Jan'75</p>	<p>RBF DEFINITIONS</p> <p><u>Packaged Concept:</u></p> <p>"... Experience is often a <u>packaged concept</u>. Such packages consist of complexedly interrelated and not as-yet differentially analyzed phenomena which, as initially unit cognitions, are potentially re-experienciable."</p> <p style="text-align: center;">- Citation and context at <u>Brain and Rose</u>, 3 Jun'72</p>
<p>RBF DEFINITIONS</p> <p><u>Package:</u></p> <p>"Radiation is always packaged... All the quanta are local-system, center-of-event activity, focal points-- fractionations of the whole point: what are minimally, ergo most economically packaged, and expanded outwardly and omnidiametrically as three-central-angle-defined tetrahedra."</p> <p style="text-align: center;">* Citation and context at <u>Integrity of Universe</u>, 23 Sep'73</p>	<p><u>Packaged Word:</u></p> <p>See Conceptuality, 1965 Earth, 1965 Equanimity Model, 26 May'72 Point, 19 Feb'72; 1 Apr'72 Spherical Triangle Sequence, (c)</p>
<p>RBF DEFINITIONS</p> <p><u>Package:</u></p> <p>"In the quantum and wave phenomena we deal with individual packages. We do not have continuous surfaces. In synergetics we find the familiar practice of second powering displaying a congruence with the points, or little separate energy packages of the shell arrays. Electromagnetic frequencies of systems are sometimes complex, but they always exist in complementation of gravitational forces and together provide prime rational integer characteristics in all physical systems. Little energy actions, little separate stars: this is what we mean by quantum. Synergetics provides geometrical conceptuality in respect to energy quanta."</p> <p style="text-align: center;">[3]</p> <p style="text-align: center;">- Cite SYNERGETICS draft at Sec. 964.12, 17 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Packaged:</u></p> <p>"Each experience begins and ends; ergo is finite. Because our apprehending is <u>packaged</u>, both physically and metaphysically, into time increments of alternate awakesness and asleepness as well as into separate finite conceptions such as the discrete energy quanta and the atomic nucleus components of the fundamental physical discontinuity, all experiences are finite."</p> <p style="text-align: center;">- Citation & context at <u>Universe</u> (p.62), 1969</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Package:</u></p> <p>"It is the nature of all of our experiences that they begin and end. They are packaged. For instance, we see in 60 separate picture frames per second, as in a moving-picture continuity. Each frame is a finite increment. Our brain's afterimage lag is so powerful that it gives a sense of absolute eccentricity / sic / to our only-subconsciously packaged seeing. We wake up and go to sleep."</p> <p>Cite NASA Speech, p.33, Jun'66 - Citation and context at <u>Finite</u>, Jun'66</p>	<p><u>Paddle:</u></p> <p>See Precession, (II)</p>
<p><u>Package:</u> (1)</p> <p>See Container Discontinuity Discrete Energy Package Finite Package Photon Quantum Vector Equilibrium Package Periodic Experience Terminal Outbound Packaging</p>	<p><u>Pain:</u></p> <p>See Good & Evil Sequence, (2) Human Beings & Complex Universe, (1)</p>
<p><u>Package:</u> <u>Packaged:</u> (2)</p> <p>See Centers of Energy Rebirth, 16 Nov'72 Finite, Jun'66* Hexagon, Nov'71* In, 1 Jun'71 Integrity of Universe, 23 Sep'73* Metaphysics, 2 Jul'62 Point: Outbound Point, 23 Sep'73 Polyhedron, 20 Feb'73 Powering (8) Rose, 3 Jun'72* Thinkability: Thinkable System Takeout, 16 Jun'72 Thinking (2) Universe (p.62) 1969 Dwelling Service Industry (B)(D) Scenario, 1 Feb'75 Wichita House, (1)(2)* Dome House Grand Strategy: 1927-1977, (2) Human Beings & Complex Universe, (1)</p>	<p>PAIRED CONCEPTS: CHECKLIST (A)</p> <p>See Aesthetics & Intuition* Annihilation & Conservation* Annihilation & Synergy Antipriorities & Priorities* Apprehending & Comprehending Articulated & Unarticulated Articulating & Observing* Aesthetics & Integrity Angle & Frequency Action & Thought* Artifact & Grand Strategy Always & Only Away & Ago</p> <p>*Indexed under other formulation</p>
<p><u>Packet:</u></p> <p>See Autonomous Living Technology Packet</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (B)</p> <p>See Boast & Fear Bias: Fear & Political Bias* Bonding & Degree of Freedom* Black Holes & Synergetics Behavior & Environment</p> <p>* Indexed under other formulation</p>

Synergetics Dictionary

<p><u>Paired Concepts:</u> <u>Checklist:</u> (C)</p> <p>See Circuit & Noncircuit Comprehending & Apprehending* Connections & Relatedness Critical Proximity & Orbital Escape* Conservation & Annihilation Complementary & Reciprocal Consciousness & Time* Climate & Intellect Cosmic Discontinuity & Local Continuity Convergence & Nonconvergence Cold & Vacuum Cognition & Time* Coming Apart & Holding Together Conceptuality & Space Congruence & Incongruence Complex Universe & Human Beings*</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (G)</p> <p>See Geometry & Number Gravity & Frequency* Growth & Decay Grand Strategy & Artifact* Generalists & Specialists</p> <p>* Indexed under other formulation</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (D)</p> <p>See Discovery & Loss Domain & Quantum Discontinuity & Energy Flow* Degrees of Freedom & Bonding Decay & Growth*</p> <p>*Cited under other formulation</p>	<p><u>Paired Concepts:</u> (H)</p> <p>See Human Mind & Physical Evolution Holding Together & Coming Apart Human Beings & Hard Machinery Human Beings & Complex Universe</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (E)</p> <p>See Energy & Number Escape: Orbital Escape & Critical Proximity* Experiences & Principles Energy & Information Energy & Intellect Energy & Time Elliptical Orbits & Otherness Restraints* Energy Flow & Discontinuity Embracement & Nucleus* Energy & Volume Energy & Thought* Eventings & Sensings* Environment & Behavior* Everywhere & Everywhen</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (I)</p> <p>See Information & Energy* Intellect & Energy* Intellect & Climate* Intuition & Aesthetics Intellect & Physical Universe* Integrity & Aesthetics* Islanded Radiation & Tensional Constancy Incongruence & Congruence* Inescapable & Only*</p> <p>* Indexed under other formulation</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (P)</p> <p>See Fear & Longing Fear & Political Bias Figures & Words Fear & Boast* Frequency & Mass* Frequency & Angle* Frequency & Gravity Frequency & Magnitude Frequency & Wave</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (K)</p> <p>See Know-how, Export Of & Transnational Capitalism*</p> <p>* Indexed under other formulation</p>

Synergetics Dictionary

<p><u>Paired Concepts:</u> <u>Checklist:</u> (L)</p> <p>See Longing & Fear* Loss & Discovery* Local Continuity & Cosmic Discontinuity* Love & Truth* Line & Nonline</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (P)</p> <p>See Proximity & Remoteness Proximity: Orbital Escape & Critical Proximity* Political Bias & Fear* Principles & Experience* Priorities & Antipriorities Physical Evolution & Human Mind* Physical Universe & Intellect* Principle & Resource*</p> <p>* Indexed under other formulation</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (K)</p> <p>See Mechanics & Structure* Mass & Frequency Magnitude & Frequency*</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (Q)</p> <p>See Quantum & Domain*</p> <p>* Indexed under other formulation</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (M)</p> <p>See Noncircuit & Circuit* Nonself & Self* Number & Energy* Now & Self* Nontruth & Truth Nonconvergence & Divergence* Number & Geometry* Nonline & Line* Nucleus & Embrace*</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (R)</p> <p>See Remoteness & Proximity* Relatedness & Connections* Reciprocal & Complementary* Review & View* Rate & Terminal Reinvestable Time & Survival Needs Resource & Principle</p> <p>* Indexed under other formulation</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (O)</p> <p>See Orbital Escape & Critical Proximity Otherness Restraints & Elliptical Orbits Otherness & Self* Observing & Articulating Only & Always* Only and Inescapable</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (S)</p> <p>See Self & Nonself Synergy & Annihilation* Self & Unity* Structure & Mechanics Syntropy & Time Self & Otherness Self-now Surface-volume* System & Zero* Spheres & Vertexes Structural Performance & Size Space & Conceptuality* Survival Needs & Reinvestible Time* Space Nothingness & Time Somethingness Synergetics & Black Holes* Sensings & Eventings Sleeping & Thinking Specialists & Generalists*</p> <p>* Indexed under other formulation</p>

Synergetics Dictionary

<p><u>Paired Concepts:</u> <u>Checklist:</u> (T)</p> <p>See Time & Energy Time & Consciousness Time & Syntropy* Truth & Love Truth & Nontruth Time & Cognition Terminal & Rate* Thought & Action Thought & Energy Tensional Constancy & Islanded Radiation* Transnational Capitalism & Export of Know-how Time Somethingness & Space Nothingness* Tuning-in & Tuning-out Thinking & Sleeping*</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> <u>Checklist:</u> (Z)</p> <p>See Zero & System</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (U)</p> <p>See Unity & Self Unarticulated & Articulated* Unstructurings & Restructurings</p> <p>* Indexed under other formulation</p>	<p>FILE INDICATORS</p> <p><u>Paired Concepts:</u> <u>Checklist:</u> (1)</p> <p>See Complementarities: Always & Only Coexisting Dichotomy: Dichotomizing Equals: Checklist Inventory of Push-pulling Alternations Nonequals: Checklist Versus: Checklist</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (V)</p> <p>See Volume-surface Vacuum & Cold* View & Review Vertexes & Spheres* Volume & Energy*</p> <p>* Indexed under other formulation</p>	<p><u>Paired Concepts:</u> (2)</p> <p>See Complementarity, 12 Sep'71</p>
<p><u>Paired Concepts:</u> <u>Checklist:</u> (W)</p> <p>See Words & Figures* Wave & Frequency*</p> <p>* Indexed under other formulation</p>	<p><u>Paired Congruency:</u> (1)</p> <p>See Reciprocal Involvement Sleeping in the Same Bed</p>

Synergetics Dictionary

<p><u>Paired Congruency:</u> (2)</p> <p>See Congruence, 25 Aug'71</p>	<p>RBF DEFINITIONS</p> <p><u>Palpitate:</u></p> <p>"... Nature oscillates and <u>palpitates</u> asymmetrically in respect to the frame of the omnirational vector equilibrium, the plus and minus magnitudes of asymmetry are rational fractions of the omnirationality of the equilibrium state. . ."</p> <p style="text-align: right;">- Citation & context at <u>Vector Equilibrium</u>, 21 Dec'71 - Cite RBF to EJA, 2206 Idaho, Washington DC, 21 Dec, 1971.</p>
<p><u>Pair: Pairing:</u> (1)</p> <p>See Cofunctions Coupled: Coupling Covariables: Covariation Paired Concepts: Checklist Prime Numbers: Pairing Of Swimmers: Two Swimmers Twins Two Kinds of Twoness Quantum: Event-paired Quanta</p>	<p><u>Palpitate:</u> (1)</p> <p>See Oscillation Oscillation & Pulsation Pulse: Pulsive: Pulsivity</p>
<p><u>Pair: Pairing:</u> (2)</p> <p>See Generalized Dichotomy: Grand Srtategy, (1)</p>	<p><u>Palpitate: Palpitation:</u> (2)</p> <p>See Now, 14 Feb'72 Physical Reality, 1 May'71 Vector Equilibrium, 21 Dec'71*; 1 May'71 Modules: A & B Quanta Modules, 20 Dec'73</p>
<p><u>Palm:</u></p> <p>See Pine Tree & Palm Tree Belts</p>	<p style="text-align: center;">██████████ <u>TEXT CITATIONS</u></p> <p><u>Pandora's Box of Invisibility:</u></p> <p>(See Transcript of RBF address to MXC, Dubuque, IA, 15 Dec. '71, p. 17.)</p>

Synergetics Dictionary

<p><u>Panic:</u> (1)</p> <p>See Official Panic Fire in a Theater</p>	<p>RBF DEFINITIONS</p> <p><u>Parable:</u></p> <p>"Playboy: 'But since you mentioned Adam and Eve a moment ago, let's take the Garden of Eden as a parable and ask if the element of man's will mightn't make him a stranger to this universal perfection. Couldn't the Scenario Universe be a tragedy as far as human affairs are concerned?'"</p> <p>"Fuller: 'In the first place I don't take anything as a parable. I'm interested in stories if I can understand them, but I don't use fiction as the basis of doing any strong thinking, especially when it comes to such matters as 'man's will.' I think we'd better not assume that what we've been told about the Garden of Eden has any validity whatsoever. I don't think there was a Garden of Eden, and I don't think there was an Adam and Eve, and I don't think Eve was born out of Adam's rib. So I can't accept the parable.'"</p> <p>- Cite RBF in Harry Farrell PLAYBOY Interview, February 1972, Above passage was in BF transcript, but omitted from final passage as it appears on p. 66. of magazine.</p>
<p><u>Panic:</u> (2)</p> <p>See Human Tolerance Limits, (2)</p>	<p><u>Parable:</u></p> <p>See Christian Legend & Philosophy Goldilocks and the Three Bears Myth Naga Theme Legend</p>
<p><u>Paper: Sheet of Paper:</u> (1)</p> <p>See Child Tearing Paper Newspaper Foldability Mark Four Paper</p>	<p><u>Parabola: Paraboloid:</u></p> <p>See Hyperbolic Paraboloid</p>
<p><u>Paper: Sheet of Paper:</u> (2)</p> <p>See Curvature: Simple, (1) Drawing, 1971 Squatters, (1)</p>	<p><u>Paradox:</u> (1)</p> <p>See Computer: Paradox of the Computer Zeno's Paradox</p>

Synergetics Dictionary

<p><u>Paradox:</u> (2)</p> <p>See Artist: Histrionics (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Parallelism:</u></p> <p>"Parallelism is uniquely characterizing the three dimensional system."</p> <p style="text-align: right;">- Cite Carbonate Draft— Nature's Coordination IV,30</p> <p>- Cite Oregon Lecture, #7, p. 245. 11 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Parallax:</u></p> <p>"When the relative circle size in respect to the observer is of macro-differential magnitudes, such as that of the circumference of the galactic system in respect to each planet observer, then the central-angle magnitude of the subtended macrocosmic arc becomes undetectable and the astronomer and navigator assume parallelism-- parallax-- to have set in, which produces a constant factor of error which must be incorporated in mathematical formulation of system descriptions. In quantum accounting and analysis of energy events and transformative transactions, this parallelism separates one quantum tetrahedron from its three surrounding tetrahedra."</p> <p>- Cite SYNERGETICS draft at Sec. 539.10, 23 Sep'73</p>	<p>RBF DEFINITIONS</p> <p><u>Parallel: Quasi-Parallel Lines:</u></p> <p>The bow tie symbol "is currently more fitting as an equation symbol than the old equation mark because we know that parallel lines, or conditions, are impossible. However, quasi-parallel lines, never coming in contact, are procreatively sterile."</p> <p>"The "=" is, then, inaccurate as a sign to link integrators and product."</p> <p style="text-align: right;">- Cite NINE CHAINS, p. 42, 1938</p> <p>- Citation & context at <u>Teleology: Bow Tie Symbol, 1938</u></p>
<p>RBF DEFINITIONS</p> <p><u>Parallel:</u></p> <p>"There can be no nucleus with parallels."</p> <p>- Cite RBF holograph at SYNERGETICS 2, Sec. 100.000; 28 Mar'77</p>	<p><u>Parallel: Quasi-parallel Lines:</u></p> <p>See Teleology: Bow Tie Symbol, 1938*</p>
<p>RBF DEFINITIONS</p> <p><u>Parallel:</u></p> <p>"Parallel and antiparallel are precession."</p> <p>- Cite RBF memo (10/11) dated 5 Sept 1965 in "The Scientific Endeavor," (10/65) - page 12.</p> <p>- Citation at <u>Precession, 5 Sep'65</u></p>	<p><u>Parallel:</u> (1)</p> <p>See Antiparallel Inflection Interparallel Nonparallel Parallax Convergent vs. Parallel Perception Series vs. Parallel Circuitry XYZ Coordinate System</p>

Synergetics Dictionary

<p><u>Parallel:</u> (2)</p> <p>See Curvature: Simple, (1)(2) Equation Symbol, 9 May'60 Terminals, 4 Feb'68 Dimensionality, 30 Mar'75 Means, 22 Jun'75 Minimum Limit Case, 12 May'75 Nature in a Corner, 6 Nov'75 Verse vs. Prose, 11 Dec'75 Nuclear Pattern of Growth & Decay, 8 Dec'75 Dynamic Equilibrium, 24 Apr'76 Module: A Quanta Module: Introduction Of, 22 Feb'77</p>	<p>HBF DEFINITIONS</p> <p><u>Parameters:</u></p> <p>" . . . The variables outside the system may affect the system from outside. In varying degrees specific levels of sub-classes of these 'background' or outside variables are identified as <u>parameters</u>. This background 'inside and outside' concept is a two dimensional or flat-projection concept."</p> <p style="text-align: right;">- Cite OMNIDIRECTIONAL HALO, p. 153, 1960</p>
<p><u>Parallelogram of Forces:</u></p> <p>See Force Lines: Omnidirectional Lines of Force</p>	<p>HBF DEFINITIONS</p> <p><u>Parameters:</u></p> <p>"Our omnioriented Halo concept converts the <u>parameter</u> consideration to conceptual four dimensionality and discloses a set of parameters inside as well as outside the zone of lucidly considered the system stars. And the parameters are at minimum fourfold: (1) the convex twilight zone of inward relevancy, (2) the concave twilight zone of outward relevancy, (3) the stark nonconceptual irrelevancy inward, and (4) the stark nonconceptual irrelevancy outward. Parameter (1) is a tetrahedron. Parameter (2) is a tetrahedron. Parameter (3) plus parameter (4) comprise an invisible tetrahedron."</p> <p style="text-align: right;">- Cite OMNIDIRECTIONAL HALO, p. 153, 1960</p> <p style="text-align: right;">- Citation & context at <u>Halo Concept</u>, 1960</p>
<p><u>Parallelogram:</u> (1)</p> <p>See Deliberately Nonstraight Line</p>	<p><u>Parameters: Parametric:</u></p> <p>See General Systems Theory, 18 Dec'74; (B) Halo Concept, 1960*; Nov'71 Variables: Theory Of, 1960; Nov'71 Design Science: Grand Strategy, 31 Jan'75 Omnihalo, Nov'71</p>
<p><u>Parallelogram:</u> (2)</p> <p>See Prime Vector, (2)(3)</p>	<p><u>Parapsychology:</u></p> <p>See No Logic Universe, 8 Apr'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Parents:</u></p> <p>"Sometimes parents say 'don't' because they want to protect the child from getting into trouble. At other times, when they fail to say 'no,' the child gets into trouble. The child, frustrated, stops exploring."</p> <p style="text-align: right;">(1)</p> <p>See Children Education Mother Television: Third Parent</p> <p style="text-align: right;">- Cite RBF in AAUW Journal, p. 174, May '65</p>	<p>RBF DEFINITIONS</p> <p><u>Parity:</u></p> <p>"Now, what we call thinkable is always ^doutside-out. What we call space is just exactly as real, but it is inside-out. There is no such thing as right and left!"</p> <p style="text-align: right;">- Cite Rbf to BO'E, Carbondale Dome, 1 May 1971.</p> <p style="text-align: center;"><u>CONCEPTUALITY PARITY- SEC 507.02</u></p>
<p><u>Parent:</u></p> <p style="text-align: right;">(2)</p> <p>See Environment, 22 Jul'71 Fresh, 3 Oct'71</p>	<p>RBF DEFINITIONS</p> <p><u>Parity:</u></p> <p>"Positive (right) and Negative (left) make one tetrahedron; therefore no <u>parity</u>. $1 + 1 = 4.$</p> <p style="text-align: right;">- Cite P. PEARCE, Inventory of Concepts, June 1967</p> <p style="text-align: center;"><u>CONCEPTUALITY- PARITY- SEC.507.04</u></p>
<p>RBF DEFINITIONS</p> <p><u>Parity:</u></p> <p>"That is the way our Universe is. There are the visibles and the invisibles of the inside-outing nonsimultaneity. What we call thinkable is always outside-out. What we call space is just exactly as real, but is inside out. There is no such thing as right and left."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 507.02, Nov'71</p>	<p>RBF DEFINITIONS</p> <p><u>Parity:</u></p> <p>". . . Physics long-held law of conservation of parity held the obverse and reverse to be identical, ergo, redundant."</p> <p style="text-align: right;">- Cite OMNIDIRECTIONAL HALO, 1960, Pp. 153-156.</p>

Synergetics Dictionary

RBF DEFINITIONS

Parity:

"Comprehensive system turbinizing: the whole system turbines positively or the whole system turbines negatively. There are no polar or opposite hemisphere differences of these systems. There are no 'rights' or 'lefts' in Universe."

- Cite SYNERGETICS ILLUSTRATION, #92, caption. 1967

Partial Generalization:

See Vector, 26 May'72

RBF DEFINITIONS

Parity & Disparity:

"Disparity is a complementary of parity."

- Cite RBF to EJA, Beverly Hotel, New York, 19 June 1971.

CONCEPTUALITY - PARITY - SEC. 507.05

RBF DEFINITIONS

Partiality:

"... A vector is a partial generalization being either metaphysically theoretical or physically realized, and in either sense an abstraction of a special case..."

- Citation and context at Vector, 26 May'72

RBF DEFINITIONS

Parity & Disparity:

"The complementary of parity is disparity and not a reflective image."

- Cite RBF reqrite of SYNERGETICS galley at Sec. 507.06, 6 Nov'73

RBF DEFINITIONS

Partiality:

Q: is partiality a complementary of totality?

A: Synergy says partiality is inherently a complementary, which means it is not witnessable in the part, per se. The part does not say it, but they are always intercomplementarities. You have to have the other parts in order for them to be complemented by.

- Cite RBF answer dictated to EJA, Kennedy airport, NY, 1 Apr '72

Parity:

- See Complementarity
- Complementor
- Disparity
- Left & Right
- Negative
- Mirror Image
- Non-mirror Image
- Parity & Disparity
- Proton & Neutron
- Rubber Glove

RBF DEFINITIONS

Partiality:

"Compression is inherently partial. Tension is inherently total."

- Citation at Tension & Compression, Dec'71

- Cite Synergetics Draft at Sec. 640.70, Dec. '71.

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Partiality:</u></p> <p>"Conceptuality is systematic but always <u>partial</u>."</p> <p>- Cite RBF at Students International Meditation Seminar - U. Mass., Amherst, 22 July 1971.</p> <p>- Citation at <u>Conceptuality</u>, 22 Jul'71</p>	<p><u>Partially Overlapping:</u></p> <p style="text-align: center;">See Newton vs. Einstein (2) Scenario, 1 Feb'75</p>
<p><u>Partiality:</u> (1)</p> <p>See Cosmic Partiality Part: Parts: Partial: Particulare Totality</p>	<p>RBF DEFINITIONS</p> <p><u>Particle:</u></p> <p>"The primitive is quite different from the fundamental particles game of the high-energy research physicists."</p> <p style="text-align: right;">- Citation & context at <u>Primitive</u>, 19 Feb'76</p>
<p><u>Partiality:</u> (2)</p> <p>See Conceptuality, 22 Jul'71* Experience, 12 Sep'71 Tension & Compression, Dec'71* Vector, 26 May'72*</p>	<p>RBF DEFINITIONS</p> <p><u>Particle:</u></p> <p>"A <u>unique energy patterning</u>-- erroneously referred to in archaic terms as a particle."</p> <p style="text-align: right;">Cite NEMRU SPEECH, P. 12 - 13 Nov'69</p> <p style="text-align: right;">- Citation & context at <u>Annihilation</u>, 13 Nov'69</p> <p style="text-align: center;"><u>CONCEPTUALITY - SEC. 507.05</u></p>
<p>RBF DEFINITIONS</p> <p><u>Partially Overlapping:</u></p> <p>"The complex of event sequences are most often characterized by overlappings. A man is born, grows up, has children and grandchildren. His life overlaps that of his grandfather and father and that of his children and grandchildren. But his grandfather's life did not overlap his children's nor his grandchildren's lives. Hence, <u>partially overlapping</u>."</p> <p style="text-align: right;">- Cite RBF marginalia Universe draft - 28 Feb 1971</p> <p style="text-align: left;"><u>FOOTNOTE - SEC. 302.00</u></p>	<p>RBF DEFINITIONS</p> <p><u>Particle:</u> (1)</p> <p>"One of the most interesting things about the modern chemistry and physics is that men have discovered that there are no things, there are no small particles. The physicist deliberately misleads society by using the words 'solid state' and things like that and-by still using the word particle. . . he may say that of course, he doesn't mean anything by it, but he just doesn't know what else to call it. . . He is so busy with his work that he doesn't want to bother with semantics so he calls it a particle. There is some kind of local preoccupation here and we just call it particle. We identify it as special local behavior. It is a special local behavior but it is pure principle, such as the wave concept. It has no weight whatsoever. . .</p> <p>"We well then get in to what we call the nucleus, the positive particles if you want to call them that. But it has since been discovered that every one of them has an anti-particle. All the negative particles have negative weight and so you have neutrons, positrons, and so on: you have negatives, and negatives and neutrals. The sum total of em</p> <p style="text-align: right;">- Cite Oregon Lecture #4, p.123, 6 Jul'62</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Particle:</u> (2)</p> <p>"all the positive weights and all the negative weights is zero. You are dealing in pure principle. This is the actual fact. And it is weightless. There is no smallest thing. There are very minute energy events in pure pattern, but they are pure pattern-- just as the knot was not a rope but a pure regenerative principle. The wave was not the water or the milk or the kerosene. The quantum in wave mechanics is simply the way we deal with these pure principles in an absolutely weightless manner."</p> <p style="text-align: right;">- Cite Oregon Lecture #4, pp.122-123, 6 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Particularity:</u></p> <p>"Quantum implies particularity."</p> <p style="text-align: right;">- For citation and context see <u>Module</u>, 1 Jun '71</p>
<p>RBF DEFINITIONS</p> <p><u>Particles:</u></p> <p>"There are no ponderable, smallest, hard-core, 'thing' particles."</p> <p style="text-align: right;">Cite SECOND HAND GOD, p.36 9 Apr'40</p>	<p>RBF DEFINITIONS</p> <p><u>Particulate Model:</u></p> <p>"Because of indeterminism, discontinuity, the exclusive tenuous nature of integrity, means that no hard particulate models may ever be fashioned by man."</p> <p style="text-align: right;">- Citation at <u>Tenuous</u>, 10 Feb'73</p>
<p><u>Particle: Particular:</u> (1)</p> <p>See [REDACTED]</p> <ul style="list-style-type: none"> Wave vs. Particle Whole to Particular Corpuscle: Corpuscular Rules of No Actual Particulate Solids Strange Particles No Building Blocks Quarks 	<p><u>Particulate: Particulate Model:</u></p> <p style="text-align: right;">See Quantum, 17 Feb'73</p>
<p><u>Particle: Particular:</u> (2)</p> <p>See Energy Event, 13 Mar'73 Minimum Set, 18 Nov'72 Modelability, (a) Invisibility of Macro- and Micro- Resolutions, (2) Primitive, 1y Feb'76 Proofs, 3 May'77 Bubble Bursting, 20 Jan'78</p>	<p>RBF DEFINITIONS</p> <p><u>Particulate:</u></p> <p>"The tetrahedron can be considered as a whole system or as a constituent of systems in particular. It is the <u>particulate</u>."</p> <p style="text-align: right;">- Citation at <u>Tetrahedron</u>, 7 Mar'73</p>

Synergetics Dictionary

<p><u>Parting the Strands:</u> (1)</p> <p>See Grass: Putting Aside the Grasses Swimmer: I Am a Swimmer</p>	<p>RBF DEFINITIONS</p> <p><u>Parts:</u></p> <p>"Functions occur only as <u>parts</u> of systems."</p> <p>- Citation and context at <u>Functions</u>, 26 May'72</p>
<p><u>Parting the Strands:</u> (2)</p> <p>See Self-experience. 1938</p>	<p>RBF DEFINITIONS</p> <p><u>Parts:</u></p> <p>"... The more symmetrical, the less the number of <u>parts</u> types."</p> <p>- Citation and context at <u>Simplicity</u>, 1954-59</p>
<p>RBF DEFINITIONS</p> <p><u>Part:</u></p> <p>"The Ancient Greeks initiated problem solving By recourse to cosmology and cosmogony, By proceeding from the whole to the <u>part</u> Lest they miss The exquisite relevance Of each little <u>part</u> or event."</p> <p>- Citation at <u>Wholes & Parts</u>, May'72 - Cite IMBITION, p.14, May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Parts:</u></p> <p>"It is a derivative corollary of synergy that there are no <u>parts</u>, for parts always turn out to be subsystems of pattern. There is only pattern, there is only wholeness to begin and cease: the environment and content of all experience or experiment.</p> <p>"It is a corollary of synergy that behaviors of subdivisions are of plural and alternate sets permitted and required of the larger pattern; and that there are always sets of complementary consequence in respect to any of the selectable alternate permissible sets. Plurality of permitted freedoms within the whole is manifold.</p> <p>"Effectiveness of synergetics is relative to comprehensiveness of initiation, its sub-behaviors being determinable to degrees of refinement permitting event prognostication within circumscribed limits of high fidelity attunement."</p> <p>- Cite RBF draft Ltr. to Jim (Fitzgibbon ?), Raleigh, NC, 1954-59, p.4a.</p>
<p>RBF DEFINITIONS</p> <p><u>Part:</u></p> <p>"And in fact No property of one <u>part</u> Considered only by itself Predicts the existence of another part--"</p> <p>- Cite IMBITION, p.27, May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Parts:</u></p> <p>"So-called fabricated <u>parts</u> of synergetic general assemblies, it should be remembered, are in themselves a complex of systems of overall morphation classification and function integrations; in turn comprised of multibillions of molecules, combining in themselves a plurality of unique atomic nuclear systems and their respective subsystem activities, each of which responds to its cues in the ever present larger synergetic patterns of local alloys or within the far larger synergetics of isotopal decay by transformation cycles."</p> <p>- Cite RBF draft Ltr. to Jim (Fitzgibbon?) Raleigh, NC, 1954-59 p.14</p>

Synergetics Dictionary

Parts: Each Part in View of the Others: (1)

See Self-consideration

Part: Parts: Partial: Particulars: (1B)

See Component
Increment
Cosmic Parts: Cosmic Partiality
Human Parts Replacement

Parts: Each Part in View of the Others: (2)

See Design, 9 Dec'73

Part: Parts: Partial: (2A)

See Child, 16 Jun'72
Conditioning, 14 Feb'72
Design, 9 Dec'73; 13 Dec'73; 4 Aug'74
Education (2)
Energetics & Synergetics, 10 Jan'74
Epistemology of Quantum Mechanics, 16 Dec'73
Functions, 26 May'72*
Gestalt, 1960
Instant Universe (1)
Local Change, May'49
Mechanical Mind, 22 Jul'71
Simplicity, 1954*
Spaceship Earth (c)
Science (2)
Specialization, 28 Apr'71
Whole System, 28 May'72; 16 Jun'72
Synergetics vs. Model, 28 Apr'74; (A)
Dome: Rationale For (I)(II)
Conceptuality, 16 Aug'70
Thinkability, 16 Aug'70
Time-size, 30 Oct'72

Parts: Self-parts-replacing:

See Industrial Complex, 13 Mar'73

Part: Parts: Partial: Particulars: (2B)

See Definable, 1959
Plumbing, (1)(2)
Weapons Technology, (2)
Boeing 747 Sequence, 22 Jun'75
Understanding, 30 Sep'76
Generalization & Special Case, 23 Jan'77
Event, 23 Jan'77
Finite Event Scenario, (2)

Part: Parts: Partial: Particulars: (1A)

See Between
No Building Blocks
Energetics
No Absolute Division into Parts
Partiality
Particle
Particularity
Modules
Starting with Parts
Toenail
Wave vs. Particle
Prediction
Nonsystem Parts
Key-keyhole
Wholes & Parts
Highway is Part of the Automobile
Mine is Part of the Mole
Nest is Part of the Bird
Tools are Part of Human Beings
Teleology = Reuniting of Parts

Partitions:

See Privacy, 22 Apr'61

Synergetics Dictionary

RBF DEFINITIONS

Pass: "And It Came to Pass":

"I used 'pass-age' all the time in Shelter Magazine. It means the same thing as 'and it came to pass,' which means it came to pass, but not to stay."

- Cite RBF to EJA & Bob Kahn in Phila. office, 22 Jun'75

Pass: "And It Came to Pass":

See Frame of Reference, 4 Oct'72

RBF DEFINITIONS

Pass: "And It Came to Pass":

"... 'And it came to pass' is something like an event. It has a 'before' and an 'after'..."

- Cite RBF to Hugh Kennet, NY City, 29 Jun'72

Pass:

See Twist-pass

RBF DEFINITIONS

Pass: "And It Came to Pass":

"Bill Whitehead had never realized that 'And it came to pass' means 'It came to go by,' that is something we could use as a chart or guidepost."

- Cite RBF to EJA by telephone from Phila., 1 Apr'73

Passion:

See Intellection, Oct'66
Technocracy, 1938

TEXT CITATIONS

Pass: "And It Came To Pass":

Synergetics text at Sec. 464.08

RBF DEFINITIONS

Passive Resistance:

"Passive resistance will not amplify the production of life support."

- Cite WORLD-AROUND PROBLEMS THAT HAVE TO BE SOLVED BY BLOODLESS
DESIGN SCIENCE REVOLUTION, 29 Jun'72

Synergetics Dictionary

<p><u>Passive:</u></p> <p style="text-align: center;">See Active & Passive</p>	<p><u>Past Otherness:</u></p> <p style="text-align: center;">See No-time-and-away-ago, 28 May'75 Tetratuning, 30 May'75 Environment, (A)</p>
<p><u>Passport:</u> (1)</p> <p style="text-align: center;">See World Passports</p>	<p><u>Past:</u> (1)</p> <p style="text-align: center;">See Historical Event Cognition History Yesterday Swivel-moored the the Tonnage of our Past</p>
<p><u>Passports:</u> (2)</p> <p style="text-align: center;">See World Pattern vs. Local Pattern, 29 Jan'75 Desovereignisation Sequence, (3)</p>	<p><u>Past:</u></p> <p style="text-align: center;">See Death, 1970 Life, 1 Jun'71 Now, '25 Apr'71</p>
<p>RBF DEFINITIONS</p> <p><u>Past:</u></p> <p>"Life is the <u>Now</u> event with its reaction <u>Past</u> and resultant <u>Future</u>."</p> <p style="margin-top: 20px;">- Citation at Life, 1 Jun'71 - Cite RBF Marginalia, SYNERGETICS Draft (Conceptuality, Life), 1 June 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Patent:</u></p> <p>"A basic patent must be statable in one line. That's the mark of an original invention."</p> <p style="margin-top: 20px;">- Cite RBF to EJA, 3200 Idaho, Wash,DC, 16 Dec'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Patent:</u></p> <p>"Patent law and precedence requires specific choices of technical ways and means for each patent claim. A number of claims can be filed covering alternate realizations of the same invention. Overall legal costs per patent are so high that usually but few of the alternate realizations are covered, the most economical under the contemporary economical conditions being hopefully selected by the inventor. . . ."</p> <p style="text-align: right;">- Citation and context at <u>Inventability Sequence</u> (2), 9 Jul'73</p>	<p><u>Patent:</u> (1)</p> <p>See <u>Inventability Sequence</u> Invention</p>
<p>RBF DEFINITIONS</p> <p><u>Patent:</u></p> <p>"It is interesting that the Russians go along with the old patent idea. You can't apply for one; the government simply awards it, at the point when it comes into use. And if the invention is so good that it gets adopted within 12 months, they award a patent and a patent in Russia gives the individual the right to go into any establishment and look things over and see what he might do; it gives him the right to ride wherever he wants on the transportation system; it is really a more effective thing than what we have here. He gets a fundamental advantage and an actual payment.</p> <p>"It's interesting that the idea of giving inventors some advantage persisted from the old feudal monarchies through democracy and into communism.</p> <p>"A patent in the United States is just a license to sue. There have been over 300 licenses of geodesic domes and over 50 have been to big, major corporations. Every time their patent attorneys would come to mine, saying of course we'd like to get around your patent but it's too well written, so we have to come to you. . . . You absolutely have to have a world patent; a U.S. patent is useless."</p> <p style="text-align: right;">- Cite RBF to Barry Farrell; Bear Island; Tape #8, Side A, transcript p.5; 22 Aug '70</p>	<p><u>Patent:</u> (2)</p> <p>See Einstein, 23 May'72; (A) Philosophers, 22 Aug'70 Cosmic vs. Terrestrial Accounting, (2) Large Patterns, (1) Dynamaxion Airocean World Map, (5)(6); (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Patent:</u></p> <p>"In general, it can be said that patents are never granted for covering fundamental principles of nature. You cannot patent any unique geometry. I have a great many patents and none of them are granted in the terms of the specific mechanical, structural, and chemical technology employed to realize an interaction of a plurality of principles.</p> <p>"It is also necessary that there be a fundamental surprise quality in an invention. Though patents can be secured from the patent office, they hold up in court when this fundamentally unique and illusive quality of surprise is undeniably present....</p> <p>"I am saying these many things to you not with the idea of discouraging you as an inventor but to save you money in your patent work. I have always found it a great help to have powerful patent searches made. They often disclose earlier invention in areas where I had thought myself to be the inventor. I never let an earlier invention discourage me, but I do not want to kid myself into thinking I am an inventor when I am not."</p> <p style="text-align: right;">- Cite RBF Ltr. to Steve Baer, 19 Apr'66</p>	<p><u>Path:</u></p> <p>See <u>Critical Path</u> Parting the Strands Trail Trajectory</p>
<p>RBF DEFINITIONS</p> <p><u>Patent:</u></p> <p>"The patent examiner's actions of one-third of a century call for subdivision because there is no comprehensive dynamic class of functioning environment valve.</p> <p>"This is the case for simplicity in legal action where the simplest rather than the most complicated documents are most effective and most costly. The criterion for a basic patent is one of approximately one sentence, or one line in length-- ergo, most far-reaching and of highest value, and resultant to the largest experience, and greatest breadth and penetration of thought and therefore resultant to greatest experience-- which is basic cost, ergo, most costly; but because of its end result being mistaken by the many for the just naturally obvious simplicity and therefore of negligible cost."</p> <p style="text-align: right;">(Slightly edited)</p> <p style="text-align: right;">- Cite RBF holograph in cardboard file folder of Synergetic Notes, circa 1955</p>	<p>RBF DEFINITIONS</p> <p><u>Pathology: Preventive vs. Curative:</u> (1)</p> <p>"Nobody seemed to know where the housing traditions and the diseases they bred came from and why they were going on. I could not seem to be able to maintain health conditions as I wanted them in the kind of rentals I could afford, and I blamed it very much on housing. The more I saw of the housing world the more it seemed to me that about this great ignorance much could be done if we could think of our whole economics in the terms of preventive pathology instead of curative pathology. In our curative pathology we wait until somebody is very sick, and if they are lucky they might be able to get the right drugs from the research institute. I am talking of the picture of 1927.</p> <p>"This present war has, however, seen an enormous advance in these curative matters. One of our boys here today had an infection in his nose which started in his eye the day before yesterday. They rushed him to the hospital and they gave him penicillin. He is all right now. It might have been a fatal case a few years ago, since the infection would have gone right up into his brain. It is just wonderful; but that has happened now in 1946. War releases an enormous amount of technology, and that is at least one benefit showing up."</p> <p style="text-align: right;">- Cite DESIGNING A NEW INDUSTRY, (RBF Reader, pp.153,154) 1946</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pathology: Preventive vs. Curative:</u> (2)</p> <p>"But that came as a remedial form of pathology.</p> <p>"If we were really to attempt preventive pathology, we would question how these things got started and, it seemed to me in 1927, we would learn to measure and to adopt the enormous amount of data being sent down by technologists everywhere relative to measurements of man's Universe and man himself and the forces seeking to destroy him and we would try to build in advance a form of environment control for man that would be both occupationally, in the manufacture of this environment control, and equally, in its end use, prevent much of the present inroads of physical and mental and moral diseases into good health and well-being and general happiness."</p> <p>- Cite DESIGNING A NEW INDUSTRY, (RBF Reader, p. 154), 1946</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern:</u></p> <p>"...And what would be necessary [redacted] was really to find out what were the great comprehensive <u>patterns</u> operating in Universe."</p> <p>- Cite RBF quoted by Cam Smith in RBF to CHILDREN OF EARTH, Dec '72</p>
<p><u>Pathology: Preventive vs. Curative:</u> (1)</p> <p>See Mend vs. Cure</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern:</u></p> <p>"It is a tendency for patterns either to repeat themselves locally or for their parts to separate out to join singly or severally with other patterns to form new constellations. All the forces operative in Universe result in a complex progression of most comfortable--i.e., least effort, rearrangings in which the macro-medio-micro star events stand dynamically together here and there as locally regenerative patterns. Spontaneously regenerative local constellations are cosmic, since they appear to be interoriented with angular constancy."</p> <p>- Cite SYNERGETICS text at Sec. 601.01; 3 Oct '72</p>
<p><u>Pathology: Preventive vs. Curative:</u> (2)</p> <p>See Economics, 1946</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern:</u></p> <p>"The Euler formula should be revised in arrangement of expression. You must have lines; you have to have two lines to have a crossing, which is a point (fixed). And you have to have three lines in order to have an area-- these being the basic constituents of a <u>pattern</u>."</p> <p>- Cite RBF to BO'R, 3200 Idaho, DC, 20 Feb '72</p>
<p><u>Patron: Patronage:</u></p> <p>See Artist-scientist, May '60 Invisible Architecture, (A)(B)(D)</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern:</u></p> <p>"Relationships are local to pattern. Patterns are comprehensive to relationships."</p> <p>(Incorporated in SYNERGETICS text at Sec. 505.03)</p> <p>- Cite RBF to EJA, 3200 Idaho, Washington DC., 20 Dec. '71.</p>

Synergetics Dictionary

RBF DEFINITIONS

Pattern:

"One of the things we have to make clear for society is the dilemma of the Max-Planck-descended scientists, the way they do their problems, you can have either a wave or a particle, but not both simultaneously. Heisenberg has the same fault. They make the error of having a wave as a continuity, as a picture-- not as a pulsating frequency. A planar reflex causes them to think of a continuous wave."

- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971

CONCEPTUALITY PATTERN - SEC 505.01

RBF DEFINITIONS

Pattern:

"Kees at M.I.T. made a beautiful demonstration of the scientist's and artists need to articulate. He took hundreds of eight by ten black and white photographs of modern paintings and shuffled them thoroughly with photographs taken by scientists through microscopes or telescopes of all manner of natural phenomena: sound waves, chromosomes, and such. The only way you can classify photographs with nothing recognizable in them is by your own spontaneous pattern classifications. Group the mealy, the blotchy, the striped, and so forth. The pattern groups of photographs were put on display. The artists' work and the scientists' were indistinguishable. Checking the data, it was found that the artist frequently conceived of a pattern in his imagination before the scientist found it in nature. Science began to take a new view of artists."

- Cite RBF to AAUW panel; AAUW Journal, p.174, May'65

PATTERN - SEC 505.07

RBF DEFINITIONS

Pattern:

"When we speak of patterns we speak of generalized patterns of conceptuality gleaned from a plurality of special case pattern experiences which have been experimentally proven to be without exception, always existent in every special case within the required class of experiences."

- Cite NASA Speech, p. 100, Jun'66

CONCEPTUALITY - PATTERN - SEC 505.01

RBF DEFINITIONS

Pattern:

"I see things sometimes in terms of vectors, sometimes in terms of the faces, and sometimes in terms of the vertexes which would be spheres. These are the three main aspects of all pattern as known by Euler. Euler found these incontrovertible minimum aspects of pattern."

- Cite Carbondale Draft - Network's Coordination, p. VI, 3+

- Cite Oregon Lecture #7, D. 245. ● 11 Jul'62

CONCEPTUALITY - PATTERN - SEC 505.11

RBF DEFINITIONS

Patterns:

". . . All patterns, for instance, numbers or phonetic letters, consist of physical ingredients and physical experience recalls. The physical ingredients consist inherently of event-paired quanta and the latter's six-vectored, positive and negative, actions, reactions and resultants. . . "

- Citation and context at Number, Jun'66

- ~~Cite NASA Speech, p. 58, Jun'66~~

CONCEPTUALITY PATTERN - SEC 505.12

RBF DEFINITIONS

Patterns:

"It is very interesting to consider . . . a total inventory of the relative abundance of different patterns remembering that the patterns are reciprocal."

- Cite ORGEON Lecture #5 - p. 167, 9 Jul'62

CONCEPTUALITY - PATTERN - SEC 505.05

RBF DEFINITIONS

Patterns:

"Euler showed that all conceptual experiences which we can pattern, or form, are composed exclusively of the three patterning elements: lines, vertexes, and areas. They are all that are necessary to analyze and inventory all parts of, as well as all whole, patterns. And Euler disclosed ~~the~~ three algebraic formulae characterizing the constant relative abundance relationships of these three fundamental topological elements in all patterns."

- Cite CARBONDALE DRAFT IV, 4+

- NASA Speech, pp. 58-59, Jun'66

CONCEPTUALITY PATTERN - SEC 505.11

RBF DEFINITIONS

Pattern:

"Pattern has emerged first from our preoccupation with getting rid of the irrelevancies and out of it has emerged a minimum constellation, a minimum consideration and it is a four-star affair. It is tetrahedral."

- Citation & context at Irrelevancies: Dismissal Of, 2 Jul'62

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pattern:</u></p> <p>"The integration of all possibilities of the complementary alternates, though confinable, inherently defies exact identity because the minimum is pattern and not isolated integer.</p> <p>"All pattern has inherent plurality of viewable aspects, which are the reciprocals of pluralities of permissible viewpoints, for instance, from within or from without, a system.</p> <p>"All treatable pattern is a subdivision of Universe, and disposes, in its first generalization, of the macrocosmic and microcosmic irrelevancies."</p> <p style="text-align: right;">- Citation and context at <u>Residual Error</u>, 1954</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Cognition Feedback:</u></p> <p>"Fundamental wisdom Can readily identify any and all Special case aspects within The generalized whole When listening Sensitively to one's intuitions By which alone The generalized sub-subconscious integration Of <u>pattern cognition feedbacks</u> Are articulated."</p> <p style="text-align: right;">- Cite HOW LITTLE I KNOW, p.62 Oct '66</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern:</u></p> <p>"There is only pattern, there is only wholeness to begin and cease: the environment and content of all experience or experiment."</p> <p style="text-align: right;">- Citation and context at <u>Parta</u>, 1954-59</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Cognizance:</u></p> <p>It is a discovery of synergetics that "the addition of angle and frequency to Euler's inventory of crossings, areas, and lines is the absolute characteristic of all <u>pattern cognizance</u>."</p> <p style="text-align: right;">(Synergetics: 251.02)</p> <p style="text-align: right;">- Cite RBF marginalia in SYNERGETICS Book, Sec. 251.02 - 20 Dec. 1971</p> <p style="text-align: right;">- Citation at <u>Synergetics</u>, 20 Dec '71</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern:</u></p> <p>"Abstraction has no pattern."</p> <p style="text-align: right;">- Cite RBF marginalia in "Mathematics in Action," by G.C. Sutton - 1955</p> <p style="text-align: right;">- Citation at <u>Abstraction</u>, 1955</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Conservation:</u></p> <p>"Structures are constellar pattern conservations. These definitions hold true all the way from whole Universe to lesser and local pattern differentiations all the way into the atom and its nuclear subassemblies. Each of the families of chemical elements, as well as their most complex agglomerations as superstar Galaxies, are alike cosmic structures. It is clear from the results of modern scientific experiments that structures are not things. Structures are event constellations."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 601.02; } Oct '72</p>
<p><u>Pattern Analysis:</u></p> <p style="text-align: right;">See Geometry, 14 Nov '73</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Conservation:</u></p> <p>"Regenerative means local <u>pattern conservation</u> of energy events.</p> <p>"Structures are <u>pattern conservations</u>."</p> <p style="text-align: right;">- Cite RBF to EJA Beverly Hotel, New York 15 March 1971</p>

Synergetics Dictionary

<p><u>Pattern Conservation:</u> (1)</p> <p style="text-align: center;">See Local Pattern Conservation Pattern Integrity</p>	<p><u>Patterns of Experience:</u></p> <p style="text-align: center;">See Angular Sinus Takeout, Dec'61</p>
<p><u>Pattern Conservation:</u> (2)</p> <p style="text-align: center;">See Energetic-synergetic Geometry, Jul'59 Nonmirror-image, 22 May'73 Regenerative, 15 Mar'71 Synergetic Accounting Advantages: Hierarchy Of, (2) Structure, 15 Mar'71</p>	<p style="text-align: right;">(1)</p> <p><u>Patterns of Experience Return Upon Themselves in All Directions:</u></p> <p style="text-align: center;">See Nature Always Comes Back on Itself Returning Upon Itself: Systems Return Upon Themselves</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Evolvement:</u></p> <p>"Unique <u>pattern evolvement</u> constitutes elementality. What is unique about each of the 92 self-regenerative chemical elements is their nonrepetitive <u>pattern evolvement</u> which terminates with the third layer of 92."</p> <p style="margin-top: 20px;">- Site RBF insert Synergetics draft, Sec 4.16.4, Bear Island, 25 August 1971.</p> <p>- Citation at <u>Elementality</u>, 25 Aug'71</p>	<p style="text-align: right;">(2)</p> <p><u>Patterns of Experience Returning Upon Themselves in All Directions:</u></p> <p style="text-align: center;">See Comprehension, Dec'61</p>
<p><u>Pattern Evolvement:</u></p> <p style="margin-top: 20px;">See Elementality, 25 Aug'71* Rectilinear Frame, 24 Sep'73 Scheme of Reference, 24 Sep'73 Vector Equilibrium Frame, 3 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Generalization:</u> (1)</p> <p>"Out of multi-overlaid experience patternings there sometimes emerges an awareness of what we may call a coincidence pattern-- a localized thickening of points. These emergent patterns of frequency congruences and concentrations display a unique configuration-integrity-integrity which has up to now been so dilute in any one experience as to be only invisibly common to many differentiated or special experiences, e.g., a pack of one hundred 4-inch by 5-inch file cards each riddled with hundreds of different sized small small holes. Each card appears to be chaotically patterned with holes. However, when the cards are stacked with edges aligned three holes in each card are vertically aligned; all others are obscured by blank spaces on one card or another. A triangular pattern relationship of the light coming through three tubes in the stack of cards is now lucidly conceptual. To such persistently emergent, uniquely mutual, coincidence-patterning relationships as the same triangle array of holes in each and every card we may apply the term '<u>pattern generalization</u>' as used in a mathematical sense, in contradistinction to the word 'generalization' as used in the literary sense. The latter often means a too-ambitious subject range which consequently permits only superficial considerations of any specific case data data."</p> <p style="margin-top: 20px;">- Cite INTRODUCTION TO OMNIDIRECTIONAL HALO, pp.118-119, 1959</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pattern Generalization:</u> (2)</p> <p>"When the uniquely emergent generalized patternings become describable by us in mentally regenerative conceptual terms, as completely divorced from any one of the specific sensorial conditions of any of the special experiences out of which they emerged, yet apparently, as seen in retrospect, to have been persistent in every special case, then we may tentatively assume such unique mutual pattern content to be a generalized conceptual principle, as for instance the conception of tension as opposed to compression, independent of textures, smells, colors, sound, or size, of any one tension-dominated experience."</p> <p>- Cite INTRODUCTION TO OMNIDIRECTIONAL HALO, p.119, 1959</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"Pattern integrity is conceptual relationship independent of size."</p> <p>- Citation and context at <u>Structure</u>, 10 Dec'73</p>
<p><u>Pattern Generalization:</u></p> <p>See Conceptuality, 24 Apr'71</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"When we speak of pattern integrities, we refer to generalized patterns of conceptuality conceptuality gleaned from a plurality of special-case pattern experiences that have been proven experimentally to be existent always, without exception, in every special case within the required class of experiences."</p> <p>- Cite SYNERGETICS text at Sec. 505.01; RBF galley rewrite of 6 Nov'73</p>
<p><u>Pattern vs. Integer:</u></p> <p>See Minimum, 1954</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"We have topology as a pattern integrity."</p> <p>- Cite RBF to EHL, 3200 Idaho, 10, 17 Feb'72</p> <p>- Citation at <u>Topology</u>, 17 Feb'72</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"A pattern integrity operates independently of the local environment in which we find it. Take a piece of rope. A wave. Its presence is communicated by its interference, apprehended by our tuning capability."</p> <p>"We have step-up, step-down transformations. The wave you can tune tells you of the wave you cannot tune by apprehension lags."</p> <p>- Cite RBF at Penn Bell videotaping session, Philadelphia, 22 Jan'75</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"Each of the chemical elements are pattern integrities formed by their self-knotting, inwardly precessing, periodically synchronized self-interferences."</p> <p>- Cite RBF insert Synergetics draft at Sec. 416.4, Bear Island, 25 August 1971.</p> <p><u>ALSO - CONCEPTUALITY PATTERN SEC. 505.20</u></p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"Comprehensive universe is amorphous and only locally finite as it transformingly differentiates into serially conceptual <u>pattern integrities</u>, some much larger than humanly apprehensible, some much smaller than humanly apprehensible, ever occurring in nonsimultaneous sets of human observings, time-cancelling, harmonically integrative synchronizations are supra or sub human sensibility and longevity experiencability whose periodicities are therefore so preponderantly unexpected as to induce human reactions of overwhelming disorder, so that . . . suddenly around comes the comet again for the first known time in humanly recorded experience, periodically closing the gap and periodically pulsing through eternally normal zero."</p> <p>- Cite RBF amplification to EJA on citation re Comet in Oregon Lecture #5, p. 158. Now in SYNERGETICS draft Sec. 614, 'Tension and Compression.' 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u> (1)</p> <p>"No sharp cleavage is found That identifies the boundary between life and nonlife, Between the heretofore so-called 'animate' and 'inanimate.'"</p> <p>"Viruses, The smallest organized structures Exhibiting 'life,' May be classified either As inanimate or animate, As crystalline or 'cellular' forms. This is the level also at which The DNA/RNA genetic code is essentially A structural <u>pattern integrity</u>. Such <u>pattern integrities</u> Are strictly accountable Only as mathematical principles. <u>Pattern integrities</u> are found At all levels of structural organization in Universe. The DNA/RNA is a specialized case Of the generalized principle of <u>pattern integrity</u> Found throughout life and nonlife."</p> <p>- Cite HOW LITTLE I KNOW, pp. 71-72, Oct'66</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"Man is a complex of patterns or processes. We speak of our circulatory system, our respiratory system, our digestive system, and so it goes. Man is not weight. He isn't the vegetables he eats, for example, because he'll eat seven tons of vegetables in his life. He is the result of his own pattern integrity."</p> <p>- Cite I SLEW TO ME A VEGETABLE, Bannan, 1970. - Citation at <u>Man as Pattern Integrity</u>, 1970</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u> (2)</p> <p>"All <u>pattern integrity</u> design Is controlled by Angle and frequency modulation. The biological corpus Is not strictly 'animate' at any point. Given that the 'ordering' Of the corpus design Is accomplished through such codings as DNA/RNA, Which are essentially angle and frequency modulation. Then we may go on to suggest That 'life,' as we customarily define it, Could be effected at a distance. Precession is the effect Of one moving system Upon another. Precession always produces Angular changes of movements Of the affected bodies, And at angles other than 180 degrees; That is, the results are never Continuance in a straight line. Ergo, all bodies of Universe"</p> <p>- Cite HOW LITTLE I KNOW, pp. 72-73, Oct'66</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"... Man is not alone the physical machine he appears to be. He is not merely the food he consumes, the water he drinks, or the air he breathes. His physical processing is only an automated aspect of a total human experience which transcends the physical. As a knot in a series of spliced ropes of manila, cotton, nylon, etc., may be progressively slipped through all the material changes of thickness and texture along the length yet remain in identifiable pattern configuration, so man is an abstract <u>pattern integrity</u> which is sustained through all the physical changes and processing."</p> <p>- Citation and context at <u>Population Sequence</u> (4), Feb'67</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u> (3)</p> <p>"Are affecting the other bodies In varying degrees, And all the intergravitational effects Are precessional angular modulations And all the interradiation effects are frequency modulations."</p> <p>"The gravitational and radiation effects Could modulate the DNA/RNA Angle and frequency instructions At astronomical remoteness-- Life could be 'sent on.'"</p> <p>"Within the order of evolution as usually drawn Life 'occurred' as a series Of fortuitous probabilities in the primeval sea. It could have been sent or 'radiated' there. That is, the prime code Or angle and frequency modulated signal Could have been transmitted From a remote stellar location. It seems more likely (In view of the continuous rediscovery of man" - Cite HOW LITTLE I KNOW, pp. 73-74, Oct'66</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u></p> <p>"Triangular structuring is <u>pattern integrity</u> itself."</p> <p>- Cite NASA Speech, p. 54, Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity:</u> (4)</p> <p>"As a fully organized being Back to ever more remote periods) That the inanimate structural <u>pattern integrity</u>, Which we call human being, Was a frequency modulation code message Beamed at Earth from remote location. Man as prime organizing 'Principle' construct Was radiated here from the stars-- Not as primal cell, But as a fully articulated high order being, Possibly as the synergetic totality Of all the gravitation And radiation effects Of all the stars In our galaxy, And from all the adjacent galaxies With some weak effects And some strong effects, And from all time. And <u>pattern</u> itself being weightless, The life integrities are apparently Inherently immortal."</p> <p>- Cite HOW LITTLE I KNOW, pp. 74-75, Oct'66</p>

Synergetics Dictionary

RBF DEFINITIONS

Pattern Integrity:

(5)

"You and I
Are essentially functions
Of Universe.
We are exquisite antientropy.

"I'll be seeing you!
Forever."

- Cite HOW LITTLE I KNOW, p.75, Oct'66

RBF DEFINITIONS

Pattern Integrity:

"A pattern has an integrity independent of the medium
by virtue of which you have received the information
that it exists-- the step-up, step-down transformation
medium."

- Cite Oregon Lecture #5, p. 171, 9 Jul'62
- Citation and context at Tunability, 9 Jul'62

CONCEPTUALITY - PATTERN-SEC 505.20

RBF DEFINITIONS

Pattern Integrity:

"Into the molecular rope
A complex slip knot has been 'tied'
Which complex knot
Is both internally and externally
In the exact pattern
Of the complex pattern integrity--
Me--
Which has been slipped
Along the rope
By time.

"And as the knot passed,
The rope behind it
Disintegrated and
Its atoms dispersed
And deployed into
Other biosphere function patternings."

- Cite HOW LITTLE, p. 21, Oct'66

RBF DEFINITIONS

Pattern Integrity:

"Every individual is a pattern integrity and it is an
evolutionary pattern integrity; it is not a static
pattern integrity."

- Cite Oregon Lecture #5, p. 171, 9 Jul'62

CONCEPTUALITY - PATTERN-SEC 505.20

RBF DEFINITIONS

Pattern Integrity:

"When I gave you the slip knot on the rope and we moved
it along-- now it was nylon, now it was manila and now
it was cotton-- we agreed that it really wasn't any of these.
They were just again colors and tactile experiences which
reported something to us as a pattern. They were what I call
a pattern integrity. I am saying to you that each of the
chemical elements are pattern integrities, the forms of local
self-interferences." (M)

- Cite OREGON Lecture #5 - p. 164, 9 Jul'62

RBF DEFINITIONS

Pattern Integrity:

(A)

"No longer do I want to talk about the chemical elements as
things but as pattern integrities. Each one of them is a
unique pattern integrity... in a sense a form of knots. So we
get where there are chemical compounds and the knots tend to
be interlinkable and they will catch on one another. This one
is holding together, all right, but this ball of twine and
this ball of twine, suddenly one weaves into the other every
so often and associates..."

"One of the interesting things I have found to consider about
humanity, whereas each one of us weighs in at an average of
seven pounds-- there is a pattern integrity that is very extra-
ordinary, because no sooner is a child born than people say,
'That is Aunt Mary,' and so forth. There are certain strange
pattern characteristics that suddenly reappear. And it is not
just that there are species, that they are human-- I don't
think people tend to do this too much, but they do, even in
hybrids of plants-- to bring out the red and the white, split
petal, or whatever it may be. At any rate, we say 'Where is
Aunt Mary,' and probably when it only weighed one ounce it
still had Aunt Mary in there."

- Cite Oregon Lecture #5, p.165, 9 Jul'62
FIRST IP - CONCEPTUALITY - PATTERN - SEC. 505.21

RBF DEFINITIONS

Pattern Integrity:

"My working theory is that man is an a priori pattern
integrity of really very great importance."

- Cite Oregon Lecture #5 - p. 173, 9 Jul'62

RBF DEFINITIONS

Pattern Integrity:

(B)

"There is some pattern integrity that came in in a family--
absolutely discontinuous, because Aunt Mary had absolutely
nothing to do with this wedding. She was just Aunt Mary, and
there is some Aunt Mary in this child, all right. I call that
pattern integrity quite independent of the relative size--
whether it is the one ounce size, or the seven pound size, or
the 70 pound size-- because later on it gets to be 70 pounds--
then it gets to be 170, and then it had better watch its
Metacal. There is a pattern integrity which is something
independent of weight; and each human being is an extraordinary
complex of these pattern integrities."

- Cite Oregon Lecture #5, p.166, 9 Jul'62

Synergetics Dictionary

<p>RBF DEFINITIONS:</p> <p><u>Pattern Integrity:</u></p> <p>"... Waves are essences neither of milk nor water nor gasoline; the waves are distinct and measurable <u>pattern integrities</u> in their own right. The invariant relationships which govern pattern integrities in nature " are "pure principle."</p> <p style="text-align: center;">██████████</p> <p style="text-align: center;">- Cite MARKS, p. 20, 1960</p> <p><u>CONCEPTUALITY - PATTERN - SEC 505.32</u></p>	<p><u>Pattern Integrity: Equation Of:</u></p> <p>See Equation: Philosophical Equations</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity: Atomic Knots:</u></p> <p>"Each of the chemical elements is a unique complex pattern of energy event interrelatednesses which interact inter-interferingly to continually relocalize the involved quantity of energy. These self-interference patterns of atomic element components are in many ways similar to the family of knots that are tied with rope by sailors to produce various local behaviors, all of which, however, result in further contraction of the knot as the two ends of the rope immediately outside the knot are pulled away from one another by forces external to the knot-- and thus all the attractive forces of Universe operating upon the atoms may result precessionally in keeping the atomic knots pulled together."</p> <p style="text-align: center;">- Cite RBF rewrite of SYNERGETICS galley at Sec. 505.21, 6 Nov'73</p>	<p><u>Pattern Integrity - Phenomenon Without Name:</u></p> <p>See Conversation Sequence, (1)</p>
<p><u>Pattern Integrity: Atomic Knots:</u></p> <p>See Tensegrity Model of Self-interference of Energy</p>	<p><u>Pattern Integrity:</u> (1)</p> <p>See Eternal Pattern Integrity Intellectual Pattern Integrity Knot Man as Pattern Integrity Metabolic Flow Pattern Conservation Topological Aspects: Inventory Of Virial Steerability Pattern Integrity - Phenomenon Without Name You & I as Pattern Integrities Wave Pattern of a Stone Dropped in Liquid Scan-transmission of Pattern Integrities</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Integrity: Equation of Pattern Integrity:</u></p> <p>"... All the biologicals are continually multiplying their orderly, cellular, molecular, and atomic, structurings which metabolic conservation functioning completes the comprehensive <u>pattern integrity equation</u> Governing orderly cosmic energy export-import balancing."</p> <p style="text-align: center;">- Citation and context at <u>Manifest Three</u>, 1973</p>	<p><u>Pattern Integrity:</u> (2)</p> <p>See Conversation Sequence, (1)* Hores & Thores, 4 Jun'72 Man: Interstellar Transmission of Man, May'72 Medium, 9 Jul'62 Necklace, (2) Population Sequence, (4)* Regenerative Design: Law Of, (2) Structure, 25 Feb'69; 16 Dec'73*; Nov'71; 9 Nov'73 System, 4 Jun'72 Triangle, (2) Tunability, 9 Jul'62 Topology, 17 Feb'72* Twenty Questions, (4) Domain & Quantum, (1) Omnitriangulation, 3 Oct'72 Vector Equilibrium Involvement Domain, 10 Dec'75 Geodesic Domes, 24 Jan'58 Stock Market, 1964 Electromagnetic Transmission of Human Organisms, Jun'72 Human Beings, 22 Jun'77</p>

Synergetics Dictionary

RBF DEFINITIONS

Patterning of Patternings:

"[In a] comprehensive view of nature the physical world [is seen as] a patterning of patternings . . . whose constituent functions are fields of force, each of which compenetrates and influences other localized fields of force.

"[A pattern] is a macro-micro-oscillocosm."

MARKS
- Cite ~~MARKS~~, P. 8. 1960

CONCEPTUALITY- PATTERN - SECS- 505.04 + 505.05

Pattern Sense:

See Blind Date with Principle, Jan'55

RBF DEFINITIONS

Pattern Processing Machines:

"The computers, both large and small, are pattern processing machines of which the human brain is the prototype. As with the human brain all pattern processing consists of two main classes: differentiation and integration, i.e., specialization vs. generalization."

- Citation and context at Computer, 10 Oct '63

rbf DEFINITIONS

Pattern Stabilizing:

"A triangle is a pattern stabilizing complex of energy events."

- Cite RBF in Corcoran Gallery Address, Washington DC, 23 Feb '72

Pattern-seeking Function:

See Metaphysical, Jun'66

RBF DEFINITIONS

Pattern Stability:

"A necklace has no pattern stability."

- Cite RBF to H.U.D. Engineers, 26 Jan '72 at Washington

RBF DEFINITIONS

Pattern Sense:

"I resolved to apply the rest of my life to converting my pattern sense, through teleological principle into design and prototyping developments governing the pertinent, but as yet unattended, essential industrial network functions.."

- Citation and context at Fuller, R.B.: Crisis of 1927, 14 Apr'70

Pattern Stability: Pattern Stabilization:

See Structure, 16 Dec'73; 27 Dec'74
Object, 9 Nov'73
Restraints, 8 Aug'77

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pattern Strip Aggregate Wrapabilities:</u></p> <p>"Thus we learn sum-totally how a ribbon (band) wave, a waveband, can self-interfere periodically to produce in-shuntingly all the three prime structures of Universe and a complex isotropic vector matrix of successively shuttle-woven tetrahedra and octahedra. It also illustrates how energy may be wave-shuntingly self-knotted or self-interfered with (see Sec. 506), and their energies impounded in local, high-frequency systems which we misidentify as only-seemingly-static matter."</p> <p style="text-align: right;">- Cite RBF rewrite of SYNERGETICS galley at Sec. 930.26, 19 Dec'73</p>	<p><u>Pattern Uniqueness:</u> (2)</p> <p>See Synergetics, 1959 Synergist, 1954 Vertex, Jun'66</p>
<p><u>Pattern Strip Aggregate Wrapabilities:</u></p> <p>See Tetrahelix: Continuous Pattern Strip Waveband Tetrascroll</p>	<p><u>Pattern: Patterning:</u> (1A)</p> <p>See Awareness Patterns Circumference Patterns Complementary Pattern Continuous Pattern Strip Cumulative Patterning Overlays Ecological Pattern Evolutionary Pattern Evolution: Pattern of Evolution Flux Pattern Fountain Pattern Happening Patterns Hierarchy of Patterns Holding Pattern Interpatterning Interrelationship Patterns Largest Pattern Local Pattern Local Holding Pattern</p>
<p>RBF DEFINITIONS</p> <p><u>Pattern Uniqueness:</u></p> <p>"Gler said, 'We are dealing in pattern. Mathematics is pattern and there are irreducible aspects of pattern. That is the patterns do represent some kind of events. There are the lines: a line is a unique kind of a pattern. If I have two lines, where the two lines cross is distinctly different from where the lines don't cross.' He called this the vertex, the convergence. He said this is absolute pattern uniqueness."</p> <p style="text-align: right;">- Cite Oregon Lecture #7, p. 245. 11 Jul'62 CONCEPTUALITY - PATTERN - SEC 505.10 VERTEXES - 523.01</p>	<p><u>Pattern: Patterning:</u> (1B)</p> <p>See Local Patterning Aspects Memory Album of Patterning Metaphysical Wave Pattern Maximum Pattern Minimum = Pattern Minimum Characteristics of All Patterns in Universe Minimum Set of Patterns Number Pattern Omnidirectional Pattern Pattern Strip Aggregate Wrapabilities Precessionally Shunted Pattern Relay Pulse Pattern Set of Patterns Shunting: Relative Motion Patterns Structural Pattern Subpattern Strip: Continuous Pattern Strip Tetrahelix: Continuous Pattern Strip Process Relationship</p>
<p><u>Pattern Uniqueness:</u> (1)</p> <p>See Unique Pattern</p>	<p><u>Pattern: Patterning:</u> (1C)</p> <p>See Tools as Part of the Pattern Man Triangulation Pattern Strip Unique Pattern Equations = Pattern Mathematics = Pattern World Pattern vs. Local Pattern Nuclear Pattern</p>

Synergetics Dictionary

<p><u>Pattern:</u> (2A)</p> <p>See Abstraction, Oct'59; 1955* Alphabet, Jun'66 Brain's TV Studio, 1960 Comprehensive, Feb'72 Discovery, 11 Jul'62 Energy, 1960 Hair, 9 Jul'62 Intellections, 1960 Irrelevancies: Dismissal Of, 2 Jul'62* Metaphysical & Physical, 2 Jun'74 Monkey Wrench, 9 Jul'62 Mathematics, 1965 Nature, Dec'72 Number, 1954; Jun'66* Parts, 1954* Principle, 12 Jun'56 Intertransformability Systems, 28 Apr'77</p>	<p style="text-align: center;">TEXT CITATIONS</p> <p><u>Pauli, Wolfgang:</u> #201.22</p>
<p><u>Pattern:</u> (2B)</p> <p>See Rafts: Early World Drifting on Rafts, 11 Jul'62 Recognize, 22 Jul'71 Residual Error, 1954* Scientific Generalization, 28 Jan'69 Solid State, 13 Jan'73 Structure, 21 Dec'71 Structure Sequence (1)(2) Synergist, 1954 Triangle, 25 Feb'69 Weather, Feb'73 Wave, 6 Nov'73</p>	<p><u>Pauli: Pauli's Exclusion Principle:</u></p> <p>See Brouwer's Theorem, 1960* Coincidental Articulation Sequence, (1)-(4) Synergetic Hierarchy, (1)</p>
<p><u>Pattern:</u> (3)</p> <p>See Pattern Analysis Pattern Cognition Feedback Pattern Cognizance Pattern Conservation Pattern Evolvment Patterns of Experience Patterns of Experiencing Returning Upon Themselves Pattern-seeking Function Pattern Generalization Pattern Integrity Pattern Integrity: Equation Of Pattern Processing Machines Pattern Sense Pattern Stabilizing: Pattern Stability Patterning of Patternings Pattern Strip Pattern Uniqueness Pattern vs. Integer</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Pauling, Linus:</u></p> <p>"Since all vectors are divisible by two Linus Pauling was right that you can close pack spheres with two spheres tangent connected."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash., DC, 7 Oct'71</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Pauli's Exclusion Principle:</u></p> <p>"Pauli's exclusion principle verifies that each of the stirred points in Brouwer's theorem and the point which did not move have their inherently separate counterpart points, which discloses bot the neutral axis formed by the two points that do not move, and the obverse and reverse set of moving points."</p> <p style="text-align: right;">- Citation & context at <u>Brouwer's Theorem</u>, 1960</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Linus Pauling:</u></p> <p>"Dr. Linus Pauling has found and twice published his spheroid clusters designed to accommodate this magic number series in a logical system. Without powerful synergetic tools we find him in the vicinity of the answer; but we now identify these numbers in an absolute synergetic hierarchy which must transcend any derogatory suggestion of pure coincidence, alone, for the coincidence reoccurs with mathematical regularity, symmetry and structural logic which identifies it elegantly as <u>the</u> model for the magic numbers."</p> <p style="text-align: right;">- Cite NASA Speech, pages 104-105. Jun'66 MAGIC NUMBERS SEC 482-02 [995.34]</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pencil:</u></p> <p>"Rationalization alone, however, is not sufficient. It is not an end in itself. It must be carried through to an objective state and materialize into a completely depersonalized instrument-- a <u>pencil</u>. (Who knows who made the first pencil? Certainly not 'Eberhard Faber' or 'Venus'.) The pencil not only facilitates communication between men, by making thought specific and objective, but also enables men cooperatively to plan and realize the building of a house, oxygen tent, flatiron, or an x-ray cabinet by virtue of the pencil's availability. The inventor-- alive or dead-- is extraneous and unimportant; it is the <u>pencil</u> that carries over. Abstract thought dies with the thinker, but the mechanism was building for a long time before the moment of recognized in-vention."</p> <p>- Citation and context at <u>Rationalization Sequence</u> (4), 1938</p>	<p>RBF DEFINITIONS</p> <p><u>Pendulum Model vs. Scenario Model:</u></p> <p>"The <u>Pendulum Model</u> of Newton's Universe in which the swings decrease and the pendulum ultimately comes to 'Up and Down Rest' vs. the inherently endless <u>Scenario Model</u> of Einstein's Universe in which truth is ever approaching evolutionary and constantly intertransforming, precessionally behaving, process of a complex of omniaccommodative, intercomplementary, transactional events involving in its inward-outward, three-way aroundness, catalogue of alternate transformative options of ever more inclusive and refining degrees-- in ever closer proximity to perfect equilibrium of all transformative forces, but never attaining such equilibrium of 'absolute' truth in which the avoidance of such omnizerophase condition involves not only a constant metaphysical apprehending, comprehending, sorting, contracting, and compacting (by universal mind) of physical entropy's everywhere and every-while increasing disorder and expansiveness (a disorder which attains and passes through maximum asymmetry as the metaphysical passes through, but fails to remain at, the zero of equilibrrious truth), wherefore metaphysical might continually improve the scenario by conceptual discoveries of new generalized principles."</p> <p>- Cite PENDULUM MODEL vs. SCENARIO MODEL, (typescript), 23 Dec'68</p>
<p><u>Pencil:</u></p> <p>See Design, 1938 Rationalization Sequence, (4)* Teleology, (2)</p>	<p><u>Penetration:</u> <u>Penetrating:</u> (1)</p> <p>See Compenetration: Compenetrate</p>
<p><u>Penditura:</u> (1)</p> <p>See Expendable Indispensable</p>	<p><u>Penetration:</u> <u>Penetrating:</u> (2)</p> <p>See Building, 28 Jan'75</p>
<p><u>Penditura:</u> (2)</p> <p>See Twoness, (p.143) 1960</p>	<p><u>Peninsula:</u></p> <p>See Male & Female, 12 Jan'74</p>

Synergetics Dictionary

<p><u>Penis:</u></p> <p>See Male & Female, 12 Jan'74; 1 Feb'75</p>	<p><u>Pentagon:</u> (1)</p> <p>See Hex-pent Tensegrity: Twelve Pentagons Twelve Pentagons</p>
<p><u>Penitence:</u></p> <p>See Hesse: Herman, 28 Apr'71</p>	<p><u>Pentagon:</u> (2)</p> <p>See Domain of a Point, May'72 Domains of Polyhedra, 7 Nov'73 Necklace, (A)</p>
<p><u>Pensive:</u></p> <p>See Expensive - Nonthinking, 24 Jan'76</p>	<p><u>People's Language:</u></p> <p>See English, 28 Jan'75</p>
<p><u>Pentagonal Polarity:</u></p> <p>See Tensegrity Masts: Pentagonal Polarity</p>	<p>RBF DEFINITIONS</p> <p><u>Perception:</u></p> <p>"The physical aberration is always in our perceptoning but it is not the reality."</p> <p>- Citation & context at <u>Principle</u>, 6 Apr'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Perception:</u></p> <p>"Our vision is limited to the tiny red, orange, yellow, green, blue, violet bands of frequency tunabilities representing far less than one-thousandth of one percent of the great electromagnetic spectrum of the thus far discovered vast range of the Physical Universe realities. Our afterimage overlapping which results in our sense of motion, is even more limited in its <u>perceptual</u> range.</p> <p>"We cannot see the hands of the clock move. We cannot see life growing. We cannot see either the stars or the atomic components move, though they move at fantastic speeds. We can only see the ultra-slow motions of the clouds, locally running waters, human beings and other creatures, and their parts.</p> <p>"No wonder that little man, who within his average lifetime has seen only about one-millionth of the surface of his planet, and has lived but a split-second of the astronomical ages, does not see and cope simultaneously with the larger evolutionary patternings and life aboard the planet Earth. Only through memory plus thought-- greatly aided by instruments-- does man discover the ultra- and infra-motion effects."</p> <p>- Cite WHAT QUALITY ENVIRONMENT?, 24 Apr'67</p>	<p style="text-align: right;"><u>Perception: Perceptivity:</u> (1)</p> <p>See Apprehension Invisible Motion Convergent vs. Parallel Perception Frequency Islands of Perception</p>
<p>RBF DEFINITIONS</p> <p><u>Perception:</u></p> <p>"It is the nature of all our experiences that they begin and end. They are packaged. For instance, we see in 60 separate picture frames per second as in a moving picture continuity. Each frame is a finite increment. Our brain's after image lag is so powerful that (it) gives a sense of absolute eccentricity' to our only subconsciously packaged <u>seeing</u>. We wake up and go to sleep.</p> <p style="text-align: center;">██████████ ████████████████████</p> <p style="text-align: right;">- Cite NACA Speech, p. 32, Jun'66</p> <p>- Citation and context at <u>Finite</u>, Jun'66</p>	<p style="text-align: right;"><u>Perception: Perceptivity:</u> (2)</p> <p>See Principle, 6 Apr'75* Invisibility of Macro- and Micro- Resolutions, (1)(2) Children as Only Pure Scientists, (1)(2)</p>
<p>RBF DEFINITIONS</p> <p><u>Perceptual Peepholes as Fraction of Reality:</u></p> <p>"How did the Universe come into being with its complete integrity, its comprehensively interaccommodative, omni-differentiated rates and methods of transforming? Such questions remain ever more importantly unanswered and seemingly unanswerable. Yet, all of our present customs, ways of thinking, and means of communication have been developed under the misapprehension that only the minuscule, millionth part of the physical Universe, which the peepholes of our perceptual senses reveal, comprises the whole of reality. Because humanity has deliberately fractionated the formal study of residual reality into ever more minute specializations, which continually know more and more about less and less, the residual preoccupations have lost sight completely of any of the comprehensive and infinitely inspirational mystery of totality. First pragmatism, then utter despiritization, have resulted. It is not God who died. It was sophisticated man who died, choked to death by the ever-tightening noose of specialization-- 'enlightened selfishness.'"</p> <p>- Cite ARCHITECTURE AS ULTRA INVISIBLE REALITY, p. 151, Dec. '69</p>	<p>RBF DEFINITIONS</p> <p><u>Perfect:</u></p> <p>"Nature abhors an equilibrium as much as she abhors a perfect vacuum or a perfect anything."</p> <p>- For citation and context see <u>Equilibrium</u>, Jun '66</p>
<p><u>Perceptual Peephole:</u></p> <p>See Common Sense: Perceptual Peephole</p>	<p>RBF DEFINITIONS</p> <p><u>Perfect:</u></p> <p>"Perfect, though impossible of demonstration, is nonetheless the criterion of selection. Perfect is not only a direction but a time direction, perfection being never in 'reality' attainable. There is herein to be discerned the meaning of "Never, Never Land;" Children dream truly."</p> <p>- Cite NINE CHAINS TO THE MOON, p.19, 1938</p>

Synergetics Dictionary

RBF DEFINITIONS

Perfection:

"As a result of the gamut of relative recall time-lags, the physical is always the imperfect experience, but tantalizingly always ratio-equated with the innate eternal sense of perfection."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 443.04, 4 Nov'73

Perfect Man:

See Immaculate Conception, 25 Jan'72

RBF DEFINITIONS

Perfection:

"Intellect... is an infinite refinement in proximation to perfection, which perfection is the zero-inflection... phase through which... the transformations oscillatingly pass..."

- Citation and context at Intellect, 16 Aug '50

RBF DEFINITIONS

Perfect Prototype:

"The vector equilibrium... an invisibly perfect prototype in pure principle."

- Citation & context at Understanding, 4 Oct'72

Perfect = Direction:

See Perfect, 1938

Perfect = Zero:

See Aberrating, 23 Jun'75

Perfect & Imperfect:

See Immaculate Conception, 25 Jan'72

Perfect: Perfection:

(1)

See Exact: Exactitude
Ideal
Perfect & Imperfect
Potential
Perfect = Zero

Synergetics Dictionary

<p><u>Perfect:</u> <u>Perfection:</u> (2)</p> <p>See Equilibrium, Jun'66 Eternal Principles, 22 Nov'73 Frame of Reference, 4 Oct'72 God, May'72 Immaculate Conception, 25 Jan'72 Intellect, 16 Aug'50²</p>	<p><u>Performance Per Pound:</u> (1)</p> <p>See Copper Design Science Displacement of Ships & Buildings Ephemeralization Metals: Recirculation of Metals More With Less Weapons Technology</p>
<p>RBF DEFINITIONS</p> <p><u>Performance:</u> <u>Equation Of:</u></p> <p>"When finally solving from the inside out the teleologic perspective will be universal and the equation of performance will be:</p> <p style="padding-left: 40px;">Degree of satisfaction encompassment =</p> <p style="padding-left: 80px;">Degree of factor inclusion."</p> <p style="margin-top: 20px;">- Citation & context at <u>Teleology</u>, 1938</p>	<p><u>Performance Per Pound:</u> (2)</p> <p>Acceleration of Change (2) See Aesthetics, Dec'67 Artifacts (1)(2)* Automobile, Feb'72 Curvature: Compound, 12 Mar'74 Design Science (B) Dome, 9 Jul'73 Dymaxion, 1967 Industrialization (1) Prestressed Concrete Sequence (3) Sovereignty: Elimination Of, 29 Jun'72 World Game (II) Transnationalism vs. Colonialism, (1) Bauhaus School: Remoteness Of, 24 Jan'58 Dymaxion Artifacts, (2) Club of Rome: Limits to Growth, (B)(C) Form Cannot Follow Function, 20 Sep'76</p>
<p><u>Performance:</u> <u>Equation Of:</u></p> <p>See Equation: Philosophical Equations</p>	<p><u>Performance:</u></p> <p>See Invisible Performance</p>
<p>RBF DEFINITIONS</p> <p><u>Performance Per Pound:</u></p> <p>"Inasmuch as nature's omni-inexorable transformings consist of a plurality of equieconomical, alternatively employable, disassociating and associating, principles-- these, together with the complex of electromagnetic and mechanical principles can be electively employed by humans to greatly advantage humanity by producing ever higher performance with ever less investment of resources as pounds of material, ergs of energy, and hours of time, per each function designedly satisfied."</p> <p style="margin-top: 20px;">- Citation & context at <u>Artifacts</u> (1)(2), 30 Apr'74</p>	<p><u>Perfume:</u></p> <p>See Communications Hierarchy, (2)</p>

Synergetics Dictionary

<p>TEXT CITATIONS</p> <p><u>Perimeters:</u></p> <p>Synergetics : Fig. 412.01, <u>note.</u></p> <p>Sec. 465.42 (2nd. Ed.)</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (1)</p> <p>"Mathematical concepts of group phenomena may be acquired in principle by the willingness (subjectively initiated) of the individual to be governed by the integrity of progressive conceptioning principle-- the objective synchronizations are implicit and unavoidable competence and comprehensive, realizable design will result. Let us pursue further the conceptioning in specifics of group principle.</p> <p>"It is not difficult to understand that the trends to synchronization by harmonic interval of one collection of events can seemingly and sumtotally create an aspect of such superficial incongruity in respect to the sumtotal collected harmonic events of other phases of functional disposition, of the differentiable Universe, as to predispose us to assume that there might never be synchronization of one major collection with another. We obviously incline to this predisposition by virtue of the persistence of the familiar in our own environmental close-up-- thought, which causes the dynamic interpenetrations to appear as a static, rather than as a periodic-continuity environment reality.</p> <p>- Cite TOTAL THINKING, I & I, pp.237-238, May'49</p>
<p><u>Perimeter:</u></p> <p>See Macro-micro, 12 Nov'75 Out-lining, 22 Mar'76</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (2)</p> <p>"Misapprehension of our own dynamic significance becomes in environmental close-ups a bundle of persistent periodicities developing into a spontaneous anticipation of repetition of harmonic intervals and their familiar synchronization.</p> <p>"So marked is our proclivity for such anticipation that we set ourselves as though we were alarm clocks to waken at specific blocks of intervals of familiar periodicities of experience. We relate our own heartbeat to minutes of hours of days, and our meals-- or chemical fueling-- to the days of the postman's coming and going, and even to periodicities such as invented Father's Days and other soon-familiar invented conventions, of the persistent, complex periodic continuities of our days into years. The invented periodicities may become only monotonous.</p> <p>"Life in retrospect, however, may be informatively discovered to have been comprised of a progressive series of interruptions and penetrations of the successively latest a priori environment continuities-- by unfamiliar frequencies or biodynamic groups of frequencies, always occurring, as unfamiliar to the ignorantly accepted trend to mono-tony."</p> <p>- Cite TOTAL THINKING, I&I, p.238, May'49</p>
<p><u>Periodic-continuity:</u> (1)</p> <p>See Continuity-finiteness Scenario</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (3)</p> <p>"The new event always comes as an harmonic interruption of frequencies, or an interference with the increasing inventory of already assimilated synchronizations (up to the latest instant), which have only become obvious by virtue of the spontaneous synchronization of the sum total of acquired experiences and progressively integrated interruptions.</p> <p>"It is necessary that the comprehensive realizer ascertain in principle how the mathematical proportioning of experience is persuasive to the erroneous concept that the sum total bundle of already-experienced frequencies constitutes so unified, or well synchronized an experience whole as to have seemingly always been 'known.' The comprehensive realizer will discover that his adequacy as rearranger of local Universe, in principle, will if competently effected, be acquired by men as an obvious accretion, and that the more competent his realizing-rearrangements of design, the less grateful the beneficiaries, which will be precisely the objective of the comprehensive realizer.</p> <p>"A human personality, that is, a life-- with which the comprehensive realizer is concerned-- is a unique bundle of"</p> <p>- Cite TOTAL THINKING, I&I, pp.238-239, May'49</p>
<p><u>Periodic-Continuity:</u> (2)</p> <p>See Thought, May'49</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (4)</p> <p>"accumulated experience to which the new experience must always be dissynchronous, but only at the moment of original interference, else the new interaction of the greater complex of truth would not have been recognizable and acquirable as new experience and tactical advantage.</p> <p>"The greatest overall misapprehension regarding the complex-continuities is that which assigns a static or 'at rest' analysis to the sum total sensation of individual experience and consequently to the sum total of all individuals' experience. Against the inertia of a seemingly static whole, each new harmonic incorporation of life therefore seemingly impinges as a dynamic perversity. This is why we frequently remark, 'Man tends to back up into his future.'</p> <p>"In addition to the simple arithmetical, algebraic, and geometrical progressions of the first, second, and third degrees of acceleration, mathematics discloses other series, and superseries, of superficially unpredictable mathematical frequencies because they are composed of complementary and reciprocal numbers whose products alone, though never occurring"</p> <p>- Cite TOTAL THINKING, I&I, p.239, May'49</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (5)</p> <p>"simultaneously or in whole, are compositely congruent with complex progressions. But these complex components occur in discontinuous series, and are inherently self-inexplicable. The complementary functions must therefore impinge upon consciousness only as meaningless. As immediately contemplated upon first experience, they of necessity, alone, constitute seemingly absolute perversity of interference. Synergy-- wholistic behavior unpredicted by parts.</p> <p>"It is, therefore, the unpredictable degree of the super- and the supersuper- 'n' degrees of complex association of energy frequencies which seem most preposterous. We cannot view the great confluences of separately and remotely significant events forwardly resultant to now. Synergy is inherently surprising.</p> <p>"When, however, these complexities are viewed in reverse, from the advantage of even the most mathematically supersuper-interference, the whole regains the acceptable sublimity of aspect, such as a fleet of little ocean racers 100 miles off Bermuda struggling with the waves of interference of the Atlantic turning the perversely interfering winds to advantage by virtue"</p> <p>- Cite TOTAL THINKING, I&I, pp.239-240, May'49</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (9)</p> <p>"of the comprehensive designer to orderings of integrity of Universe.</p> <p>"Where, geographically speaking, of a priori unique environment continuities, the inherent periodicity of the occurrence of interference is at a relatively low frequency, then the rate of dissipation of ignorance is proportionally low, and vice versa.</p> <p>"The relatively lowest inherent periodicity of interference of forceful variables-- of experience in the dynamic environment (geography)-- occurs in the dry land near sea level in the region of the equator. The periodic frequency of interference by physical variables increases outwardly from the Earth's center into the colder climates of mountain and toward the Earth poles. The periodicity and magnitude of forceful interferences increase even more upon the seas, and yet more as man penetrates outwardly from the unique energy fixations of Earth into the cosmos of major categories of general dynamic principles.</p> <p>"Sum totally on Earth the residual vanities and superstitions of the ego bulk up most obviously in the warm and mild climates,"</p> <p>- Cite TOTAL THINKING, (I&I), pp.24-242, May'49</p>
<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (6)</p> <p>"of the relative inertia of the relative waves of water, eventually to pass Bermuda, as the whole picture is observed from the airplane and its infinitude of subcomplexities.</p> <p>"Though both are designed with the same family of principles called 'factors of ships,' the comprehensive realizer can see that the superficial difference between the collections of frequencies which makes the Bermuda cruising boat seemingly different from the airplane-- or indeed, man from elephant-- may be in principle the same difference as understandably exists between an early Wright airplane and the latest supersonic airplane, or, yet, between an early Chinese hot air balloon and a late helicopter.</p> <p>"The only difference between the Wright and the supersonic planes is the sum total of recurrent synchronized cyclic events known as the 'succession of design models'-- evolved in complex out of the physical experience with each trial balance of the designed complex effected by [redacted] man, and as let loose after static-load-test-within-limited-controlled-conditions of variables, into the dynamic-load-tests within the unknown, uncontrolled, comprehensive and a priori design"</p> <p>- Cite TOTAL THINKING, (I&I), p.240, May'49</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (10)</p> <p>"originally most favorable to the naked, ignorant man, and are most rapidly dispersed and replaced with intellectual ordering in the environments of highest frequency of unprecedented intensities of interference, penetrated now by man at will by virtue of his contriving of realizations in complex principles.</p> <p>"Each of the sumtotal variety of biological forms represents in simple principle the complex bundling of unique internal experience continuities, and the latter's individual accumulations of external periodic experience, within the greater bundle of persistently unique environmental sequences-- of variable geographic frequency bundle limitations. Humans have abstract 'tree rings' of experience.</p> <p>"The circling bands of cross-sectioned tree or the scalloped terraces of the shellfish are convergently secreted structures (interference of higher order) of cyclic bundling of experiences. Wave embodiments of cyclic experience appear everywhere in the accredited morphology of nature's omnidirectional, convergent-divergent, synchronous-dissynchronous, infinite plurality of pulsating controls of interactive events in principle."</p> <p>- Cite TOTAL THINKING, (I&I), p.242, May'49</p>
<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (7)</p> <p>"complex of the residual uncharted variables of Universe. The uncharted residual function of Universe balances the special-set function of derived functions-- called from out of the total principles of energetic Universe by the designer as a newly realized mutation of species evolution accomplished by synergetic extension.</p> <p>"Though having no one common component part identification, the difference between the 1904 Wright Brothers' biplane and the 1963 superjet, supersonic, stratosphere monoplane is only a group difference of a minor complex of almost 60 packed years of experience with the same body of experience called airship; which, in turn, only specialized in a few of the greater body of principles called ship; which specialized in a few of the greater body of principles called Earth; which specialized in a few of the greater body of principles called motion; which specialized in a few of the greater body of principles called energy, which specialized as an original function for the comprehensive Universe. The first derived coordinates of Universe would seem to be functions of energy variant in respect to intellect.</p> <p>- Cite TOTAL THINKING, I&I, pp.240-241, May'49</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (11)</p> <p>The cyclic wave accelerations-- unique to parents and parent's parent-- make overlapping internal impressions of the periodic and cyclic interferences-structuring-by-accretion, prearranging thereby internal angles of the original turbing tendency of unfoldment, upon the gestating seed of periodic secretion of outside-in then inside-out pulsation-inversion which we call regenerative birth. This is, of course, a union of the infinite inwardness with the infinite outwardness to fulfill the comprehensive principle of uni-verse. Human egos are multiconcentric frequency 'halo' systems.</p> <p>"As with the complex of synchronized convergent principles called airplane, compounded of the succession of flight experiences with a succession of 'improved' designs in-corporating all previous experience in action-reaction juxtapositions (called structure and mechanics), a trend to further inclusion and refinement of accelerating acceleration of improvement is inherent, but always improvement is relative to the whole of already-secreted true experiences, whether as yet detected or not by the redesign-cycle mutators.</p> <p>"A new design's 'sport' or subspecies may long be latent, a helicopter development postponed by preoccupation with the"</p> <p>* Cite TOTAL THINKING, (I&I), pp.242-243, May'49</p>
<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (8)</p> <p>"We can see that the concept of original separation of Universe into two inherent functions-- and the further subdivision and expansion of one function into a unique plurality of subsets of functions-- and subsequent acceleration of specialized experience with new design events of any one unique subset's evolution, as contrasted against another, can only accelerate superficial differences between any degrees of subsets.</p> <p>"It is obvious that if the frequency of cyclic events differs in one geographical environment from another, the life within one environment may be accelerated to increasing degrees of experience with the life within another, and, therefore, to sets of superficial difference of existence and trend. It can then be seen that what we might designate as natural education-- by induced self-discipline advantage-- represents an accelerated testing of objective-subjective experience, and that acceleration is natural and that natural education may potentially evaporate the inadequacy predictions of original vanity and superstitions over and that the original springs of action may become obsolete as the realizations of intellect and the hitherto preoccupations with seeming frustration and self-destruction may be supplanted, through the self-disciplining"</p> <p>- Cite TOTAL THINKING, (I&I), p.241, May'49</p>	<p>RBF DEFINITIONS</p> <p><u>Periodic Experience:</u> (12)</p> <p>"initial concept of 'airship.' The relative, realized-complex trend accelerates itself in compounding degrees, whereby, eventually, the probability of numbers of immediately detected forward mutations to be refinably anticipated exceeds in number the sum total of the previously secreted, or experienced, impressions, innately preoccupying the species division.</p> <p>"A historical shift is now occurring in the scientific viewpoint, induced by this shift in balance of [redacted] preponderant numbers of effective impressions, pre-and-post-natal, upon behavior probabilities of the various species to be affected preponderantly by the relative number of post-natal, periodic, and cyclic accelerations.</p> <p>"Hazy awareness of the significance of this historically pivotal event is at the core of hastily taken political positions seeking to establish monopolistic validity of comprehensive viewpoint (where mono-logical explanation of the biologically functioning derivatives of Universe may never be tolerable). Both sides are right about their specially selected cases; neither may increase their understanding by arbitrary limitations of experience and conception regarding the next"</p> <p>- Cite TOTAL THINKING, (I&I), p.243, May'49</p>

Synergetics Dictionary

RBF DEFINITIONS

Periodic Experience: (13)

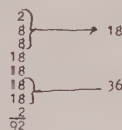
"appropriate trial balance of potentials of the apprehended, and therefore anticipated, periodic inclusions of the subjective-objective 'beating to windward' of the periodically shifting advantages of Universe. The comprehensive realizers of all time have always realized the implicit truth of these relationships of Uni-verse. Bias precludes synergetic advantage."

- Cite TOTAL THINKING, (I&I), p.243, May'49

RBF DEFINITIONS

Periodic Table: Harmonics of 18:

"The prime number 17 accommodates all the positive-negative, quanta-wave primes up to 17 and including the number 18, which in turn accommodates the two nines of the invisible twoness of all systems. It is to be noted that the harmonics of the periodic table of the elements add up to 92:



There are five sets of 18, though the 36 is not always so recognized. Conventional analysis of the periodic table omits from its quanta accounting the always occurring invisible additive twoness of the poles of axial rotation of all systems."

- Cite SYNERGETICS, 2nd. Ed. at Sec. 1238.43, 22 May'75

RBF DEFINITIONS

Periodic Table:

"Because people thought the nucleus was one, they missed for so long the significance of the atomic weights in the Periodic Table."

- Citation and context at Zero Frequency, 29 May'72

Periodic Table:

(1)

See Eightness: Begeted Eightness
Elementality
Ninety-two Elements

RBF DEFINITIONS

Periodic Table and Closest Packing:

In closest packing of spheres "the third layer of 92 spheres contain eight new potential nuclei which however do not become active nuclei until each has three more layers surrounding it-- three layers being unique to each nucleus. This tells us that the nuclear group with 92 spheres in its outer or third layer is the limit of unique, closest-packed assemblage of unit wavelength and frequency, nuclear symmetry systems. This is impressive for the system's three layers of 12, 42, 92 add to 146 which is the number of neutrons in uranium, which has the highest nucleon population of all the self-regenerative chemical elements-- and whose 146 neutrons plus the 92, unengaged mass attracting protons of the outer layer adds 92 to 146 giving the predominant uranium 238 from whose outer layer the excess two of each layer-- which functions as a neutral axis of spin-- can be disengaged, which leaves the chain reacting, uranium 236."

- Cite N&HNU SP&UCH, p. 25, 13 Nov'69

Periodic Table:

(2)

See Number: 64, 22 Jan'73
Pythagoras, (2)
Rhombic Dodecahedron, 25 Feb'72

Periodic Table & Closest Packing:

See Mite as Model for Quark, 3 May'77

RBF DEFINITIONS

Periodicity:

"Because the physical is time, the relative endurance of all special-case [redacted] physical experiences are proportional to the synchronous periodicity of associability of the complex principles involved."

- Citation and context at Metaphysical Experience, 13 Mar'73

Synergetics Dictionary

<p><u>Periodicity:</u> (1)</p> <p>See Comet Harmonics: Harmonic Intervals Ninety-two Elements: Periodic Regularities Of Relative Abundance Tidal Invented Periodicities Input Periodicities Decimal & Duodecimal Octave Local Periodicity</p>	<p><u>Periphery:</u> <u>Peripheral:</u> (2)</p> <p>See Projective Transformation, (4)</p>
<p><u>Periodicity:</u> (2)</p> <p>See Antientropy (1) Design Covariables: Principle Of, 1959 Ignorance (2) Intellect, 16 Aug'50 Metaphysical Experience, 13 Mar'73* Personality, May'49 Physical, 13 Mar'73 Individuality & Degrees of Freedom, (1)(2) Boeing 747 Sequence, 22 Jun'75 Regenerativity, 17 Jan'75</p>	<p><u>Perishable:</u></p> <p>See Mind, 24 Feb'72</p>
<p>RBF DEFINITIONS</p> <p><u>Peripheral:</u></p> <p>"... Identifications of physical reality have been and as yet are only awkwardly characterized because of the inherent rationality of the <u>peripheral</u> hypotenuse aspects of systems in respect to their radial XYZ interrelationships."</p> <p style="text-align: right;">(1), [32]</p> <p>- Citation and context at <u>XYZ Coordinate System</u>, Sec. 825.53, Sep'72</p>	<p><u>Permanence ≠ Normal:</u></p> <p>See New York, 1970; 13 Mar'75</p>
<p><u>Periphery:</u> <u>Peripheral:</u> (1)</p> <p>See Embracement Surround</p>	<p>RBF DEFINITIONS</p> <p><u>Permanent Symbolic Communication Devices:</u></p> <p>"Architects designed temples, cathedrals, and other buildings as permanent symbolic communication devices."</p> <p>- Citation and context at ██████████ <u>Invisible Architecture</u>, (B), Aug'72</p>

Synergetics Dictionary

<p><u>Permanent Symbolic Communications Devices:</u></p> <p style="text-align: center;">See Religious Edifices</p>	<p><u>Permeate:</u> <u>Permeative:</u> <u>Permeability:</u> (1)</p> <p style="text-align: center;">See Omniembracing vs. Permeating Omni-permeative Permeative Topology</p>
<p><u>Permanent Wave Architecture:</u></p> <p style="text-align: center;">See New York City, (1)</p>	<p><u>Permeate:</u> <u>Permeative:</u> <u>Permeability:</u> (2)</p> <p style="text-align: center;">See Carrier Wave, 9 Mar'73 Octave Wave, 5 Mar'73 Synergetic Hierarchy, 5 May'74 Tetrahedral Dynamics, (3) Time, 2 Jul'62 Truth, (1005,52) 29 Dec'73 Universe, 4 May'57 Vector Equilibrium, 16 Oct'72</p>
<p><u>Permanence:</u></p> <p style="text-align: center;">See Change is Normal</p>	<p><u>Permit:</u> <u>Permitted:</u> (1)</p> <p style="text-align: center;">See Degrees of Freedom Hammering Sheet Metal Nature Permits it Sequence Realization Womb of Permitted Ignorance Event Freedoms Reciprocals of Permissible Viewpoints Copermitting</p>
<p><u>Permeative Topology:</u></p> <p style="text-align: center;">See Dymaxion Afrocean World, undated</p>	<p><u>Permit:</u> <u>Permitted:</u> (2)</p> <p style="text-align: center;">See Artificial, Jan'59: 22 Apr'61 Awareness, 10 Feb'73 Free Will, 20 Dec'73 Invisible, 16 Dec'73 Rules of Universe, 9 Dec'73 Tetrahedron: Coordinate Symmetry, Nov'71 Twoness, 1960 Happening, 22 Apr'71 Isotropic Vector Matrix, Oct'71 Conceptuality, 28 Feb'71 Restrains, Dec'71</p>

Synergetics Dictionary

<p><u>Permutations:</u> (1)</p> <p>See Interpermutations</p>	<p><u>Perpendicular:</u> <u>Perpendicularity:</u> (1)</p> <p>See Interperpendicular Internuclear Vector Modulus Line Between Two Sphere Centers Unique Perpendicularity XYZ Coordinate System Nonperpendicular</p>
<p><u>Permutations:</u> (2)</p> <p>See Limit, Oct'71 Octahedron: Nuclear Asymmetric Octa, 1 Apr'73 Prime Number, Oct'71 Resonance, 18 Jun'71</p>	<p><u>Perpendicular:</u> <u>Perpendicularity:</u> (2)</p> <p>See Calculus, (1) Omnidirectional Typewriter, (1)(2) Projective Transformation, (6) Sixty Degreeeness, 17 Nov'72 Dimensionality, 30 Mar'75 Nature in a Corner, 6 Nov'75 Module: A Quanta Module: Introduction Of. 22 Feb'77 Precession of Two Sets of 10 Closest-packed Spheres, (1)(2)</p>
<p>RBF DEFINITIONS</p> <p><u>Perpendicularity:</u></p> <p>"Perpendicularity (90-degreeeness) uniquely characterizes the limit of three dimensionality."</p> <p style="text-align: right;">- Citation and context at <u>Sixty-degreeeness</u>, 17 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Perpetual Motion Machine:</u></p> <p>"Our universe is the only and the minimum <u>perpetual motion machine</u>. It is self-regenerative."</p> <p style="text-align: right;">- Cite RBF address to Rev. Sean of Enniscorthy, 2 June 1971 - Citation & Context at <u>Self-regenerative</u>, 2 Jun'71</p>
<p>RBF DEFINITIONS</p> <p><u>Perpendicular:</u></p> <p>"The minute you know you are on a sphere or spheroid, you know that none of the perpendiculars are parallel to one another,"</p> <p style="text-align: right;">- Cite RBF to SINS Seminar, U. Mass, Amherst, 22 July 1971.</p>	<p>RBF DEFINITIONS</p> <p><u>Perpetual Motion Machine:</u></p> <p>"The Universe is a perpetual motion machine because its energy is never lost. So the minimum number of transformations is Universe. It is the minimum and only perpetual motion machine, and perpetual conservation requires this metaphysical functioning of order and collection inherent to man."</p> <p style="text-align: right;">- Citation and context at <u>Intellect: Equation of Intellect</u>, (2)(3), 1970</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Perpetual Motion Machine:</u></p> <p>"The physical Universe is a machine-- in fact, Universe is the minimum and <u>only</u> perpetual motion machine."</p> <p>- Cite MUSIC OF THE NEW LIFE, U & D, p. 11, 10 Dec'64,</p> <p>- Citation & context at <u>Universe</u>, 10 Dec'64</p>	<p>RBF DEFINITIONS</p> <p><u>Personality:</u></p> <p>"The interaction of the unique patterns of... inherited genes and experiences...make personalities..."</p> <p>- Citation & context at <u>Individuality</u>, 9 Jan'75</p>
<p><u>Perpetual Motion Machine:</u> (1)</p> <p>See Closed System: Conservation of Energy Eternal vs. Finite Self-regenerative</p>	<p>RBF DEFINITIONS</p> <p><u>Personality:</u></p> <p>"A known personality, that is, a life-- with which the comprehensive realizer is concerned-- is a unique bundle of accumulated experience to which the new experience must always be dissynchronous, but only at the moment of original interference, else the new interaction of the greater complex of truth would not have been recognizable and acquirable as new experience and tactical advantage."</p> <p>- Citation & context at <u>Periodic Experience</u>, (3)(4), May'49</p>
<p><u>Perpetual Motion Machine:</u> (2)</p> <p>Absolute Velocity, 30 Oct'73 See Intellect: Equation Of, (2)(3)* Reciprocal, 9 Jul'62 Regenerative, 1960; 28 Apr'71 Self-regenerative, 2 Jun'71* Sphere, 26 Jan'73; (1)(2) Universe, 1960; 10 Dec'64*; 9 Jul'62 Minimum Sphere, Aug'71</p>	<p>RBF DEFINITIONS</p> <p><u>Personality:</u></p> <p>"Continuity of conscious life becomes personality and is a product of complex periodic interactions known as cycles, or periodic recurrences of a higher frequency order."</p> <p>- Citation & context at <u>Charting Alternating Experiences of Man & Nature</u> (1), May'49</p> <p>- Cite SOCIET THINKING, J&T, p.222, May'69</p>
<p><u>Persistence:</u> <u>Persistent:</u></p> <p>See Matter, 19 Jun'71 Hierarchy of Constellar Configurations, 1959 Mobility, 4 May'57 Atom, 8 Sep'73</p>	<p><u>Personality:</u> (1)</p> <p>See Dual Personality Identity Individuality Multiple Personality Self Split Personality</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Personality:</u> (2)</p> <p>See Charting Alternating Experiences in Man & Nature, (4)(5)* Individuality, 9 Jan'75* Periodic Experience, (3)(4)*</p>	<p><u>Persuasion:</u> (2)</p> <p>See Peace, 19 Oct'71* Religion, May'65</p>
<p><u>Perspective:</u></p> <p>See Central Perspective Intellectual Perspective Teleologic Perspective Time Perspective Universal Perspective</p>	<p><u>Perturb:</u> <u>Perturbation:</u></p> <p>See Interperturbation</p>
<p>RBF DEFINITIONS</p> <p><u>Persuasion:</u></p> <p>"People can't live on persuasion. They've got to eat."</p> <p style="text-align: center;">- Citation and context at <u>Peace</u>, 19 Oct'71</p>	<p><u>Perversity:</u></p> <p>See Future: Man Backs into His Future, May'49 Progressions, May'49</p>
<p><u>Persuasion:</u> (1)</p> <p>See Education: Knowing Where the Bridges Are Fuller, R.B: Decision to Be a Doer, Not a Persuader</p>	<p><u>Pessimism:</u></p> <p>See River: You Might as Well Jump in the River</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Petal: Tetrahedron as Three-Petaled Flower Bud:</u></p> <p>"Convergence is involuting; divergence is evolving.</p> <p>"Each vertex of the tetrahedron precesses its opposite face. Like the flower petal. The action is pear-shaped as the pattern of the vertexes opening up. Like the plus-four and the minus-four of the Indigs, which really should not be illustrated in a plane: the model is tetrahedral as in the tetrahelix.</p> <p>"The tetrahedron is regenerative-- quite different from two hemispheres."</p> <p style="text-align: right;">- Cite RBF to EJA, Pepper Tree Inn, Santa Barbara, 11 Feb'73</p>	<p><u>Petrocolonialism:</u></p> <p style="text-align: right;">See Transnationalism vs. Colonialism, (5)</p>
<p><u>Petal: Tetrahedron as Three-petaled Flower Bud:</u> (1)</p> <p style="text-align: right;">See Leaf: Unfolding Leaves</p>	<p><u>Petroleum: It Costs a Billion Dollars to Make a Gallon of Petroleum:</u></p> <p style="text-align: right;">See Cosmic Accounting Sequence, (2)(3) Cosmic vs. Terrestrial Accounting, (2) Energy Capital Sequence, (2)(3)</p>
<p><u>Petal: Tetrahedron as Three-petaled Flower Bud:</u> (2)</p> <p style="text-align: right;">See Comprehension, 16 Feb'73; 10 Jan'74 Geometrical Function of Nine, (3)-(6)</p>	<p><u>Petro-pap-pipelines:</u></p> <p style="text-align: right;">See World Pattern vs. Local Pattern, 29 Jan'75</p>
<p>RBF DEFINITIONS</p> <p><u>Peta:</u></p> <p>"In Florida one of the porpoises at Marineland picked me as a pet. People pick dogs as pets. Porpoises pick people as pets."</p> <p style="text-align: right;">- RBF to videotaping audience (between takes), Penn Bell Studios, Philadelphia, PA., 31 Jan'75</p>	<p><u>Petroleum:</u> (1)</p> <p style="text-align: right;">See Fossil Fuels Petrocolonialism</p>

Synergetics Dictionary

<p><u>Petroleum:</u> (2)</p> <p>See Energy Slave, (3) No Energy Crisis, (A)-(C)</p>	<p><u>Phantom Captain:</u></p> <p>See Beautiful, 1938 False Property Illusion, (1)(2) Industrial Man, 1938 Reflection Sequence: Applew, (2)(3) Teleology, (2)(3)</p>
<p>RBF DEFINITIONS</p> <p><u>Phantom Captain:</u></p> <p>Q. Do you foresee the day when the phantom captains inhabit vessels of their own design?</p> <p>A. "The phantom captains can and do inhabit only vessels of their own design-- there are no other designs than that of the great cosmic intellect's designing."</p> <p style="text-align: center;">- Cite RBF Ltr. to James Coley, Sep'73</p>	<p><u>Pharach:</u></p> <p>See Ecology Sequence, (H) Pink Stuff, May'70 Pyramid Technology, Dec'71 Buddha: Christ: Mohamed, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Phantom Captain:</u></p> <p>"An illuminating rationalization indicates that <u>captains</u>-- being phantom, abstract, infinite, and bound to other captains by a bond of understanding as proven by their recognition of each other's signals and the meaning thereof by reference to a common direction (toward 'perfect')-- are not only all related, but are one and the same captain. Mathematically, since characteristics of unity exist, they cannot be nonidentical."</p> <p style="text-align: center;">- Cite NIML CHAINS TO THE MOON, p.22, 1938</p>	<p><u>Phase: Coming Into Phase:</u></p> <p>See Continuous Kan, 1971 Individual Economic Initiative, 19 Feb'73</p>
<p>RBF DEFINITION</p> <p><u>Phantom Captain:</u></p> <p>"Common to all such 'human' mechanisms-- and without which they are imbecile contraptions-- is their guidance by a <u>phantom captain</u>.</p> <p>"This phantom captain has neither weight nor sensorial tangibility, as has often been scientifically proven by careful weighing operations at the moment of the abandonment of the ship by the phantom captain, i.e., at the instant of 'death.'</p> <p>He may be likened to the variant of polarity dominance in our bipolar electric world which, when balanced and unit, vanishes as abstract unity 1 or 0. With the phantom captain's departure, the mechanism becomes inoperative and very quickly disintegrates into basic chemical elements. . . ."</p> <p style="text-align: center;">- Cite NIML CHAINS TO THE MOON, p.19, 1938</p>	<p>RBF DEFINITIONS</p> <p><u>Phase & Interphase:</u></p> <p>"Phase and Interphase of Cosmic System Transformations: Phases are symmetric and interphases are asymmetric. The interphases are only locally asymmetric but always omnitransformatively symmetric."</p> <p style="text-align: center;">- Cite RBF rewrite of 8 Feb'76 citation: 9 Feb'76</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Philosophy:</u></p> <p>"I don't want any credit for having such wisdom as the ancient philosophers. I was just lucky enough to have been so busy as a mechanic, never to have learned about them.</p> <p>"When I entered Harvard I had all A's in mathematics and I took some more advanced math, and so I was able to catch on to the whole idea of geometric proofs. But I had the good luck to be insulated from all philosophy and such formal knowledge. They didn't tell you anything about Plato at Milton Academy. The nearest we got was the Platonic solids in solid geometry.</p> <p>"I knew Shakespeare, and the Fairie Queen, and Thackeray, and all about the kings in history: who beheaded who and who put someone in a tower. I had the battle stuff okay. ... And all I knew about the Greeks all I knew about the Greeks was what my mother had taught me about the Spartan boy who brought the fox in to eat all his guts."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash, DC: 11 Aug'76 Incorporated in COSMIC FISHING; MS p. 11 -2.</p>	<p>RBF DEFINITIONS</p> <p><u>Philosophy:</u></p> <p>"You can't better the world by simply talking to it. <u>Philosophy</u> to be effective must be mechanically applied."</p> <p style="text-align: right;">- Cite RBF to EJA, Wichita, Kan@ga; 1946</p>
<p>RBF DEFINITIONS</p> <p><u>Philosophy:</u></p> <p>"Philosophy gains validity by the practical application of its general principles."</p> <p style="text-align: right;">- Cite RBF quoted by Alden Hatch in "RBF: At Home in the Universe," p. 184. Tape transcript probably. 6 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Philosophy:</u></p> <p>"But you can't better the world by simply talking of or to it. Philosophy, to be effective, must be mechanically applied."</p> <p style="text-align: right;">- Cite 4-D, Timelock, Chapter 5, 21 May'28</p>
<p>RBF DEFINITIONS</p> <p><u>Philosophy:</u></p> <p>"The artists are philosophers in cry."</p> <p style="text-align: right;">- Citation & context at <u>Artist</u>, 6 Jul'62</p>	<p><u>Philosophy:</u> (1)</p> <p>See Boolean Algebra Christian Legend & Philosophy Containing & Contained Epistemology Ethical Physics Fuller, R.B: His Neo-Platonism Geometry of Thinking Logic No Thing-in-itself Psychological Geometry Reductio ad Absurdum Teleology Thinkability Thinking Determinism Causality Equation: Philosophical Equations</p>
<p>RBF DEFINITIONS</p> <p><u>Philosophy:</u></p> <p>"Technology represents philosophy resolved to the most cogent argument."</p> <p style="text-align: right;">- Citation & context at <u>Technology</u>, 1947</p>	<p><u>Philosophy: Philosophers:</u> (2)</p> <p>See Civilization, May'70 Force, 1946 Inhibit, 9 Apr'40 Marx, Karl: Epitaph, undated Self-discipline, May'72 Synergetics, Oct'71 Technology, 1947* Tension, 4 Oct'72 Theory, 22 Jul'71 Author, Dec'72 Epistemology, 28 May'75 Fear & Longing, 1938 Communications Hierarchy, (2)</p>

Synergetics Dictionary

<p><u>Phobia of Imprisonment:</u></p> <p style="text-align: center;">See <u>Immobility</u>, 4 May'57</p>	<p><u>Phonetics: Phonetic Letters:</u> (2)</p> <p style="text-align: center;">See <u>Phoenician</u>, 28 Jan'75 <u>Communications Hierarchy</u>, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Phoenician:</u> "Phoenician = phonetic. The Phoenicians invented the alphabet for trade."</p> <p style="text-align: center;">- Cite RBF at Penn Bell videotaping, Philadelphia, 28 Jan'75</p>	<p><u>Photoelectric:</u></p> <p style="text-align: center;">See <u>Light Cells</u></p>
<p>RBF DEFINITIONS</p> <p><u>Phoenician Phonetic Sequence:</u> "Poem -- red -- pundit -- thinker -- Phoenician -- Venetian -- Punic Wars -- punt -- boat..."</p> <p style="text-align: center;">- Cite RBF videotaping Penn Bell Studios, Phila., PA 23 Jan'75</p>	<p><u>Photography:</u> (1)</p> <p style="text-align: center;">See <u>Camera</u> <u>Macrophotography</u> <u>Microphotography</u> <u>Model vs. Photograph</u></p>
<p><u>Phonetics: Phonetic Letters:</u> (1)</p> <p style="text-align: center;">See <u>Letters of the Alphabet</u> <u>Navy Phonetic Sequence</u> <u>Phoenician Phonetic Sequence</u></p>	<p><u>Photography:</u> (2)</p> <p style="text-align: center;">See <u>Eye-beamed Thoughts</u>, (II)(III)</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Photon:</u></p> <p>"Max Planck's photons of light are separately packaged at the radiation source and travel in a group-coordinated flight formation spherical surface pattern which is ever expanding outwardly as they gradually separate from one another. Every photon always travels radially away from the common origin. This group-developed pattern produces a sum-totally expanding spherical wave-surface determined by the plurality of outwardly traveling photons, although any single photon travels linearly outwardly in only one radial direction. This total energy effort is exactly expressed in terms of the exponential second-power, or areal 'squaring,' rate of surface growth of the overall spherical wave; i.e., as the second power of the energy effort expended in lifting one gram in each second of time a distance of one 'vertical' centimeter radially outward from the origin center."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 223.72, 26 Sep'73</p>	<p><u>Photon: Tetrahedron Edge as Unit Radius:</u> (1)</p> <p style="text-align: center;">See Constant Volume of A & B Quanta Modules Radial Line as Tetra Edge Tetra Edge Unit Radius</p>
<p>RBF DEFINITIONS</p> <p><u>Photon:</u></p> <p>"The minimum increment of all radiation, the photon . . ."</p> <p>"... Max Planck's photon of light. . . expands outwardly as a spherical wave surface in all directions-- instead of travelling linearly outwardly in only one radial radial direction..."</p> <p style="text-align: right;">- Citation and context at <u>Planck's Constant (C)</u>, 15 May'73</p>	<p><u>Photon: Tetrahedron Edge as Unit Radius:</u> (2)</p> <p style="text-align: center;">See T Quanta Module, (1)</p>
<p><u>Photon-quantum:</u></p> <p style="text-align: center;">See Spherical Field, 9 Jan'74</p>	<p><u>Photon:</u> (1)</p> <p style="text-align: center;">See Photon-quantum</p>
<p>RBF DEFINITIONS</p> <p><u>Photon: Tetrahedron Edge as Unit Radius:</u></p> <p>"...We identify the minimum tetrahedron photon as that with radius = c, which is the speed of light: the tetrahedron edge of the photon becomes unit radius = frequency limit."</p> <p style="text-align: right;">- Cite RBF clarification of garble at galley marginalia, SYNERGETICS Sec. 1106.23, by telephone from La Jolla, to Wash, DC, 17 Jan'74.</p> <p style="text-align: right;">- Citation & context at <u>Unit Radius</u>, 17 Jan'74</p>	<p><u>Photon:</u> (2)</p> <p style="text-align: center;">See Finite Furniture, 7 Nov'73 Gravity, (2) Planck's Constant, (A)-(C)* Nonsimultaneity, 7 Nov'73</p>

Synergetics Dictionary

<p><u>Photo-satellite:</u></p> <p>See <u>Satellite: Telescopes Mounted on Around-Earth, Fixedly-hovering, Photo-satellites</u></p>	<p>RBF DEFINITIONS</p> <p><u>Photosynthesis:</u></p> <p>"Thus Sun energy as heat is impounded into the atmosphere to produce weather changes. Thus also are the waters refractonally heated by the Sun's radiation. Thus by a series of relay stages is energy impounded aboard our spaceship Earth to regenerate life by the photosynthesis of the vegetation, which is a beautiful process whereby the random energy receipts are transformed chemically into beautiful orderly molecules, which are beautiful structures. Here you see the turnaround from disorder disorder to order-- from entropy to antientropy. All the biologicals are converting chaos to beautiful order. All biology is antientropic."</p> <p>- Cite <u>Antientropy</u> (2), Oct'69</p>
<p>RBF DEFINITIONS</p> <p><u>Photosynthesis:</u></p> <p>"Photosynthesis is meaningful communication whereby metaphysical rules the physical (like the Federal Reserve Bank) by issuing or withdrawing complex coding-identified 'quanta' currency from the overall, cosmic, transforming and transaction system's accounting."</p> <p>- Citation & context at <u>Radiation as Information-carrier</u>, 9 Jun'75</p>	<p><u>Photosynthesis:</u> (1)</p> <p>See Biosphere Ecology Sequence Metabolic Flow Radiation Sequence Electromagnetic-photosynthetic Programming Octahedron as Photosynthesis Model</p>
<p>RBF DEFINITIONS</p> <p><u>Photosynthesis:</u> (1)</p> <p>"The Sun's radiant energy is the prime regenerating source for all biological life on our planet. Even while sunburning their skins Humans and all other mammals Are unable to take in enough radiant energy Through their skins To keep themselves alive. To circumvent mammals attempting futilely so so to do Nature has invented The green vegetation on the dry lands, And the algae in the waters around the Earth's surface. The vegetation and the algae Impound the Sun's radiation by <u>photosynthesis</u> Converting the radiation Into orderly molecules Which provide celestial life's prime energy intake. The vegetation and algae Provide metabolic sustenance Of all manner of creatures, Some of which can in turn. Nourish humans.</p> <p>- Cite BRAIN & MIND, Pp. 109-110 May '72</p>	<p><u>Photosynthesis:</u> (2)</p> <p>See Antientropy, (A)(B); (2)* Boltzmann Sequence, (15) Cosmic vs. Terrestrial Accounting, (2) Cosmic Accounting Sequence, (2) Design, (2) Isotropic Vector Matrix Field, 15 Feb'73 Manifest: Six, 1973 Precession, (a)(b); (II) Roots, May'72 Syntropy & Entropy, 31 May'74 Wind Power Sequence, (2)(3); (A) Radiation as Information-carrier, 9 Jun'75</p>
<p>RBF DEFINITIONS</p> <p><u>Photosynthesis:</u> (2)</p> <p>"Urged by subconsciously initiated desire, Or genetically programmed To experience thirst, appetite and breathing, Biological species are motivated To 'feed' in the solid, liquid and gaseous Chemical constituents necessary To produce the ongoing biological molecules whose energies are convertible Into action and growth."</p> <p>- Cite BRAIN & MIND, p.110 May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Physical:</u></p> <p>"The physical is always special case; that's why we spell Universe with a capital U."</p> <p>- Cite RBF to EJA & Roger Stoller, 3200 Idaho, Wash, DC; 12 Nov'75</p> <p><u>GENERALIZATION + SPECIAL CASE SEC 262.08</u></p>

Synergetics Dictionary

RBF DEFINITIONS

Physical:

"The physical alone accelerates and is fast. It is really only the destructive things or negative things that accelerate."

- Citation & context at Eternal Slowdown, circa 1970

RBF DEFINITIONS

Physical:

"The concept of life is unique to the mind. Brain apprehends only the physical. Brain does not differentiate life and death."

- Cite GENERALIZED PRINCIPLES, p.7, 28 Jan'69

RBF DEFINITIONS

Physical:

"The physical is subdivisible into two different phenomena. Energy associative as matter-- substance and energy disassociative as radiation, both of which behavioral phenomena may be transformed into one another."

- Cite RBF Draft BRAIN & MIND, pencil, 1970

RBF DEFINITIONS

Physical:

". . . All patterns, for instance, numbers or phonetic letters, consist of physical ingredients or physical experience recalls. The physical ingredients consist inherently of event-paired quanta, and the latter's Σ six-vectored, positive and negative, actions, reactions and results. . . "

~~- Cite NASA Speech, v. 58, Jun'66~~

- Citation at Pattern, Jun'66

RBF DEFINITIONS

Physical:

"The physical is inherently entropic; it gives off energy in ever more disorderly ways."

- Cite NEHRU, p. 39
13 Nov'69

RBF DEFINITIONS

Physical: [REDACTED]

"The proton group and the neutron group account rationally for all physical structures."

~~- Cite NASA Speech, p. 64, June '66~~

- Citation at Proton & Neutron, Jun'66

RBF DEFINITIONS

Physical:

"The physical is always special case."

- Citation and context at Generalization Sequence (1), Jun-Jul'69

RBF DEFINITIONS

Physical:

"My definition of Universe inherently includes all the ponderable, i.e., weighable, instrumentally detectable, associative and disassociative, material and radiational energy behaviors of the physical subdivision of Universe."

- Cite DOXIADIS, p. 310, 20 Jun'66

Synergetics Dictionary

RBF DEFINITIONS

Physical:

"Electromagnetic frequencies of systems are sometimes complex but always constitute the prime rational integer characteristic of physical systems."

~~- Cite MASS SPECTRUM, p. 91, Jun'66~~

- Citation at Frequency, (p.91) Jun'66

Physical Case:

See Vector Equilibrium, Oct'75
Vector Equilibrium Involvement Domain, 10 Dec'75

RBF DEFINITIONS

Physical:

"All ~~physical~~^{STRUCTURAL} phenomena ~~is~~^{ARE} accounted in the terms of tetrahedron, octahedron, vector equilibrium and icosahedron."

(RBF noted 30 May'72 that "Nonlinear is physical but not structural, since it is not accounted for by tetrahedron, octahedron, vector equilibrium, and icosahedron." -- EJA note.)

- Cite Oregon Lecture #5, p. 179, 9 Jul '62

Physical Discontinuity:

See Interference: You Really Can't Get There From Here,
19 Dec'73

RBF DEFINITIONS

Physical:

"It is the nature of physical universe always to operate in the most economical ways. Sometimes there are a plurality of equally economicals and nature might operate in any one of these equally economicals. This does not put nature into a groove. There is not just a one most economical way but there are an alternate number of equally economicals-- and nature will always take one of that set."

- Cite OREGON LECTURE #2 - p. 70, 2 Jul '62

TEXT CITATIONS

Physical Education:

Hyper, World Mag., 10 Apr'73

RBF DEFINITIONS

Physical:

"The physical portion of Universe is energetic and finite."

- Cite INTRO, to OMNIDIRECTIONAL HALO, p. 124, 1959

Physical Evolution:

See Cosmogony
Scenario Universe: Physical Evolution Scenario

Synergetics Dictionary

<p><u>Physical Experience Recalls:</u></p> <p style="text-align: center;">See Pattern, Jun'66</p>	<p><u>Physical Ingredients:</u></p> <p style="text-align: center;">See Pattern, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Physical is Always the Imperfect:</u></p> <p>"The whole of Universe is a consequence of our not seeing instantly. As a result of the recall lags the physical is always imperfect."</p> <p style="text-align: center;">- Citation at <u>Recall Lags</u>, 26 May'72</p>	<p><u>Physical Law:</u> (1)</p> <p style="text-align: center;">See Laws of Nature vs. Laws of Man</p>
<p>RBF DEFINITIONS</p> <p><u>Physical Is Always The Imperfect:</u></p> <p>"We discover . . . that the physical is always the imperfect, special-case, after-imaged lagging realization of the ideal generalization, which can be realized, or momentized, or experimentally identified, time-ized and measured, only by such limited, ergo imperfect approximation, all of which latter is implicit in Heisenberg's operationally imposed indeterminism."</p> <p style="text-align: center;">- For citation and context see <u>Metaphysical</u>, 14 Feb '72</p>	<p><u>Physical Law:</u> (2)</p> <p style="text-align: center;">See Navy: Theory Of, 22 Dec'74</p>
<p><u>Physical is Always the Imperfect:</u></p> <p style="text-align: center;">See Recall Lags, 26 May'72* Metaphysical, 14 Feb'72* Perfection, 4 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Physical Life:</u></p> <p>"Physical Life is always a special case."</p> <p style="text-align: center;">- Citation and context at <u>Generalized Principle (A)</u>, 22 May'73</p>

Synergetics Dictionary

<p><u>Physical to Metaphysical = Brain to Mind:</u></p> <p>See Triangle, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Physical Reality:</u></p> <p>"It is a condition that nature apparently does not permit in our life, but what we call physical reality is always a positive and negative pulsating aberration of the whole-- a multifrequency-accommodating, vector equilibrium aberratability whole."</p> <p>- Cite RBF rewrite of SYNERGETICS galley at Sec. 441.23, 4 Nov'73</p>
<p><u>Physical to Metaphysical:</u> (1)</p> <p>See Cosmic Discontinuity & Local Continuity Idea Trending Progressions</p>	<p>RBF DEFINITIONS</p> <p><u>Physical Reality:</u></p> <p>"The vector equilibrium and the isotropic vector matrix are the equilibrium or the central set of conditions through which <u>physical reality</u> palpitates. It never stops at the center. . ."</p> <p>- For citation and context see <u>Vector Equilibrium</u>, 1 May '71</p>
<p><u>Physical to Metaphysical:</u> (2)</p> <p>See Cosmic Accounting, 2 Jun'74 Process Relationships, 28 Jan'69</p>	<p>RBF DEFINITIONS</p> <p><u>Physical Reality:</u></p> <p>"It is a condition that nature apparently does not permit in our life, but what we call reality is always a positive and negative set of the whole."</p> <p>- Citation & context at <u>Vector Equilibrium: Zero Tetrahedron</u>, (3), 11 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Physical Reality:</u></p> <p>"Very clearly, vector equilibrium is a zerosize tetrahedron. We have already had tetrahedron as an indestructible phenomenon independent of size. And then we have it getting into its own true zero vector equilibrium. It is a condition that apparently nature does not permit in our life, but what we call <u>physical reality</u> is always a positive and negative pulsating aberration of the whole-- a multifrequency-accommodating, vector equilibrium aberratability whole."</p> <p>- Cite SYNERGETICS text at Sec. 441.23 as rewritten by RBF on galley, 4 Nov'73</p>	<p><u>Physical Reality:</u> (1)</p> <p>See Potential vs. Physically Realized</p>

Synergetics Dictionary

Physical Reality: Physical Realization: (2)

See Awareness, 10 Feb'73
 Mathematics, undated
 No Generalized Boat, 22 Jan'75
 Vector, 27 May'72
 Vector Equilibrium, 1 May'71*
 Vector Equilibrium: Zero Tetrahedron, (3)*
 Universe, 11 Dec'75
 Regular = Uniangular, 11 Dec'75

RBF DEFINITIONS

Physical Synergy:
 "The universal mass interattractions called gravity
 Of galaxies, star systems and atoms
 All manifest physical synergy."

- Cite EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH,
 Jan. '72, p. 6.

Physical Ingredient Recall:

See Alphabet, Jun'66

Physical Tetrahedron vs. Conceptual Tetrahedron:

See Instantaneity = Eternity

RBF DEFINITIONS

Physical Sciences:

"But physical science lacked the experience which might have persuaded it to hypothesize what all Universe it. Physical science therefore restricted its comprehensive accounting strategy to the special case of definitive isolations within the physical portion of Universe. This left the remainder of all experiences, no matter how earnestly and meticulously reconsidered, outside the definitive portion of comprehended experiences of Universe, i.e., the physicist said that all that is not physically encompassed as $E = Mc^2$ is metaphysical."

- Cite INTRODUCTION TO OMNIDIRECTIONAL HALO, p.124, 1959

RBF DEFINITIONS

Physical Universe:

"The whole of physical Universe experience is a consequence of our not seeing instantly, which introduces time. As a result of the recall lags the physical is always imperfect."

& context
 - Citation at Time, 26 May'72

Physical vs. Structural:

See Physical, 9 Jul'62
 Wavilinear, 30 May'72

RBF DEFINITIONS

Physical Universe:

"Minimum effort is one of the chief characteristics of our physical Universe."

- Cite RBF to EJA, 3200 Idaho, Washington DC, 21 Dec. '71.

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Physical Universe:</u></p> <p>"Physics has found the whole <u>physical Universe</u> to be uniquely differentiated and locally defined as 'waves.'"</p> <p style="text-align: right;">[04]</p> <p>- Cite RBF Margonalis, at SYNERGETICS, Sec. 522.04, Nov. '71.</p>	<p><u>Physical Universe:</u> (2)</p> <p>See Comprehensive Universe, (1)* Dimension, 1 Apr'49* Energy, Jun'66 Frequency, 1970 Radiation, 18 Mar'65 Relativity, May'72; Jun'66 Time, 26 May'72* Wave, Nov'71 Zero, 13 Nov'69 A Priori Four-dimensional Reality, (1) Conservation of Energy, 18 Mar'65 Poetry, 13 Nov'69 Left & Right, 7 Nov'75 Infinite, 15 Oct'72 Multiplication by Division, 20 Jan'77</p>
<p>RBF DEFINITIONS</p> <p><u>Physical Universe:</u></p> <p>"The physical universe as we have seen it is entirely characterized by entropy-- an ever increasing randomness, an ever increasing diffusion as all the different and non-simultaneous transformations and reorientations occur."</p> <p style="text-align: right;">- Cite NASA Speech, p-87, Jun'66</p> <p>- Citation and context at <u>Comprehensive Universe</u> (1), Jun'66</p>	<p><u>Physical Vectors:</u></p> <p>See Powering: Sixth Powering, 26 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Physical Universe:</u></p> <p>"[Synergetics originates] in the assumption that dimension must be physical. It follows that, inasmuch as <u>physical Universe</u> is entirely energetic, all dimension must be energetic. Vectors and tensors constitute all elementary dimension."</p> <p>- Citation at <u>Dimension</u>, 1 Apr'49</p>	<p><u>Physical:</u> (1A)</p> <p>See Body: Bodies Field: FTM Field of Thought or Physical Articulation Life Calls Life is Not Physical Metaphysical & Physical Mortal Omnidirectional: Physical Existence Environment Surrounds Physical vs. Structural Real Realization Scenario Universe: Physical Evolution Scenario Sense Phrases Energy & Information Metabolic Flow Atoms vs. Radiation Matter Matter vs. Radiation Know-how Accounting vs. Physical Accounting Human Mind & Physical Evolution</p>
<p><u>Physical Universes:</u> (1)</p> <p>See Equanimity Model Eternal Universe & Physical Universe Intellect in Physical Universe Expanding Physical Universe Perpetual Motion Machine Energy: Energetic</p>	<p><u>Physical:</u> (1B)</p> <p>See Frequency = Experienced Physical Energy Constant vs. Physical Ninety-two Elements</p>

Synergetics Dictionary

Physical:

(2A)

Adam & Eve, 2 Jun'74
 See Awareness, 10 Feb'73
 Angular Topology: Principle Of, 14 Dec'66
 Communication, 13 Mar'73
 Electromagnetic Spectrum, Aug'64
 Eternal Slowdown, 1970*
 Generalization, 13 Mar'73
 Generalization Sequence (1)*
 Intellect: Equation of Intellect, 2 Apr'71*
 Imperfect, 26 May'72
 Limit-limitless, 4 Nov'73*
 Organism, 3 Jun'72
 Metaphysical Experience, 13 Mar'73*
 Frequency, (p.91) Jun'66*
 Life, 7 Apr'75
 Modelability, 12 May'75
 Energy Event, Mar'71
 Multiplication by Division, 20 Jan'77

RBF DEFINITIONS

Physics:

"Physics is concerned only with the most economical."

~~Cite RBF definition
 from Time New York
 12 March 1971~~

- Citation at Most Economical, 12 Mar'71

Physical:

(2B)

See Pattern, Jun'66*
 Proton & Neutron, Jun'66*
 Periodicity, 13 Mar'73
 Principle, Jun'69
 Real, 20 Apr'72
 Reality, 22 Apr'71
 Size, 21 Mar'73
 Specialization, 28 Apr'71
 Structure, 29 Dec'58; 1965
 War, 1971
 Wave, 19 Dec'71*
 Temperature of the Human Body, 21 Dec'71*
 Seven Minimum Topological Aspects, 12 Feb'76
 Womb of Permitted Ignorance, (1)(2)

RBF DEFINITIONS

Physics:

"All the time phenomena of physicists are linear."

- Citation & context at Time, 8 Mar'71

Physical:

(3)

Physical Case
 See Physical Discontinuity
 Physical Education
 Physical Experience Recalls
 Physical Is Always the Imperfect
 Physical Ingredients
 Physical Life
 Physical to Metaphysical
 Physical Reality
 Physical Ingredient Recalls
 Physical Sciences
 Physical vs. Structural
 Physical Synergy
 Physical Universe
 Physical Vectors
 Physical Law
 Physical Tetrahedron vs. Conceptual Tetrahedron
 Physical Evolution

RBF DEFINITIONS

Physics:

"Ernest Mach . . . said that 'Physics is experience arranged in the most economical order.' To define the special case of science known as physics Mach added only the two words 'most economical' to Eddington's definition of generalized science. Mach made this qualification because physicists have found that nature always behaves most economically."

~~Ernest Mach
 quote~~

~~- Cite RBF Speech, pp 36, 37, Jun'66~~

- Citation & context at Environmental Events Hierarchy, (5)(6), Jun'66

RBF DEFINITIONS

Physics:

"That's what physics is: the energy investment of Universe on a wave-quantum basis."

- Cite RBF remarks at Design Science Institute press conference, N.Y. 28 Jun'72

RBF DEFINITIONS

Physics & Chemistry: Difference Between:

"The vector equilibrium is the... zero-inflection, nonmoment of intertransformabilities where anything can happen and must happen single-atomically within and multiatomically without."

- Citation & context at Vector Equilibrium as Starting Point, 8 Apr'75

Synergetics Dictionary

<p>RBF DEFINITIONS <u>& Chemistry:</u> <u>Physics: Difference Between</u> [redacted]</p> <p>"In the atoms we are always dealing in equiradius spheres. Chemical compounds may, and [redacted] often do, consist of atomic spheres with a variety of radial dimensions. Since each chemical element's atoms are characterized by unique frequencies, and unique frequencies impose unique radial symmetries, this variety of radial dimensionality constitutes one prime difference between nuclear physics and chemistry."</p> <p style="text-align: right;">- Cite RBF rewrite of SYNERGETICS, Sec. 415.23 (5 July'72) per marginalis, Beverly Hotel, NY, 22 Jun'72.</p>	<p>RBF DEFINITIONS <u>& Chemistry:</u> <u>Physics: Difference Between</u> [redacted]</p> <p>"The cube relates to chemistry, the external affairs of the atom. Organic chemistry begins with the cube: carbon. The tetrahedron, octahedron, and icosahedron relate to physics, the [redacted] affairs of the atom." internal</p> <p style="text-align: right;">- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May'71</p>
<p>RBF DEFINITIONS <u>& Chemistry:</u> <u>Physics: Difference Between</u> [redacted]</p> <p>"In the atoms we are always dealing in equiradius spheres. Chemical compounds may, and often do, consist of atomic spheres in a variety of radial dimensions. This is the difference between nuclear physics and chemistry."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 415.23, 8 Jun'72</p>	<p>RBF DEFINITIONS <u>& Chemistry:</u> <u>Physics: Difference Between</u> [redacted]</p> <p>"All the phenomena larger and more complex than vector equilibria do relate to the chemical compounds and anything smaller than vector equilibrium relates to the single atoms and the single atoms do get into the symmetries whereas the chemical compounds get into a polarized system."</p> <p style="text-align: right;">- Cite Oregon Lecture #7, p.235, 11 Jul'62 - Citation and context at <u>Vector Equilibrium</u>, 11 Jul'62</p> <p style="text-align: right;"><u>VE AS ZERO MODEL SEC 432.03 440.03</u></p>
<p>RBF DEFINITIONS <u>& Chemistry:</u> <u>Physics: Difference Between:</u></p> <p>"In the atoms we are always dealing with equiradius spheres. Chemical compounds have multiradius spheres. This is the difference between nuclear physics and chemistry."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash DC, 28 May'72</p>	<p>RBF DEFINITIONS <u>& Chemistry:</u> <u>Physics: Difference Between:</u> [redacted]</p> <p>"The physicist deals with the internal affairs [redacted] and the chemist with the external affairs of the atom."</p> <p style="text-align: right;">- Cite NO MORE SECOND HANU GOD, p.32, 9 Apr'40</p>
<p>RBF DEFINITIONS <u>& Chemistry:</u> <u>Physics: Difference</u> [redacted]</p> <p>"All the internal or nuclear affairs of the atom occur internally to the vector equilibrium and all the external or chemical associations occur externally to the vector equilibrium."</p> <p style="text-align: right;">- Cite WASH Speech, pp. 63-84, Jun'66 - Citation and context at <u>Vector Equilibrium</u> (I), Jun'66</p>	<p><u>Physics & Chemistry: Difference Between:</u> (1)</p> <p style="text-align: right;">See Atoms & Compounds: Difference Between Ninety-two Elements</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pi</u>: (<u>π</u>):</p> <p>"The transcendently irrational 'constant' <u>π</u> (<u>π</u>) is irrelevant to spherical geodesic polyhedral array calculations because minimum sphere is a tetrahedron."</p> <p style="text-align: right;">- Citation & context at <u>Minimum Sphere</u>, Aug'71</p>	<p>RBF QUOTATION</p> <p><u>Piaget</u>: <u>Jean</u>: <u>Child's Spontaneous Geometry</u>: (1)</p> <p>"Study of the child's discovery of spatial relationships-- what may be called the <u>child's spontaneous geometry</u>-- is no less rewarding than the investigation of his number concepts. A child's order of development in geometry seems to reverse the order of historical discovery. Scientific geometry began with the Euclidean system (concerned with figures, angles, and so on), developed in the 17th century to the so-called projective geometry (dealing with problems of perspective), and finally came in the 19th century to topology (describing spatial relationships in a general qualitative way-- for instance, the distinction between open and closed structures, interiority and exteriority, proximity and separation). A child begins with the last: his first geometrical discoveries are topological. At the age of three he readily distinguishes between open and closed figures: if you ask him to copy a square or a triangle, he draws a closed circle; he draws a cross with two separate lines. If you show him a drawing of a large circle with a small circle inside, he is quite capable of reproducing this relationship, and he can also draw a small circle outside or attached to the edge of the large one. All this he can do before he can draw a"</p> <p style="text-align: right;">- Cite Jean Piaget: HOW CHILDREN FORM MATHEMATICAL CONCEPTS, "Scientific American," p. 75, Nov'53. Above quote marked by RBF.</p>
<p>RBF DEFINITIONS</p> <p><u>Pi</u>: (<u>π</u>):</p> <p>"<u>π</u> (<u>π</u>) is irrelevant in Synergetics because the sphere is not experimentally demonstrable and tetrahedron is the minimum sphere. Compound curvature starts with the mettetrahedron. <u>π</u> drops out because chords are more economical than arcs. . . ."</p> <p style="text-align: right;">-Cite RBF to EJA, Blackstone Hotel, Chicago, 31 March 1971</p> <p style="text-align: right;">- Citation and context at <u>Sphere</u>, 31 May'71</p>	<p>RBF QUOTATION</p> <p><u>Piaget</u>: <u>Jean</u>: <u>Child's Spontaneous Geometry</u>: (2)</p> <p>"rectangle or express the Euclidean characteristics (number of sides, angles, etc.) of a figure. Not until a considerable time after he has mastered topological relationships does he begin to develop his notions of Euclidean and projective geometry. Then he builds these simultaneously."</p> <p style="text-align: right;">- Cite HOW CHILDREN FORM MATHEMATICAL CONCEPTS, by Jean Piaget, "Scientific American," p.75, Nov'53. Above passage marked by RBF.</p>
<p><u>Pi</u>: (<u>π</u>): (1)</p> <p>See Bubbles in the Wake of a Ship Sequence Circle: Synergetics Formula for Triangular Area of a Circle Irrational Constants Sphere: Synergetics Formula for Area & Volume of a Sphere</p>	<p>RBF DEFINITIONS</p> <p><u>Piano Top</u>:</p> <p>"I am enthusiastic over humanity's extraordinary and sometimes very timely ingenuities. If you are in a shipwreck and all the boats are gone, a piano top buoyant enough to keep you afloat that comes along makes a fortuitous life preserver. But this is not to say that the best way to design a life preserver is in the form of a piano top. I think that we are clinging to a great many piano tops in accepting yesterday's fortuitous contrivings as constituting the only means for solving a given problem. Our brains deal exclusively with special-case experiences. Only our minds are able to discover the generalized principles operating without exception in each and every special-case experience case which if detected and mastered will give knowledgeable advantage in all instances."</p> <p style="text-align: right;">- Cite opening paragraph, Chapter One of OPERATING MANUAL FOR SPACESHIP EARTH, 1969</p>
<p><u>Pi</u>: (<u>π</u>): (2)</p> <p>See Chords, 22 Jul'71; 31 May'71 Cul de Sac, 30 Dec'73* Disparity, 1960 Hexagon, Nov'71* Spherical Interstices, 18 Nov'72 Starting with Parts: The Nonradial Line, 29 Dec'73 Universal Integrity: Principle Of, 21 Dec'71 Vector Equilibrium: Spheres & Spaces (1) Vector Equilibrium: Zerophase, 1 May'71 Geodesic Sphere, (1)</p>	<p><u>Piano</u>:</p> <p>See Neutral, 1 Feb'75 Standardization, 13 May'30</p>

Synergetics Dictionary

<p><u>Pigment: Pigmentation:</u></p> <p style="text-align: center;">See Skin Pigmentation</p>	<p>RBF DEFINITIONS</p> <p><u>Pink Stuff:</u></p> <p>"The Pharaoh said to the doctor, 'Doctor, give me that pink stuff.' The doctor said, 'Pharaoh, I think The pink stuff is the wrong stuff.' The Pharaoh said, 'Give me the Pink stuff!' The doctor did. They put the living doctor Into the tomb with the dead Pharaoh."</p> <p style="text-align: right;">- Cite I SMOB TO BE A VERB, Queen, May '70 (Not in Bantam edition)</p>
<p><u>Pin: Head of a Pin:</u></p> <p style="text-align: center;">See Invisible Circuitry, (1)</p>	<p><u>Pipe:</u> (1)</p> <p style="text-align: center;">See Closest Packing of Rods Monopolizable over Pipe or Wire Petro-pap-pipelines</p>
<p><u>Pine Trees & Palm Trees Belts:</u></p> <p style="text-align: center;">See Ecology Sequence, (E)</p>	<p><u>Pipe: Pipes:</u> (2)</p> <p style="text-align: center;">See New York City (8)</p>
<p><u>Pine Trees:</u></p> <p style="text-align: center;">See Hierarchies, 16 Jun'72</p>	<p>RBF DEFINITIONS</p> <p><u>Pirates: Great Pirates:</u></p> <p>Q. "Are there still great pirates?... Can I become one?"</p> <p>RBF: "The top ones were called sovereigns and the lesser ones were called pirates, and the even lesser ones hi-jackers. The British Empire began as a subterfuge for Queen Elizabeth I to go into private enterprise with the East India Company... The American flag was actually derived from that of the East India Company... The German cartels were owned partly by the allies and they played both sides. The East India people swithhed over and backed the new American colonies.</p> <p>"There are no great pirates left. It's all lawyers now, and lawyer-capitalism. It's all now corporate: the safest and surest way to make the most money."</p> <p style="text-align: right;">- Cite RBF to World Game Workshop'77; Phila., PA: 22 Jun'77</p>

Synergetics Dictionary

RBF DEFINITIONS

Pirates: Great Pirates: (1)

"Penobscot, Blue Hill, and Frenchman's Bay were up to World War I the summer residence country of what Bucky Fuller speaks of as history's 'Great Pirates.' These were the men who ran the world as a consequence of their commanding the oceans of the Earth-- for the oceans of the Earth governed three-quarters of our planet. Because the laws invented and adopted by dry-land-dwelling people cannot be enforced either logically or practically over the ever moving ocean waters beyond their political entity's shores, the ocean seas are inherently outside the man-made laws. Only the physical laws of raw nature govern the seas.

"The high seas sailormen were inherently 'outlaws'-- therefore pirates. When one high seas crew seized another ship, she was called a prize into which they entered-- ergo, enterprize. Because the greatest pirates were, literally speaking, 'privately enterprising outlaws,' Bucky used the contracted form of this term, which is simply 'pirate', to identify them. The great pirates were inherently world people because they were masters of the World Ocean. Land people are local people and think locally. Ocean people are world people and think world."

- Cite BEAR ISLAND STORY, galley pp.25-26, 1968

RBF DEFINITIONS

Pirates: Great Pirates: (5)

"their East India Company. Malthus discovered that the world people were multiplying themselves much more rapidly than they could produce goods with which to support themselves. His calculations showed an arithmetical progression in the rate of gain of the vital supplies and a geometrical progression in human reproduction. Darwin's 'Evolution' and his explanation of it as being caused by 'survival only of the fittest' was formulated 25 years after Malthus and successful survival of only a minor fraction of humanity-- by the shrewdest, toughest, swiftest, most foresighted, and hardest hitting-- seemed to be a scientific fact. To their thinking, any altruism was fatal.

"This was the basic conception upon which the great pirates and all the sovereignties which they established were operated. Neither they nor the rest of the world society ever foresaw an era of technology which would continually do much more with ever less resource investments per each function until, as today, suddenly, all unexpected by the world's economists, businessmen, and politicians of all ideological persuasions, a 1/4-ton communications satellite outperforms the transoceanic message-carrying capability of 150,000 tons of copper cables."

- Cite BEAR ISLAND STORY, galley p.27, 1968

RBF DEFINITIONS

Pirates: Great Pirates: (2)

"The headquarters of the 'Greatest Pirates' were the British Isles because the British Isles represented the unsinkable flagships commanding the majority of the best harbors of Europe where lived the richest customers for their world trade. The greatest pirates manned their ships with men from their shipyard's country. Because the most conveniently recruited or 'Shanghaied' their sailors from the British Isles waterfront saloons, their operation came to be called the 'British Empire' though such an empire was never the democratic ambition of the British Isles people. World-around sea battling narrowed the field of contenders for world supremacy. Finally there was established amongst the greatest pirates the top or IN pirates. The IN pirates called themselves 'sovereign' and called all the OUT pirates 'outlaws.'

"When the North American colonists broke away from the greatest IN pirates in 1775, those British Isles-based great pirates came to America where, finding it impossible to dominate or conquer the colonists politically, they conquered their business world through financing acumen and control of the corporation shares."

- Cite BEAR ISLAND STORY, galley p.26, 1968

Pirates: Great Pirates Are Dead:

See Meek Have Inherited the Earth, 10 Oct '63
Pirates: Great Pirates, 22 Jun '77

RBF DEFINITIONS

Pirates: Great Pirates: (3)

"When World War I was declared in August 1914, the British Ambassador to the United States, Sir Arthur Spring-Rice was in residence at Isleboro in Penobscot Bay. That's where the great IN pirates were making their war defense plans. World War I was waged by the greatest OUT pirates against the great IN pirates. With its mighty new armored steel ships replete with modern mechanics, World War I was the first comprehensive world-around industrial technology and science war in history. It was waged around the whole planet Earth between the great IN and great OUT world pirates.

"World War I and its post-war decade saw the end of the world ruled by either the top IN or OUT great pirates. In World War I the great pirates lost their world mastery forever because the fundamental controls of the new world of industry, technology, and science went from wire to wireless communication, from tracked to trackless transport, and from visible to the invisible structural strengths of atomic element alloying. Concomitantly the controlling factors of science and technology founded industry went entirely out of human sight into the vast ranges of the nonsensorially tunable electromagnetic spectrum. The great pirates who ruled with their senses were helplessly and"

- Cite BEAR ISLAND STORY, galley p.26, 1968

TEXT CITATIONS

Pirates: Great Pirates:
Mexico '63, p.7, 10 Oct '63

RBF DEFINITIONS

Pirates: Great Pirates: (4)

"hopelessly blind. Also in 1929 a one-ton airplane in flight launched a torpedo which sank a 20-ton battle cruiser and this shifted mastery of the economic and social affairs of Spaceship Earth from a sea to an air dominance strategy.

"Not long before the stock market crash of 1929 when the great pirates lost their world power by silent default, J.P. Morgan's great steam yacht, the 'Corsair' went on a reef entering Gilkey's harbor on Isleboro. No Morgan yacht had ever before touched a rock. The captain claimed the reef was uncharted. The 'Corsair' was floated safely off on the next tide. No one ever knew what happened to that captain. This event however was full of mystical foreboding of the great stock market crash that took place two months later. The great pirates went on the rocks forever.

"The great pirates were great! They did run the world and they ran it with magnificent selfishness and brilliant foresight-- that is within the limits of their comprehension of the supreme scheme of physical laws of Universe. Their thinking was however too limited. It was based on the seemingly scientific 1810 finding of Thomas Malthus, Professor of Political Economics of"

- Cite BEAR ISLAND STORY, galley p.27, 1968

Pirates: Great Pirates:

(1)

See Divide & Conquer Sequence
Eggs: You Just Lay Eggs
Enterprise
King's Sign
Leaders: Leadership
Invisible Masters
Money
Outlaw
Realm
Rule

Synergetics Dictionary

<p><u>Pirates: Great Pirates:</u> (2)</p> <p>See Artist, Jun'66 Education (B); Jun'66 Lever (b) Country, 12 Aug'70</p>	<p>RBF DEFINITIONS</p> <p><u>Planar Reflex:</u></p> <p>"One of the things we have to make clear for society is the dilemma of the Max-Planck-descended scientists, the way they do their problems, you can have either a wave or a particle, but not both simultaneously. Heisenberg has the same fault. They make the error of having a wave as a continuity, as a picture-- not as a pulsating frequency. A <u>planar reflex</u> causes them to think of continuous waves."</p> <p>- Citation at <u>Wave vs. Particle</u>, 22 Apr'71 - <u>CITE RBF TO EIA, Somerset Club, Boston, 22 April 1971</u></p>
<p>RBF DEFINITIONS</p> <p><u>Plagiarism:</u></p> <p>"What is often mislabeled as <u>plagiarism</u> is more precisely 'talent.' <u>Plagiarism</u> is an ethical offshoot label of the false property illusion..."</p> <p>- Citation and context at <u>Talent (2)</u>, 1938</p>	<p><u>Planar:</u></p> <p>See Plane: Planar</p>
<p><u>Plagiarism:</u></p> <p>See Coincidental Articulation Idea Stealing Intellectual Kleptomaniac</p>	<p>RBF DEFINITIONS</p> <p><u>Planck's Constant:</u> (A)</p> <p><u>Whereas:</u> All the volumes of all the equi-edged regular polyhedra are irrational numbers when expressed in the terms of the volume of a cube = 1;</p> <p><u>Whereas:</u> The volume of the cube and the volumes of the other regular polyhedra, taken singly or in simple groups, are entirely rational;</p> <p><u>Whereas:</u> Planck's constant was evaluated in terms of the cube as volumetric unity;</p> <p><u>Whereas:</u> Synergetics finds the tetrahedron, whose volume is one-third that of the cube, to be the prime structural system of Universe;</p> <p><u>Whereas:</u> Structuring stability is accomplished by triangularly balanced energy investments;</p> <p><u>Whereas:</u> Cubes are structurally unstable;</p> <p><u>Whereas:</u> The radial arrangement of unit tetrahedral volumes"</p> <p>- Cite SYNERGETICS draft at Sec. 223.71, 15 May'73</p>
<p><u>Planarity of Civil & Agrarian Law:</u> (2)</p> <p>See Grid: Crisscross, Right-angle Grid Local Squareness, 9 Jul'62 Air Space, May'65</p>	<p>RBF DEFINITIONS</p> <p><u>Planck's Constant:</u> (B)</p> <p>"around an absolute radiation center (the vector equilibrium) constitutes a prime radiational-gravitational proclivity model with a volume of 20 where the cube is 3 and the tetrahedron 1;</p> <p>"It becomes evident that: In order to convert the value of the photon, which occurs as a whole rational energy entity, to conformity with the ill-chosen cube, Planck's constant emerged empirically, and to reconvert it to conformity with synergetics the 6.6-ness is cancelled out:</p> $6.6 = \frac{20}{3} = \frac{\text{vector equilibrium volume of cube}}{\text{cube}}$ <p>"Planck's constant: Symbol = h. $h = 6.6$ -- multiplied by 10^{-27} grams by square centimeters per each second of time. h is the invariable number found empirically by Planck by which each of the experimentally discovered <u>minimum increment</u> of all radiation, the photon, must be multiplied to equate the photon's energy value as rated by human's energy-rating technique, which is predicated on the effort expended in lifting"</p> <p>- Cite SYNERGETICS draft at Secs. 223.71 +.72, 15 May'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Planck's Constant:

(C)

"weights vertically against gravity given distances in given times. Thus automotive horsepower or electromagnetic kilowatts per hour are rated.

"In the case of Max Planck's photon of light, which expands outwardly as a spherical wave surface in all directions-- instead of travelling linearly outwardly in only one radial direction-- the energy effort involved is expressed in terms of the exponential second power, or areal 'squaring' rate of surface growth of the spherical wave; i.e., as the second power of the energy effort expended in order to lift, in each second of time, a distance of one 'vertical' centimeter radially away from the Earth's center, one gram of weight, i.e., the weight of one cubic centimeter of water whose temperature is 40 centigrade. The invariable number, which accomplishes this rating is $h = 6.6$ multiplied by 10^{-27} ; whereas the gravitational constant = $6.6+$ multiplied by 10^{-8} grams per second 'squared.'"

- Cite SYNERGETICS draft at Secs 223.72 + .73, 15 May'73

RBF DEFINITIONS

Planck's Constant:

"Planck's constant is purely an accommodative number. Put together. The central angles of the octahedron are the 90-degree coordinate system; the coordinates are there, but that's not what nature uses. There's no denying man's way of accounting for things-- which is absolutely awkward. With the synergetics conversion constant I'm discovering how you can take the same fundamental data and really make it come out right."

- Tape #6A, Side A, transcript p.3; RBF to Barry Farrel, Bear Island, 16 Aug'70

RBF DEFINITIONS

Planck's Constant:

"Planck's constant corrects for the error of science's predicating its comprehensive coordinate mensurating system upon the cubic centimeter of water at a specific temperature as the volume-weight geometrical coordinating factor, whose centimeter of edge-length-height on the XYZ three-dimensional system became the distance of anti-gravitational work to be accomplished in one second of time as constituting the most logical system for integrating the energy information science was acquiring instrumentally from the vast invisible ranges of physical reality."

- Cite RBF entry of 22 July 1971 as re-written by him in Washington, 7 October 1971.

RBF DEFINITIONS

Planck's Constant:

(1)

"In synergetic geometry the vector equilibrium's mass value of 20 shows why nature requires that the cube's volumetric value of three be multiplied by Planck's empirically discovered, but heretofore scientifically inexplicable, constant 6.665--? to correct for the mistaken assumption by both mathematics and physics that the cube's volume was nature's logical volume of one-- instead of its actual volume of three, in nature's most economical system of both physical and metaphysical accounting. The physicist finds that nature is always most economical. Planck's empirical constant of correction was also required to remedy the mistaken assumption by physics that the cube of one centimeter to the edge, filled with water at four degrees centigrade (as the unity of the XYZ, 90-degree-coordinate, gram, temperature "second system) was also suitable as the basic unit of energy for computing radiational propagation. The 6.6 radiational constant correction, of the mistakenly assumed suitability of the cube and its conversion thereby to the value of the vector equilibrium's base 20 also required the further 10^{-8} reduction in size to reduce the gram of water's reference size to a photon's energy magnitude."

- Cite NEHRU SPEECH, pp. 27-28. 13 Nov'69

RBF DEFINITIONS

Planck's Constant:

"Planck's constant corrects the cubic centimeter. It accommodates a number which relates what man is doing to electromagnetic theory."

- Cite RBF to SIMS Seminar, U.Mass, Amherst, 22 Jul'71

RBF DEFINITIONS

Planck's Constant:

(2)

"The closest packed sphere layers of the vector equilibrium account for the non-solid proton-quantation of the wave's outer layer value of frequency (or velocity) to the second power as required by Einstein's g^2 of his equation $E = Mc^2$ and eliminates the necessity to consider the second power as characterizing continuous surfaces of systems.

"The vector equilibrium's surface sphere growth rate of the second power also accommodates Newton's discovery of gravitation's mass attraction as being governed by the second power of the relative proximities of the masses, expressed in terms of their respective radii (or modular frequency.) The gravitational constant also requires the 6.66+1 correction of its gram-cube base to conform to the vector equilibrium and requires a 10^{-8} reduction of size to conform to the electron volt magnitude of energy."

117 to

- Cit NEHRU SPEECH, p. 28. 13 Nov'69

RBF DEFINITIONS

Planck's Constant:

"Now Planck's Constant was simply how you forced what you find out about energy into calculatability and manipulatability mathematically in respect to rectilinear analytic geometry. That's plotting things only on the XYZ coordinates. Always having to go round corners. . . ."

- Cite RBF tape transcript to BO'R, Carbondale Dome, 1 May 1971. Page 43.

RBF DEFINITIONS

Planck's Constant:

(3)

"The many mildly differing values arrived at empirically for both Planck's constant and for the gravitational constant seem to indicate that the radiational constant is just a little less than 6.666 and that the gravitational constant is complementarily just a little bit greater than 6.666

- Cite NEHRU SPEECH, p. 28, 13 Nov'69

Synergetics Dictionary

RBF DEFINITIONS

Plane:

"Theoretically, a flat surface is infinitely extensible laterally, i.e. in ~~all~~ all diametric planar directions. As a laterally unbounded, or infinitely open, extensibility the theoretical flat plane is only partially definable. That which is definable of the plane forbids its returning upon itself."

Cite NEHRU SPEECH, P. 12, 13 Nov'69

RBF DEFINITIONS

Planes:

"There are, of course, no planes. It is experimentally demonstrable that an apparent plane is a 'surface' area of some structural system.

"There are no experimentally demonstrable continuums.

"All that has been found is discontinuity as in star constellations or atomic nuclear arrays. Areas are discontinuous, by constructional definition. Areas, as system 'faces' are inherently empty of actions or events, and therefore are not 'surfaces.'"

- Cite NASA Speech, p. 60, Jun'66

NOVENT - SEC 524.201

RBF DEFINITIONS

Plane:

"Planes described supposedly by three points have, in experimental fact, four points, with two very close together, ergo, all planes are warped."

- Cite RBF marginalis at old Chap. 2, "Synergy," I.5, 18 Mar'69

RBF DEFINITIONS

Plane:

Since "lines cannot go through the same point, then there cannot be a plane: so planes are eliminated."

- Cite Ledge mont, p. 13, 15 Oct'64

RBF DEFINITIONS

Plane:

"If there are six equilateral triangles around a vertex we cannot define a three-dimensional structural system, only a plane."

- Cite SYNERGETICS ILLUSTRATIONS - # 7
1967

RBF DEFINITIONS

Plane:

"A 'plane' is a tetrahedron of negligible altitude and significant base dimensionality. . .

"There are no impervious surface continuums.

- Cite COLLIER'S, p. 115, Oct'59

RBF DEFINITIONS

Plane:

"I can't get six triangles around a vertex because their corners would add up to 360°. A 360° intersection of triangles is 'flat.' They form a theoretically and experimentally nonexistent, non-experimentally demonstrable plane which would go to 'infinity,' and could not therefore subdivide the universe, by a local conceptual system."

- Cite NASA Speech, p. 61, Jul'66

Plane as Facet:

See Polyhedron, 1 Jan'75
Plane, 19 Feb'72

Synergetics Dictionary

<p><u>Plane:</u> (1)</p> <p>See Area Geometry: Plane Geometry Planar: Planarity Surface Tools of Geometry Facet Eternal Plane No Planes Tuck in a Plane Sphere Tangent with a Plane</p>	<p>RBF DEFINITIONS</p> <p><u>Planetary Democracy:</u> (2)</p> <p>"developments. Humans tend to think that Universe is waiting upon them to make the evolutionary decisions. I do not. That is why I have tried to stress the fact with you today that-- when considered before they occurred-- all the technological events in my life were thought to be absolutely impossible. Therefore, they were not the consequence of society deliberately undertaking to bring them about. Individual inventors, often called 'crackpots,' brought them into realization. It was completely unexpected.</p> <p>"When I was five years of age no one realized that we would develop any of the 20th Century technology. Anyone who even suggested humans reaching safely to and returning from the Moon were called lunatics and in jeopardy of being incarcerated in a lunatic asylum.</p> <p>"As an infinitely small detail in designing terrestrial ecology Nature designed the honey bees with their chromosomal drive to go after honey in order to have them inadvertently cross-pollinate the vegetation; so too, by a million other chromosomally programmed behaviors, nature arranged to grow and"</p> <p>- Cite RBF in committee transcript, US Senate, 15 May'75</p>
<p><u>Plane: Planar:</u> (2)</p> <p>See Comprehension, 16 Feb'73* Fourth Dimension, 29 Nov'72 Meaningless, Oct'66 Probability (1) Point, 20 Dec'73* Systematic Realization, 20 Dec'74 Systems & Nonsystems, 26 May'72 Bubbles, 7 Nov'73 Threeness, 27 May'72 No Opposites, 12 Nov'75 Polygon, 14 Oct'76 Four-dimensional Reality, 30 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Planetary Democracy:</u> (3)</p> <p>"sustain humans on our planet. Also, 99-percent-programmed humans usually have been doing a lot of the right things for the wrong reasons. What we think of as side effects are usually evolution's main events. The time has come when we must participate directly in the mainstream of Universe, instead of only accidentally, while playing lethally-biased, exclusive-survival games instead of the all-inclusive main show.</p> <p>"When our forebears evolved the system of democratic representation of the United States all the first representatives were well and favorably known to their neighbors. Everybody knew them. Their term of office was predicated on the realization that they would have to go to the central meeting place in Philadelphia by foot or by horse over footpaths, Indian trails, or very small highways, stopping overnight at inns and talking with everybody along the way. And while in Philadelphia-- or later in Washington-- three or four important letters might come from Europe during the whole year you were there. Everybody at the capital knew what the letters said. They all talked about the letters with one another. Then all of the representatives started back homeward talking to the people"</p> <p>- Cite RBF in committee transcript, US Senate, 15 May'75</p>
<p><u>Planetarium:</u></p> <p>See Children as Planetarium Audiences</p>	<p>RBF DEFINITIONS</p> <p><u>Planetary Democracy:</u> (4)</p> <p>"along the way, at the inns and homes. They would tell everybody at home about the four letters from Europe this year and what everybody in Philadelphia (or later in Washington) thought about the situation, and what the people along the way think, and would then say to their home people, 'How do you feel about it and what do you want me to do about it?' They were told; and then they walked or rode on these, often many-days travel to the capitol. We had what scientists call a one-to-one correspondence between stimulation and response.</p> <p>"With the unexpected development of the telegraph 30 years later news short-circuited the representatives' direct communications system and reached people in minutes instead of in months; and the people had no way to respond to the stimulation. Since that time radio and television broadcasting have added to the telegraph-fed newspapers in producing a constant barrage adding to hundreds of thousands of stimulations before any political response could be manifest by the citizenry.</p> <p>"Democracy worked well with the initial one-to-one correspondence. Today, democracy is not working. It is not the fault"</p> <p>- Cite RBF in committee transcript, US Senate, 15 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Planetary Democracy:</u> (1)</p> <p>Q: (Sen. Clark): "Do you feel any form of world government is in order or that we are moving toward that? Or that there is any possibility that the American people, after years of plowing the field, are ready to accept any concept like that?"</p> <p>A: (RBF): "I have been asking myself the question you ask me for a very long time. I am a student of large patterns and am trying to see what evolution does to some of these things. I think that human beings do not often realize how powerful, knowledgeable, and competent is universal evolution.</p> <p>"X-ray cinema makes visible organization of a chicken-- the gradual assembly from its embryo, all taking place inside the egg, much of which process seems chaotic and discretely uncontrolled. Humans do not see the logical interrelatedness of big evolutionary development. All the technical happenings which were unpredicted in my youth seem only in retrospect to have been obviously sequitur to their immediate predecessor"</p> <p>- Cite RBF in committee transcript, US Senate, 15 May'75</p>	<p>RBF DEFINITIONS</p> <p><u>Planetary Democracy:</u> (5)</p> <p>"of the concept of democracy. Democracy is unable to express itself. That is why samplings of political viewpoints have developed. The Congress conducts as many inquiries as possible to discover in advance of elections what their constituents are thinking. Particularly amongst the young there is a feeling of absolute futility. The system is not working.</p> <p>"Over a great many years I have been following the technology of electromagnetic communications to find out if it did not contain its own answer to how one-to-one correspondence might be regained. In 1940 I was science and technology consultant to 'Fortune' magazine. After checking with the telephone system engineers and finding it technically feasible, and not disruptive of all other regular services, I proposed daily voting by telephone on all prominent questions before Congress. That was back in 1940 and I published my proposal in my book, 'No More Secondhand God.'</p> <p>"Since World War II studies have been scientifically conducted disclosing the electromagnetic energy output of human brains. The work has been scientifically conducted in veterans' hospitals with electrodes fastened to the heads of volunteers. Then, "</p> <p>- Cite RBF in committee transcript, US Senate, 15 May'75</p>

Synergetics Dictionary

RBF DEFINITIONS

Planetary Democracy: (6)

"Using recording oscillographs, unique patterns were discovered to be identified with certain dreams. Most recently experiments have disclosed an electromagnetic field surrounding the whole body of a human, which field discloses a positive or a negative attitude of response to various stimuli-- very much as does the polygraph or lie detector through direct contact.

"With the sensors now mounted in satellites orbiting our planet, broadcasting to us, there is present in this room right now one electromagnetic program amongst several million, which, if tuned in by the right radio set, can tell us where every beef cattle on Earth is located. As a consequence, we may soon have the capability to directly sense how each and every human feels about each and every common human problem of the moment as each such problem and its alternative solutions are separately broadcast. This might well develop within the critical 10 years of which I have been speaking.

"Senator Percy, you have asked me what kind of world government may develop. It may well be akin to the city management concept, where the management has to do whatever the satellite-sensor-- harvested and computer analysis says that the world majority"

- Cite RBF in committee transcript, US Senate, 15 May'75

RBF DEFINITIONS

Planet Earth:

"This planet is a low pressure area for gathering the Universe together again. And I can see man arriving here as part of that function. So we're a gathering point; and every time a gathering point gets to the place where it needs the mental capability of man on board, man arrives...."

- Citation & context at Man: Interstellar Transmission of Man, 14 Aug'70

RBF DEFINITIONS

Planetary Democracy: (7)

"thinks ought to be done. Undoubtedly the world majority would make many mistakes, but as the mistake becomes evident the majority of humans will think that this alternative will work better; and because they think so, it will be satellite sensed and the computer will instruct management to immediately alter the course.

"This is the way all mechanical steering mechanisms of airplanes or ships of the sea work. The servomechanisms responding to sensed error in first one direction and then the other, successively correcting the steering-- first this way, then that way-- averaging an accomplished course halfway between. The variations get finer and finer, trending toward but never attaining, 'absolute straightness.' This is the essence of cybernetics. This way humans reached the Moon. It is the essence of all life growth. Development of such satellite-harvested, electromagnetic-field sensing of how world democracy feels about any proposed solution of any given problem is close at hand or has already been technically prototyped. An incorruptible, true, direct planetary democracy with all of humanity franchised and always voting, may well render all of humanity sustainable, successful. So those are my thoughts, sir."

- Cite RBF in committee transcript, US Senate, 15 May'75

Planet Earth:

See Earth
Spaceship Earth

Planetary Democracy:

See Electronic Referendum
World-around Communication Transcends Politics
World Democracy

Planetary Inventory:

See Time-energy Economics, 15 Jun'74
Interrelatedness vs. Names, (1)

RBF DEFINITIONS

Planet Earth:

Q: (Allegheny Airlines lost baggage agent tracing lost RBF suitcases sent to Pittsburgh by mistake.)

"What is your permanent address?"

A: (RBF) "Address! That isn't the right question. Young man, I live on Planet Earth!... Man was born with legs, not roots!"

- Cite RBF, red-faced and banging the counter with his fists, Washington National Airport, with EJA, 12 Feb'72

TEXT CITATION

Planets: Prediction of Unknown Planets:

Synergetics, Sec. 115, Sept'71

Synergetics Dictionary

<p><u>Planets: Prediction of Unknown Planets:</u></p> <p>See Whole System: Principle Of, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Planilinear:</u> "The statisticians think almost exclusively in lines or planes; they are what I call planilinear."</p> <p style="text-align: right;">- Citation and context at <u>Probability Model of Three Cars on a Highway</u> (2), 26 Sep'73</p>
<p><u>Planets: Probable Myriads of Consciously Operated Planets:</u> (1)</p> <p>See Ext⁶aterrestrial Humans</p>	<p>RBF DEFINITIONS</p> <p><u>Planilinear:</u> "Probability is purely mathematics: just points on curves. But they are thought of as linear. Or planar. What I call planilinear."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 17 Feb '72</p>
<p><u>Planets: Probably Myriads of Consciously Operated Planets:</u> (2)</p> <p>See Metaphysical: Supremacy Of, May'72</p>	<p><u>Plasmica:</u></p> <p style="text-align: right;">See Compound, 13 Mar'73</p>
<p><u>Planets: Planetary:</u></p> <p>See Coherence, 10 Feb'73 Curvature: Compound, 22 Sep'71 Economic Accounting System: Human Life-hour Production, (1) Sphere, 1971 Synergetic Strategy of Commensing with Totality, 28 May'72 Earth, 17 May'77</p>	<p>RBF DEFINITIONS</p> <p><u>Plastic:</u> "There is an unfortunate tendency to abhorancy of the plastic. Our fingernails are plastic. Our eyes are plastic...."</p> <p style="text-align: right;">- Citation & context at <u>Reproducible</u>, 30 May'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Plastics:

"There's really a whole new generation of chemistry coming through again. We're getting new skins and tubes that go three and four times as far. The first skins only lasted two years; now they last six. So with all these inventive kids, and the new chemistries, and the aerospace industry which has been depending on the war and is going to have to find new capabilities after they stop the nonsense... these things are really going to come along. There's a whole new era coming through-- with new skins and new foldabilities. You'll be able to fold your dome up in a little package and just explode it into something really big."

- Cite transcript of RBF tape to Barry Farrell, Tape #1, p.3;
Bear Island, 10 Aug'70

Plastic Tube of Universe:

See Metaphysical Gas, 27 Dec'73

Plastic Call-girl Angels:

See Dwelling Service Industry, (6)

Plastic:

(1)

See Artificial

Plastic Flowers:

See Dwelling Service Industry, (6)

Plastic:

(2)

See Reproducible, 30 May'72
Alcohol, 1946
Wood Technology, (4)
New York City, (4)
Hex-pent Sphere: Transformation into Geodesic
Spiral Tube, (1)(2)

Plastic Replica of a Cotswold Cottage:

See Dwelling Service Industry, (1)

RBF DEFINITIONS

Platonic Solids:

"The Platonic solids do not stand in a vacuum of Universe. They are in Universe and if you change that thing you change the rest of Universe. Nothing can change locally without changing everything else."

- Cite Dragon Lecture # 8, p. 285. 12 Jul'62
- Citation & context at Restraints, 12 Jul'62

Synergetics Dictionary

Plato's Solids: Platonic Geometries:

See Size (A)
Transformation, 12 Jul'62
Prime Structural Systems (2)
Restrains, 12 Jul'62*
Vectors & Tensors, 19 Oct'72
Dodecahedron, 1 Feb'75
Subvisible Discontinuity, 19 Oct'72
Philosophy, 11 Aug'76

Pleased or Displeased: We Are Not Here to Be:

(1)

See Amused: We Are Not Here to Be

Plato:

See Philosophy, 11 Aug'76

Pleased or Displeased: We Are Not Here to Be:

(2)

See Humane City, (10)

Play Acting:

See Population Sequence, (6)
Pretending, 8 Apr'75

Plenitudes:

See Acceleration of Change, 1938

Playbacks:

See Feedback
Recall Playbacks

Plumbers:

See Labor Unions

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Plumbing:</u> (1)</p> <p>"My self-disciplining strategy of never losing the large-pattern comprehensivity doesn't mean that you have to disregard the particulars. For instance, when I was designing my stamped-out bathroom, doing the research for it, I discovered that there was one man in Toledo, Ohio, who designed all the toilet bowls in the U.S. His problem was largely one of manufacture, where the crude ceramics employed did not permit any fine tolerances.</p> <p>"Scientists are simply not looking at plumbing. There is a feeling that pure scientists shouldn't stoop to that sort of nonsense. Nature spends a lot of time separating materials out into solids and liquid-- as you know if you've ever done any mining or refining. We should always pay close attention when nature does this kind of thing. If we employed stainless steel instead of ceramics we could have very fine tolerances and we wouldn't have to waste seven gallons just to flush one pint of waste.</p> <p>"The point is that you can be a generalist and still plunge into the particular. I've done such plunges for one month at a time or for six months at a time, such as the time I was doing my</p> <p>- Cite RBP at Penn Bell studios, Philadelphia, Pa., 25 Jan'75</p>	<p><u>Plumbing:</u> (1)</p> <p>See Autonomous Living Technology Packet Bathroom as Symbolism & Association Excrement: Excremental Functions Toilet Sewage: Sewage Systems Outbound Packaging of Human Food Waste</p>
<p>RBF DEFINITIONS</p> <p><u>Plumbing:</u> (2)</p> <p>cartography. But you always can come back from the artifact to the grand strategy."</p> <p>- Cite RBF at Penn Bell studios videotaping, Philadelphia, PA., 25 Jan'75</p>	<p><u>Plumbing:</u> (2)</p> <p>See Buildings as Machines (2) Livingry Science, 1 Apr'49 Junkyard, 1971* Buildings: Multiple Occupancy, 30 Apr'74 Romance, 30 Jan'75 Desovereignization Sequence, (1) Building Business, (4) Doing What Needs to Be Done, (1)(2) Back Pack, 20 Sep'76 Dome House Grand Strategy: 1927-1977, (1)-(3) Invented Jobs, 20 Sep'76</p>
<p>RBF DEFINITIONS</p> <p><u>Plumbing:</u></p> <p>"... Science has hooked up the everyday plumbing to the cosmic reservoir."</p> <p>- Citation and context at <u>Junkyard</u>, 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Pluralistic:</u></p> <p>"We cannot have disorder Because Universe is not monological; It is <u>pluralistic</u> and complementary..."</p> <p>- Citation and context at <u>Universe</u>, pp.156-157 May '72</p>
<p>RBF DEFINITIONS</p> <p><u>Plumbing:</u></p> <p>"Many scientists live in houses-- they look at the plumbing, often find that the plumbing isn't working, twiddle the knob, and send for the plumber. You know as architects that you do not design the plumbing which you buy. You design the superficial use and arrangement of fixtures which are designed by non-architects and manufactured by commerce for you. You are free only to choose the coloring of the bathroom tiles and the coloring of the fixtures. But what goes on back of the bathroom tile is not part of the architectural design. Even if you studied 'plumbing' and detailed the pipe layouts, your design would not be followed or even looked at. The layout would be as dictated by the plumbers' scientifically illiterate craft code and frequent whimsy.</p> <p>"The fact is that the plumbing system and the sewer system and the aqueduct system have not been importantly changed for 4,500 years. Only one improvement in the system was made, 100 years ago, in England. That was the development of the roof vented plumbing stack and water seal in plumbing fixtures to keep the sewer gases from entering the house."</p> <p>- Cite MEXICO '63, p. 10, 10 Oct '63</p>	<p>RBF DEFINITIONS</p> <p><u>Plurality:</u></p> <p>"Plurality of systems is a plurality of micros, but only one macro."</p> <p>"Each of a plurality of systems forces all other systems into lesser proportions of totality.</p> <p>"Likewise, Universe is inherently infinite and systems are inherently finite."</p> <p>- Cite RBF holograph in synergetics notes, 5 Mar'55</p>

Synergetics Dictionary

<p><u>Plural Otherness:</u> See Environment, (A)</p>	<p><u>Plural: Plurality:</u> (1)</p> <p>See Singular & Plural Understanding Must Be Plural Unity is Plural</p>
<p>RBF DEFINITIONS</p> <p><u>Plural Unity:</u> "...There are only two fundamental kinds of observable transformational changes, i.e., angular, or subunity alterations, and linear or <u>plural unity</u> (frequency modulated) accelerations."</p> <p>- Citation and context at <u>Acceleration: Angle and Linear Acceleration</u>, 1960</p>	<p><u>Plural: Plurality:</u> (2)</p> <p>See Awareness, 10 Feb'73 Differentiation, 27 May'72 Experience, 1971 Is, 24 Apr'72 Second, May'72 Universe, 26 May'72 Whole System, 16 Jun'72 Geometry of Vectors, 15 Jun'74 Isotropic Vector Matrix, (p.32) undated Polarity, 11 Sep'75</p>
<p><u>Plural Unity:</u> (1)</p> <p>See Unity as Plural</p>	<p>RBF DEFINITIONS</p> <p><u>Plus and Minus:</u> "Physics hasn't really associated radiation with (+) and gravitation with (-), but that's what they are."</p> <p>- Cite RBF to EJA, 3200 Idaho, Washington DC, 25 Jan '72.</p>
<p><u>Plural Unity:</u> (2)</p> <p>See Cosmic Discontinuity & Local Continuity, 15 Jan'74 Interawareness, 9 Jul'75 Multiplication by Division, 20 Jan'77</p>	<p>RBF DEFINITIONS</p> <p><u>Plus and Minus:</u> "The average of all plus (+) and minus (-) weights of Universe is zero weight. The normal is eternal."</p> <p>- Citation at <u>Normal</u>, 25 Apr'71</p>

Synergetics Dictionary

Plus-and-minus One Equilibrium:

(1)

See Zero Frequency

Plus & Minus:

(2)

See Algebra, Oct'66
 Coupler (2); 27 Jan'75
 Death, 13 Mar'71
 Normal, 25 Apr'71*
 Polar Points, 7 Nov'73
 Powering: Sixth Powering, 26 Nov'72
 Twinkle Angle, 19 Dec'73
 Vector Equilibrium, 21 Dec'71
 Polarization, 10 Nov'74
 Conception-birth, 27 Dec'74
 Superstition, May'49
 XYZ Quadrant at Center of Octahedron, 14 May'75

Plus-and-minus One Equilibrium:

(2)

See Vector Equilibrium, 23 Oct'72

HBF DEFINITIONS

Plus One:

"So it is really never infinite because you are not looking at one part. It is never just Plus One; it is always plus the rest of the Universe when you separate that One out. You can separate unity up further and further. You can multiply the subdivisions of unity."

Infinity & Finity,

- Citation and context at [redacted] (1)(2), 9 Jul'62

Plus-minus Polarity:

See Number: Even Number, 26 Sep'73
 Vector Equilibrium (2)
 Polarization, 10 Nov'74

Plus Two:

(1)

See Additive Twoness
 Coring
 Two-Twoness
 Polar Points
 Vertexial Unities

Plus & Minus:

(1)

See ~~Asymmetry~~ Plus & Minus Magnitudes
 Positive & Negative
 Split Personality

Plus Two:

(2)

See Euler, (2)
 Theta, 11 Mar'69
 Topology: Synergetic & Eulerian, (2)
 Torus, 11 Jul'62
 Thinking, (II)
 Ten, 22 Jun'75
 Modules: A & B Quanta Modules, 20 Dec'73

Synergetics Dictionary

<p><u>Plus:</u> (1)</p> <p style="text-align: center;">See Positive & Negative</p>	<p>RBF DEFINITIONS</p> <p><u>Pneumatic Bag:</u></p> <p>"We assume that pneumatic bags are not permitted as solutions of the problem as they prohibit omnidirectional penetrations and provide no local resistance against high ██████████ impact."</p> <p style="text-align: right;">- Cite Pennsylvania Triangle, Nov. '52, p. 11.</p>
<p><u>Plus:</u> (2)</p> <p style="text-align: center;">See Circuitry: Thermionic & Political Analogy, 23 Jan'72</p>	<p>RBF DEFINITIONS</p> <p><u>Pneumatic-hydraulic Structures:</u></p> <p>"Hydraulics and aerodynamics and pneumatics-- Nature is using them in making trees and everything else, but we're just beginning to use them in buildings. This is the reason great trees can go through hurricanes. Nature uses the crystals only for tension; all the compression she uses hydraulics for. In between the molecules of liquids of the tree are the gases, so the branches sway-- five tons, ten tons-- waving in the wind. And it's doing so because the hydraulics holds its shape under pressure in compression, with the very high tensile strength of the fibers, and the pneumatics there, taking all that shock.</p> <p>"No man has built any buildings like that yet. That's the truth. That's the way nature does it. That's the way she designs you. You're a beautiful piece of design, and what a contrast you are to a stone fortress! Can you imagine architects saying I am unaesthetic because I didn't want to work with stone? Yes, Italy is beautiful: every stone laid by a prisoner. The reason you don't have stone buildings now is that a man has to earn a wage. If you pay him so he can live decently you can't afford to lay stone."</p> <p style="text-align: right;">- Cite RBF to Barry Farrell; Bear Island; Tape #8, Side A, transcript p.2; 22 Aug'70</p>
<p>RBF DEFINITIONS</p> <p><u>Pneumatics:</u></p> <p>Synergetics has discovered "the identification of tensegrity with pneumatics and hydraulics-- it's load distribution, that's the point."</p> <p style="text-align: right;">- Cite RBF to EJA re SYNERGETICS, Sec. 251.19, 20 Dec. '71.</p> <p><u>BALLOON - SEC. 656.34</u></p>	<p><u>Pneumatic-hydraulic:</u></p> <p style="text-align: right;">See Intuition Sequence (2) Spectrum, 15 Oct'72 Tensegrity, 10 Nov'73 Human Beings & Hard Machinery, 20 Apr'72 Tensegrity Model of Self-interference of Energy, 25 Mar'75 Humans as Machines, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Pneumatics:</u></p> <p>"When I use the six-strut tetra tensegrity with tensegrity octa in triple bond I get an omnidirectional asymmetry tensegrity which is compressible and expandible as are gasses."</p> <p style="text-align: center;">(N.B. Caption supplied by RBF on Holograph)</p> <p style="text-align: right;">- Cite undated RBF holograph or paper of Onchiota Conference Center, Sterling Forest/ Tuxedo, New York.</p> <p><u>TENSEGRITY 650.11</u></p>	<p>RBF DEFINITIONS</p> <p><u>Pneumatic Structures:</u></p> <p>"A fleet of ships maneuvering under power needs more room than do the ships of the same fleet when docked side by side. The higher the speed of the individual ships, the greater the sea room required. This means that the enclosed and pressurised molecules in <u>pneumatic structural systems</u> are accelerated in outward-bound paths by the addition of more molecules by the pump and, without additional room, each must move faster to get out of the way of the others."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 703.04, 25 Sep'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Pneumatic Structures:

(1)

"I have considered a great deal about footbals and balls and pneumatics from being a little kid. And I saw that as I pumped up my basketball or football, it went from supine . . . flat, into this beautiful firm condition. But this is because the molecules of gas were trying to get out of the system. And they got hot because they were in such action. The kinetics of gas are something easy for the brain to understand and feel. . . . the action of those individual molecules of gas. I saw all the molecules of gas were trying to get out of the system-- that gives it the high pressure-- and they were stretching it outwardly and so, therefore, the skin is designed to go the other way, holding it inwardly so that the skin is finite and comes back upon itself. And it represents a tensional force with the arrows bound inwardly, balancing all the molecules, bouncing, hitting it, caroming around every action having its reaction. So I began to see that it would be possible that geodesics could be similar to what could be called discontinuous compression/continuous tension, where every molecule has to have one it pushes from, like two swimmers in the middle of a tank."

- Cite RBF Interview by Hans Meyer, Dome Book II, p. 90, Dec'70

BALLOON - SEC. 656.03 + 656.10

RBF DEFINITIONS

Pneumatic Structures:

"Tensegrity structures are pure pneumatic structures and pneumatic structures do what they do at the subvisible range."

- Cite OREGON Lecture #5 - p. 189, 9 Jul'62

TENSEGRITY SEC. 650.10

RBF DEFINITIONS

Pneumatic Structures:

(2)

"When you are swimming you dive from one end of the tank-- gives you a little acceleration into the tank, when you get to the end, you can put your feet up and double your body up and so shove off from the tank, and if two swimmers could meet in the middle of the tank and double their bodies up like that and put the soles of their feet together and thrust and go in opposite directions, I saw that the molecules that are in motion. . . and every action has its reaction. . . there has to be some reaction set, so each molecule which is caroming around, circularly hitting glancing blows and then making a chord, then another glancing blow, had to have one it shoved off from. Each one would have to be balanced, so a balanced pair. . . all the forces are caroming around. . . each one will represent one of the chords, the compression chords, which the two ends pressing outwardly glancing blows against the tension skin, which are trying to pull inwardly and they are pulling outwardly. So there's a net arrow outwardly in the middle of the chord against the net of arrows pointing inwardly. So. . . I saw this represents what the gases are doing and you could make discontinuous compression/continuous tension geodesic structures in this way. So all this came

- Cite RBF Interview by Hans Meyer, Domebook, II, p. 90, Dec'70

BALLOON - SEC. 656.10411

Pneumatics: Pneumatic Bag:

(1)

See Balloon
Hydraulics
Human Beings & Hard Machinery
Pneumatic-Hydraulic
Prestressed Concrete Sequence
Tensegrity Sphere
Invisible Pneumatics
Geodesic Spinnaker

RBF DEFINITIONS

Pneumatic Structures:

(3)

"in as a fundamental feeling that in dealing with geodesics in contradistinction to compressional arches where men had made lesser rings of stone and bricks and so forth, like Santa Sophia, fitting them beautifully and very mathematically, one to the other, so they wouldn't fall in, and taking and putting chain around the bottom of the dome to take care of the thrust of the enormous weights of the buildings, they could build a dome that would not thrust outwardly at the base and allow it to collapse. . . . I saw that in tension there is no limit-- you can make as big a pneumatic bag as you want. . . . I saw that in the comprehensive geodesically omni-triangulated tensegrity structure I would be able to go to unlimited spans, because your only limitation is tension. I've found that there is no inherent limit to cross section due to length. We get to where there is no cross section visible at all, as in the pull between the Earth and the Moon. . . . The beautiful intuitive feelings have been there right from the beginning. Always I could really feel the apple in those terms of hydraulics and doing the same tricks."

- Cite RBF Interview by Hans Mayer, Domebook II, p. 90, Dec'70

BALLOON - SEC. 656.30

Pneumatics: Pneumatic Bag:

(2)

See Sphericity of Whole Systems, 26 Sep'73
Three-way Great Circling: Three-way Grid, 17 Feb'72

RBF DEFINITIONS

Pneumatic Structures:

"Pneumatic structures are tensegrity structures. . . all structures are tensegrity structures from the solar system to the atom."

- Cite OREGON Lecture #6, p. 197, 10 Jul'62

TENSEGRITY - SEC. 650.04

TEXT CITATIONS

Pocket Calculator:

See RBF Introduction to Schlossberg & Brockman: "Pocket Calculator Game Book, 2 Sep'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Poe, Edgar Allen:</u></p> <p>"I'm sorry to say Edgar Allen Poe drank, quite heavily.... No I'm not sorry about anything."</p> <p style="text-align: right;">- Cite RBF at Penn Bell videotaping, Philadelphia, 30 Jan'75</p>	<p>RBF DEFINITIONS</p> <p><u>Poetry:</u></p> <p>"Ralph Waldo Emerson defined poetry as 'saying the most important things in the simplest way.' By that definition Einstein became and will probably remain history's greatest poet-- for who could say so much so simply as did Einstein when he described physical universe as $E = mc^2$."</p> <p style="text-align: right;">- Cite NEHRU, p. 78, 13 Nov'69 (The Leonardo Type)</p>
<p><u>Poe, Edgar Allan:</u></p> <p>See Artist, 24 Jan'72 Artist: Histrionics, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Poetry:</u></p> <p>"If you say it is poetry that is because engineering is poetry. Take out for yourself some engineering and science textbooks and break the words up into phrases in similar manner and prove it for yourself. Then try some non-engineering prose and it probably won't work. I would not be surprised if some day it were proven a law that the better the science the better the poetry."</p> <p style="text-align: right;">- Cite Foreword to No More Second Hand God, p.3, 1962, 1962 (Incorrect attribution)</p>
<p>RBF DEFINITIONS</p> <p><u>Poet:</u></p> <p>"The word <u>poet</u> in this professorship of poetry [i.e., the Charles Eliot Norton Professorship of Poetry at Harvard] is a very general term for a person who puts things together in an era of great specialization wherein most people are differentiating or 'taking things apart.' Demonstrated capability in the integration of ideas is the general qualification for this professorship."</p> <p style="text-align: right;">- Cite EDUCATION AUTOMATION, p. 3, 22 Apr'61</p>	<p>POETS</p> <p>"Poets tend to say things a little earlier than the others regarding the significance of what it is that we are experiencing."</p> <p style="text-align: right;">- Cite RBF in Milton Eisenhower Lecture, Johns Hopkins, Baltimore, 3 Oct'73</p>
<p>RBF DEFINITIONS</p> <p><u>Poetry:</u></p> <p>Q. "Is there any type of poetry, or any poet you can't stand?"</p> <p>A. "No, I have nothing negative to say about poetry, except to tell you that rhyme is not poetry."</p> <p style="text-align: right;">- Cite RBF in tape interview with Mike Bandler for BOOK WEEK, 3200 Idaho, Wash, DC, 29 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Poets:</u></p> <p>"Poets have been history's consistently competent anticipators of forward evolutionary transformations."</p> <p style="text-align: right;">- Cite Dreyfuss Preface, "Decease of Meaning," 28 April 1971, p. 14</p>

Synergetics Dictionary

RBF DEFINITIONS

Poets:

"The young life realizes that the older life is holding to the familiar, in opposition to evolution. This is an interesting point to identify the prescience of the poet. What man tends to call a poet is one whose sensitivity has not been [redacted] so damaged, where the thoughts flow almost subconsciously, where all the tastebuds of sound have been undamaged and the communication capability is very, very high. Their full vision is unimpaired. Time and again the poet will say what the nonpoet will not dare to say. He is afraid to hear his own voice-- the poet's not. The poet's not afraid because he's not thinking in terms of his own voice. It's irrepressible; and so time and again poets have said very extraordinary things long before the rest of society recognized the significance of what they were saying."

- Cite RBF in Preface for Francis Janner, p. 5, [redacted] circa 1970

FILE INDICATORS

Poets Cited in this File:

See Aikon, Conrad
Emerson, Ralph Waldo
Kipling, Rudyard
Morley, Christopher
Millay, Edna St. Vincent
Fowler, Gene
Eliot, T.S.
Pound, Ezra
Joyce, James
Tennyson, Alfred Lord
Frost, Robert
Poe, Edgar Allen

RBF DEFINITIONS

Poets:

"Women and their clothes are like poets. They anticipate. All options are open."

-- Cite RBF quoted in Queen, May '70 -
- Citation at Option, May '70

Poetry: Poets:

(1)

See Artist-explorer
Artist-scientist
Concrete Poetry
Economist-poet
Einstein as Poet
Ford, Henry as Poet
Time Entered the Picture through Poetry
Prose: Prosaic
Verse vs. Prose

RBF DEFINITIONS

Poets:

"...Poets are the earliest to foresee and express almost all of the important concept changes in the evolution of humanity's development around the surface of the spherical Spaceship Earth."

- Citation and context at Millay, Edna St. Vincent (3), 1968

Poetry: Poets:

(2)

See Generalization Sequence, (2)
Millay, Edna St. Vincent, (3)*
Nature Permits It Sequence, (2)
Option, May '70*
Slang, 28 Apr '71
Culture, 1 Feb '75
Words, May '44
News & Evolution, (1)
Custom: Lest One Good Custom Corrupt the World, (A)

Poets Anticipate Discoveries of Science:

See Artist, May '65
Heisenberg-Eliot-Pound Sequence, 28 Jan '69
Time, 1938

RBF DEFINITIONS

Points:

"Points are point-to-able microscale systems which at minimum consist of one tetrahedron which is always potentially amplifiable independently of size to conceptual inspectability."

- Cite RBF holograph for EJA; Windsor Castle, Berks; 22 Mar '76

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A point is always a microsystem or a plurality of microsystems, ergo at minimum one tetrahedron."</p> <p>- Citation & context at <u>Microsystems</u>, 22 Mar'76</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Reality is a priori Universe, what we speak of geometrically as having been vaguely identified in early experience as 'specks' or dots or points has no reality. A point in synergetics is a tetrahedron in its vector-equilibrium, zero-volume state, but too small for visible recognition of its conformation. A line is a tetrahedron of macro altitude and micro base. A plane is a tetrahedron of macro base and micro altitude. Points are real, conceptual, experienceable visually and mentally, as are lines and planes."</p> <p>- Citation & context at <u>A Priori Four-dimensional Reality</u>, (2) 20 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Points are subdifferentiable systems; i.e., microsystems of event points too far apart to resolve."</p> <p>- Citation & context at <u>Minimum Awareness Model</u>, (1), 9 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"In omnitopology, a vertex (<u>point</u>) is the only-approximate, amorphous, omnidirectional region occurring mid-spatially between the most intimate proximity attained between two almost-but-never-quite, yet critically intertransformatively, interfering vectors."</p> <p>- Citation and context at <u>Interference: You Really Can't Get There From Here</u>, 19 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Points are unresolvable, untunable somethingnesses occurring in the twilight zone between visible and supravisible experience."</p> <p>- Citation & context at <u>Somethingness & Nothingness</u>, 9 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"It takes four to define insideness and outsideness. It is called a point only because you cannot resolve it...."</p> <p>"When concentrically and convergently resolved, the 'point' proves to be the 'center'-- the zero moment of transition from going inwardly and going outwardly...."</p> <p>"Physical points are energy-event aggregations.... A 'point' often means 'locus of inflection' when we go beyond the threshold of critical proximity and the <u>inness</u> proclivity prevails...."</p> <p>- Cite RBF rewrite of SYNERGETICS galley at Secs. 519.03 + 519.10, 6 Nov'73</p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A point is a somethingness."</p> <p>- Citation & context at <u>Somethingness & Nothingness</u>, 9 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Every 'point' (event embryo) may articulate any of its four event vector sets, each consisting of six positive and six negative vectors, but only one set may be operative at any one time; its alternate sets are momentarily only potential."</p> <p>- Cite RBF galley correction to SYNERGETICS at Sec. 240.28, 28 Oct'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"What we speak of as a point is always eight tetrahedra converged to no size at all. The eight tetrahedra have been brought to zero size and are abstracted from time and special case. They are generalized. Though the empty vector equilibrium model is now sizeless, we as yet have the planes converging to intercept centrally indicating the locus of their vanishment. The locus of vanishment is the nearest to what we mean by a point. The point is the macro-micro switchabout between convergence and divergence."</p> <p style="text-align: right;">[33]</p> <p>- Cite SYNERGETICS draft at Sec. 1012.34, 20 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Points are complex but nondifferentially resolvable by superficial inspection. A star is something you cannot resolve. We call it a point, playing Euler's game of crossings. One star does not have an insiderness and an outsiderness. It is a point because you cannot resolve it.</p> <p>"Two remotely crossing trajectories have no insiderness nor outsiderness but do produce optically observable crossings or fixes which are positionally alterable in respect to a plurality of observation points."</p> <p style="text-align: right;">[63]</p> <p>- Cite RBF rewrite of Synergetics Sec. 519.40 (Jul'71) done 1 Apr'72 (At Kennedy Airport)</p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Any point or locus inherently lacks insiderness."</p> <p style="text-align: right;">- Citation and context at <u>Prime Enclosure</u>, 17 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A point's definitively unresolved event relationships inherently embrace potential definitions of a complex of local events. When resolved, the point is the microcosmic turning around between going inwardly and going outwardly."</p> <p style="text-align: right;">- Cite RBF rewrite of SYNERGETICS Dec '71 draft Secs. 519.11 + 519.12, Kennedy Airport, 1 Apr '72.</p> <p style="text-align: right;"><u>POINT - SEC. 519.03</u></p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Any point can tune in any other point in Universe. All that is necessary is that they both employ the same frequency, the same resonance, the same system, center to center."</p> <p style="text-align: right;">- Cite SYNERGETICS Draft at Sec 960.08, 16 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Without insiderness there is no outsiderness, and without both there is no point, ergo points are inherently nondemonstrable and the phenomena accommodated by the package-word 'point' will always prove to be a focal center of differentiating events.</p> <p>"A point constitutes conceptual genesis which may be realized in time.</p> <p>"Any conceptual event in Universe must have insiderness and outsiderness. This is a fundamental self-organizing principle."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC (19 Feb'72) rewritten by RBF Kennedy Airport, 1 Apr'72</p> <p style="text-align: right;"><u>POINT SEC. 519.02</u></p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A point is not a relationship. . ."</p> <p style="text-align: right;">- Citation and context at <u>Line</u>, 7 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Without insiderness there is no outsiderness, and without both there is no <u>point</u>. Ergo, points are inherently nondemonstrable and the phenomena accommodated by the packaged word 'point' will always prove to be a focal center of differentiating events. A point constitutes conceptual genesis which may be realized in time."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 19 Feb '72; as rewritten by RBF, Kennedy Airport, 1 Apr '72.</p> <p style="text-align: right;"><u>POINT. SEC 519.02</u></p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"What we really mean by a point is an unresolved definition of an activity. A point by itself does not enclose. There are no indivisible points.</p> <p>"A point's definitively unresolved event relationships inherently embrace potential definition of a complex of local events.</p> <p>"When resolved, the point is the microcosmic turning around between going inwardly and going outwardly."</p> <p style="text-align: right;">- Cite RBF rewrite of Synergetics draft at Secs. 519.11+12 (Dec'71) done at Kennedy Airport, 1 Apr'72</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A <u>point</u> by itself does not enclose."</p> <p style="text-align: right;">- Cite Synergetics draft, Sec. 880.2, August 19/71.</p> <p><u>POINTS - SEC. 519.01</u></p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Without insideness there is no outsideness, and without both there is no point. Any conceptual event in Universe must have insideness and outsideness. This is a fundamental self-organizing principle."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash DC, 19 Feb'72</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Points are complex but nondifferentially resolvable to superficial inspection. A star is something you cannot resolve. We call it a point, playing Euler's game of crossings. One star does not have an insideness and an outsideness. It is a point because you cannot resolve it.</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 519.⁰³16, Jul'71</p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"In a vector equilibrium the points are only in equilibrium when they get to be the icosahedron. . . Points are always tetrahedra-- whether it's a neuron, or whatever. . . A point is a minimum tetrahedron just as a tetrahedron is a minimum sphere. Without insideness there is no outsideness, and without both there is no point. Any conceptual event in Universe must have insideness and outsideness. This is a fundamentally self-organizing principle."</p> <p>(EJA NOTE: The above is superseded by RBF rewriting of 1 Apr '72.)</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 19 Feb 1972</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"Points are energy event aggregations; when they converge beyond the critical fall-in proximity threshold, they orbit co-ordinatedly, as loose pebbles on our Earth orbit the Sun in unison and chips ride around on men's shoulders. A point, then, is when we go beyond the threshold of critical proximity and the <u>iness</u> proclivity prevails, in contradistinction to the differentiable other fallen-in aggregates orbiting precessionally in only mass-attractively cohered remoteness outwardly beyond the critical proximity threshold. Points are complex but nondifferentially resolvable to superficial inspection."</p> <p style="text-align: right;">- Cite RBF to EJA, Beverly Hotel, New York, 19 June 1971.</p> <p><u>POINT - SEC. 519.01 + 02 + 10</u></p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A point is an as-yet-undifferentiated focal star embracing a complex of local events.</p> <p>"The point is the microscopic turning around between going inwardly and going outwardly.</p> <p>"What we really mean by a point is an unresolved definition of an activity. A point by itself does not enclose. There are no indivisible points."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Secs. 519.11+12, Dec'71</p>	<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A <u>point</u> on a sphere is never an infinitesimal tangency with a plane."</p> <p style="text-align: right;">- Citation at <u>Tangency</u>, 31 May'71</p> <p style="text-align: right;">- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971.</p> <p><u>POINTS SEC. 519.21</u></p>

Synergetics Dictionary

RBF DEFINITIONS

Point:

"The domains of vertexes are spheres. This is all the symmetries around the exquisite point."

- Cite RBF tape Blackstone, Hotel, Chicago, 31 May 1971
p. 37.

POINTS - SEC. 519.22

REF DEFINITIONS

Point:

"What we really mean by point then is an unresolved identification of an activity."

- Cite Oregon Lecture #8, p. 284. 12 Jul'62

POINTS - SEC. 519.01

RBF DEFINITIONS

Point:

"The point is the microcosmic turning around between going inwardly and going outwardly."

- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971.

POINTS, SEC. 519.03

RBF DEFINITIONS

Point:

"There are no indivisible points."

- Cite SYNERGETICS Corollaries, Sec. 240. Oct'59

POINTS - SEC. 519.01

RBF DEFINITIONS

Point:

"A star is something you can't resolve.

We call it a point,

playing Euler's game of crossings.

One star doesn't have an outside and an inside.

It is a point because you can't resolve it."

- Cite RBF to EJA
Carbondale
2 April 1971

POINTS - SEC. 519.03

RBF DEFINITIONS

Point:

"For every point in universe there are six uniquely and exclusively operative vectors."

"Each vector is reversible having its negative alternative."

"Every point may export all or any of its six positive or six negative vectors by importing like numbers."

"Each point in universe could be said to have twelve unique and exclusive vectors, but one set of six is operative and its alternate reverse effect set is only potential."

- Cite COLLIER's, p. 113. Oct'59

- Citation & context at Vector, Oct'59

POINTS - SEC. 519.30

RBF DEFINITIONS

Point:

If light or any other experiential phenomenon . . .

were instantaneous it would be less than a point."

- Cite RBF SYNERGETICS Draft Mar '71

POINTS - SEC. 519.20

RBF DEFINITIONS

Point:

"A point is an as-yet undifferentiated focal star embracing a complex of local events."

- Cite Collier's, p. 113, Oct'59

POINTS. SEC. 519.

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A 'point' is a tetrahedron of negligible altitude and base dimension."</p> <p style="text-align: center;">- Cite SYNERGETICS corollaries, Sec. 240, Oct'59</p>	<p style="text-align: right;">(2)</p> <p><u>Points, Areas & Lines:</u></p> <p style="text-align: center;">See Euler, (1); 1969 Minimum Awareness Model, (1) Domains of Polyhedra, 7 Nov'73</p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"There is no pointal center of gravity."</p> <p style="text-align: center;">- Citation and context at <u>Gravitational System Zone</u>, 14 Jan'55</p>	<p>RBF DEFINITIONS</p> <p><u>Point-to-able Something:</u></p> <p>"A point-to-able something may be much too small to be optically resolved into its constituent polyhedral characteristics, yet be unitarily differentiated as a black speck against a white background. Because a speck existed yet defied their discernment of any feature, mathematicians of the precroscope era mistakenly assumed a speck to be self-evidently unitary, indivisible, and geometrically employable as a nondimensional 'point.'"</p> <p style="text-align: center;">- Cite SYNERGETICS 2 draft at §ec. 100.032; 30 Apr'77</p>
<p>RBF DEFINITIONS</p> <p><u>Point:</u></p> <p>"A <u>point</u> is a tetrahedron of combined zerophase of both altitude and base."</p> <p style="text-align: center;">- Cite PENNSYLVANIA TRIANGLE, p. 10, Nov'52</p>	<p><u>Pointable: Point-to-able:</u></p> <p style="text-align: center;">See In & Out: Go In to Go Out, 16 Dec'73 Vector, 16 Dec'73 Primitive Dimensionality, 1 Mar'76 Tetrahedron as Microsystem, 12 May'77 In, Out & Around, 17 May'77</p>
<p><u>Points, Areas & Lines:</u> (1)</p> <p style="text-align: center;">See Constant Relative Abundance Events, Novents & Event Interrelatabilities Fixes, Discontinuities & Sontinuties Crossings, Opening & Trajectories Vertices, Faces & Edges Joints, Windows & Struts</p>	<p><u>Point Growth Rate: External:</u></p> <p style="text-align: center;">See Powering: Second Powering</p>

Synergetics Dictionary

TEXT CITATIONS

Point: Humans First Conception of a Point:
 Sec. 262.02 (2nd. Ed.)
 264.03 "
 265.03 "

RBF DEFINITIONS

Point: Outbound Point: (2)
 "Ergo; Radiation finite; tension infinite. Therefore, Universe is infinitely cohesive and limitedly chaotic."

- Cite RBF holograph, 6 Mar'48

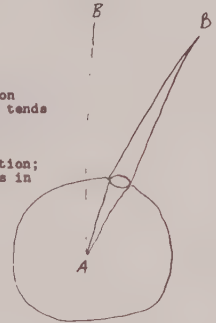
RBF DEFINITIONS

Point: Inbound Point:
 "The anti-inbound gravity works collectively toward the invisibility of the central zero-size point."

- Cite SYNERGETICS Draft at Sec. 541.05, 23 Sep'73

RBF DEFINITIONS

Point: Outbound Point:
 "Inbound point diminishes or contracts to straight line; therefore, shortest distance B to A.
 "Outbound point must expand to direction of cone or tetra; therefore, radiation tends to take angle, and therefore, longest distance A to B.
 "Therefore, gravity swifter than radiation; therefore, Universe collects its masses in ever tighter concentrations."



- Cite RBF holograph, circa 1948

RBF DEFINITIONS

Point: Outbound Point:
 "The outbound, tetrahedrally-packaged, fractional point works toward and reaches the inherent visibility phases of radiation."

- Cite SYNERGETICS draft at Sec. 541.05, 23 Sep'73

Point Population:

See Powering: Second Powering, 28 Oct'73
 Powering: Third Powering, 28 Oct'73

RBF DEFINITIONS

Point: Outbound Point: (1)
 "Trigem (trimetric) system of airways--
 Is just like a plane on the ground with three-point support."



"The four-point landing of a plane is ridiculous, as, in fact, is the automobile for which we have had to build plane (carpet) highways... Individual spring was to loose fourth wheel."

"Three dimensions invoked four-square scaffolding of civilization, which os o.k. at diminutive scale like a needle floating on water... as relative tension supports the otherwise untenable transgression of principle."

"Inbound point concentrates infinitely as point and foges (sic) an infinite tensile cohesiveness."



"Outbound point expands to fourth dimension: therefore is point annihilations and fissions at limits."
 - Cite RBF holograph, 6 May'48

RBF DEFINITIONS

Point of No Return:
 "... Humanity is approaching a crisis in which its residual ignorance, shortsightedness and circumstance-biased viewpoints may dominate, Thus carrying humanity beyond the 'point of no return'-- Enveloping his exclusively Sun-regenerated Planetary home In chain-reactive pollutionings And utter disorder."

- Cite INTUITION, pp.60-61 May '72

<p>TEXT CITATIONS</p> <p><u>Point = Eight Tetrahedra:</u> s1053.810</p>	<p>Point: points (b)</p> <p>519: (Main text)</p> <p>535.11 geodesic array</p> <p>537.11 six vectors for every point</p> <p>541.09 tetra: points & no-points</p> <p>541.10 novents embrace points</p> <p>707.02 points, planes, and lines are systemic</p> <p>713.06 subvisible aggregates</p> <p>713.07 convergence & twist</p> <p>825.27 triangulation and trigonometric fix</p> <p>960.08 any point can tune in any other point</p> <p>966.12 specks an dots are unreal; points are conceptual</p> <p>985.20 spheric experience of three or more vectors converging</p> <p>985.21 points define systems</p>
<p><u>Point = Eight Tetrahedra:</u></p> <p>See Point, 20 Feb'73 Nonpolar Points, 29 Nov'72 Tetrahedron: Nine Schematic Aspects, 30 Aug'75 Vector Equilibrium: Zerophase, 30 Aug'75 Hedra, 10 Apr'75</p> <p>Sec. 1012.33</p>	<p>Point: points (c)</p> <p>1009.11 vertex between converging vectors</p> <p>1011.10 four points for prime enclosure</p> <p>1011.11 no interior point in a domain</p> <p>1012.33 point = eight tetra: zerosize: generalized</p>
<p><u>Point vs. Zone:</u></p> <p>See Gravitational System Zone, 14 Jan'55</p>	<p><u>Point:</u> (1A)</p> <p>See Brouwer's Theorem Congruence with the Points Cosmic Limit Point Crossing Disturbance Initiating Point Domain of a Point Ineffable Point Intertangency Points Kissing Point: K Localized Thickening of Points Nonpolar Points No Points Otherness Point Polar Points Spherical Point System Subpoint Surface Points Vector Center Fix Zero Point Lines Cannot Go Through the Same Point at the Same Time</p>
<p>Point: points (a)</p> <p>223.40 external, superficial points of a system</p> <p>223.65 points defining modular subdivisions (length, area, vol.)</p> <p>224.07 sphere; center & surface</p> <p>240.05 tetra of negligible altitude & base</p> <p>240.09 undifferentiated focal star complex</p> <p>240.10 undivisible</p> <p>240.11 complex unities</p> <p>240.12 six vectors for every point</p> <p>240.28 embryo articulates as six vectors</p> <p>445.05 VE as domain of a point</p> <p>510.01 star event: fix</p> <p>510.05 star event: focus</p> <p>515.011 points defining modular subdivisions (length, area, vol.)</p>	<p><u>Point:</u> (1B)</p> <p>See Conceptual Genesis Event Embryo Locus Fix Starting Point Limit Point Event-points Interpointal Vertaxial Topology Vector Equilibrium as Starting Point Interconnection of Any Two Points Interconnection of Any Four Points Reachable Point Whyte, L.L: Point System Somethingness Benday Screen</p>

Synergetics Dictionary

<p><u>Point:</u> (2A) ■</p> <p>See Aggregate, 20 Dec'71 A Priori Four-dimensional Reality, (2)* Constant Relative Abundance, 29 Nov'72 Coupler, 5 Apr'73 Crystallography, 17 Aug'70 Domain, 22 Jun'72 Gravitational System Zone, 14 Jan'55 Interference: You Really Can't Get There from Here, 19 Dec'73* Line, 7 Nov'72* Meaningless, Oct'66 Needle, 10 Sep'73 Powering: Second Powering, 5 Apr'73 Prime Enclosure, 17 Feb'73* Start, 29 Dec'58 Surface, 17 Feb'72 Tangency, 31 May'71* Two, (2) Vector, Oct'59 Vector Equilibrium, (1); Feb'48</p>	<p>TEXT CITATIONS</p> <p><u>Poisson Effect:</u> Oregon Lecture #3, p. 152, 6 Jul'62 Synergetics - Secs. 1005.30-32</p>
<p><u>Point:</u> (2B)</p> <p>See Systematic Realization, 20 Dec'74 Minimum Limit Case, 9 Jun'75 Somethingness & Nothingness, 9 Jun'75* Minimum Awareness Model, (1)* Proofs, 7 Oct'75 Invisibility of Macro- and Micro- Resolutions, (2) Primitive Dimensionality, 1 Mar'76 Microsystems, 22 Mar'76* Six Motion Freedoms & Degrees of Freedom, (1)-(3)</p>	<p><u>Poisson:</u> <u>Poisson Effect:</u></p> <p>See Electric Motor, 25 Jan'72 Tidal, (pp.129-130) May'72</p>
<p><u>Point:</u> (3)</p> <p>See Pointable: Point-to-able Points, Areas & Lines Point Growth Rate Point: Inbound Point Point of No Return Point: Outbound Point Point Population Point vs. Zone Point = Eight Tetrahedra Point-to-able Something</p>	<p>RBF DEFINITIONS</p> <p><u>Polarity:</u> "All systems are polarized.... There is an inherent polarity in all observation: that is the additive twoness."</p> <p style="text-align: right;">- Citation & context at <u>Nonpolarized</u>, 12 Nov'75</p>
<p>RBF DEFINITIONS</p> <p><u>Poisson Effect:</u> "These vectorial resultants of forces articulated in planes perpendicular to the axis of the applied force vector, with concomitant right-angle transformation of compression into tension, and vice versa, are altogether known as the <u>Poisson Effect</u> (as named for their human discoverer and not for a fish-like behavior). We now know that this imprecisely recognized reciprocal effect is a precisely operative physical system phenomenon known as precession."</p> <p style="text-align: right;">- Cite "Tensegrity," PORTFOLIO AND ART NEWS, p. 119, Dec. '61</p>	<p>RBF DEFINITIONS</p> <p><u>Polarity:</u> "Polarity is inherent in the plurality of the con of congruence."</p> <p style="text-align: right;">- Citation & context at <u>Two-dimensional Polarity</u>, 11 Sep'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Polarity:</u></p> <p>"Absolutely straight lines or an absolutely flat plane would, theoretically, continue outwardly to infinity. . . The difference between infinity and finity is governed by the taking out of angular sinuses, like pieces of pie, out of surface areas around a point in an absolute plane. This is the way lampshades and skirts are made. Joining the sinused fan-ends together makes a cone; if two cones are made and their open end, ergo infinitely trending, edges are brought together, a finite system results. It has two polar points and an equator. These are inherent and primary characteristics of all systems."</p> <p>- Citation at <u>Angular Sinus Takeout</u>, Dec'61</p> <p>- Citation at Angular Sinus Takeout, Dec'61</p> <p>- Cite <u>ASSOCIABILITY</u> Portfolio: Art News Annual, pp. 179-180, Dec'61</p> <p><u>SYSTEM - sec 400.10</u></p>	<p>RBF DEFINITIONS</p> <p><u>Polarization:</u></p> <p>"Here we have a positive and a negative event in opposition to one another as a polarized system. Up to now I have been giving you symmetrical systems, not polarized. There is nothing at all polarized about tetrahedron or icosahedron, but now when we oppose these two there is a north pole and a south pole in equatorial aspect."</p> <p style="text-align: center;">(Comment on SLIDE 3:4 - 1)</p> <p>- Cite OREGON Lecture #5 - pp. 179-180, 9 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Polarity:</u></p> <p>"Because of a hemisphere's polar symmetry to its opposite polar hemisphere the total inventory of great circle grid triangles in the comprehensive world grid is always even in number. . ."</p> <p>- Cite Undated Sheet: The DYNAMION ATROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION</p>	<p><u>Polar Coupling:</u></p> <p>See <u>Associability</u>, 21 Mar'73</p>
<p>RBF DEFINITIONS</p> <p><u>Polarization:</u></p> <p>"The precessional processing of plus-minus polarization is" a synergetic proclivity.</p> <p>- Citation & context at <u>Synergetic Proclivity</u>, 10 Nov'74</p>	<p><u>Polar Focus:</u></p> <p>See <u>Focus = Beamable = Wirable</u>, 1 Apr'72</p>
<p>RBF DEFINITIONS</p> <p><u>Polarization:</u></p> <p>"There are in closest packing, we find, always alternate spaces that are not being used so that triangular groups can be rotated into one position or 60 degrees to an alternate nestable place. . . In other words you take the vector equilibrium, rotate it 60 degrees to the next nestable position and suddenly it is <u>polarized</u>."</p> <p>- Cite Oregon Lecture #7, pp. 234-235, 11 Jul'62</p> <p>- Cite <u>Sixty Degree-ness</u>, 11 Jul'62</p>	<p><u>Polar Azimuthal Projection:</u></p> <p>See <u>Projective Transformation</u>, (II)</p>

Synergetics Dictionary

Poles of Inward-outward Consideration:

See Macro-Micro, 12 Nov'75

RBF DEFINITIONS

Polarized Precession:

"Polarized precession is special case."

- Citation and context at General Case, 16 Feb'73

RBF DEFINITIONS

Polar Points:

"Polar points are two dimensional: plus and minus, opposites."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 527.21q
7 Nov'73

Polarized Precession:

See Polarization, 10 Nov'74,
Heaven & Hell, 31 May'71

RBF DEFINITIONS

Polar Points:

"Polar points are two dimensional: North-South."

- Cite SYNERGETICS draft at Sec. 527.21, 29 Nov'72

RBF DEFINITIONS

Polar Symmetry:

"Poles are symmetrical to each other, but not
omnismmetrical like the icosahedron and tetrahedron."

- Cite RBF to EJA, 3200 Idaho, Wash Dc, 17 Feb '72

Polar Points:

See Vertexial Unities
Plus Two
Neutral Axis

Polar Symmetry:

See Projective Transformation, (8)
Tetrahedron: Polarization Of, 13 Nov'75

Synergetics Dictionary

<p><u>Polarized System:</u></p> <p>See Physics: Difference Between Physics & Chemistry, 11 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Polar Vertexes:</u></p> <p>"Every event has its coexistent system's topological characteristics. Initially to be considered are the two polar axis points of every event observer's axis of view, i.e., the viewer's 'up and down,' eye to foot, vertical axis of right and left footprints. In our analysis of our spontaneous conceptioning controls we extract these two polar points and there remains a constant relative of two areas and three edges of every event fix. In respect to our spontaneously adopted axis of view, <u>me</u> or <u>we</u>, can describe ██████████ the shape of anything in Universe exclusively in terms of angle and frequency." - Cite RBF re-write 19 Feb '72, of same caption 17 Feb.</p>
<p><u>Polar Torque:</u></p> <p>See Jitterbug, 1 Dec'65</p>	<p>RBF DEFINITIONS</p> <p><u>Polar Vertexes:</u></p> <p>"Every event has two points. Every event has two polar points derived from the axis of reference. We need to extract these two polar points and there will be a remaining constant relative abundance of two areas and three edges. We take an axis of observation-- Me-- and we can describe anything else in Universe in terms of angle and frequency." - Cite RBF to EdA + BO'R, 3200 Idaho, DC, 17 Feb '72</p>
<p>RBF DEFINITIONS</p> <p><u>Polar Vertexes:</u></p> <p>"For every point in Universe except two there are always and only six intertriangulating connective lines because every action has its reaction, every event vector line has its diametrically always coexistent exposed ^{PUSH} and pull forces, ergo every visible line has its coexistent counterpart, ergo in addition to the █████ visible six, there are six invisible lines (or twelve universally unique degrees of freedom of alternately optional articulatabilities.)"</p> <p>- Cite RBF re-write 19 Feb '72 at 3200 Idaho, DC, of undated 19/71 holograph, same citation.</p>	<p><u>Polar Vertexes:</u> (1)</p> <p>See Additive Twoness</p>
<p>RBF DEFINITIONS</p> <p><u>Polar Vertexes:</u></p> <p>"For every point in Universe except two there are always and only six intertriangulating connective lines."</p> <p>- Cite RBF undated holograph (1971)</p>	<p><u>Polar Vertexes:</u> (2)</p> <p>See Two, 25 May'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Poles:

"At any instant of time any two of the evenly coupled vertexes of a system function as poles of the axis of inherent rotatability."

- Cite SYNERGETICS, "Corollaries," Sec. 240.63. 1971

RBF DEFINITIONS

Pole Vault:

"Repetition is inherent to frequency and wave phenomena in writing and expression as in music and sports, where rhythm is fundamental and expression is the essence. Whether it is a kid jumping over a ditch or a pole-vaulter seeking a new world record, he cannot do it all in no-time-at-all nor all the first time. It is part of the grand strategy that the pole-vaulter has to run over the same cinder path hundreds and hundreds of times before comprehendingly omni-coordinating his degrees of freedom and rising to that additional quarter of an inch for a record. And no one ever gets tired watching him."

- Cite SYNERGETICS, 2nd. Ed., front matter, Author's Note on Rationale for Repetition in This Work, p.xxii; 2 Jul'75

Polar: Polarity: Pole: Polarization: (1)

See Additive Twoness
 Axis entries
 Electromagnetic
 Fountain Pattern
 Magnetic Field
 Nonpolar
 Omnidirectionality vs. Polarization
 Precession: Polarized Precession
 Plus-minus Polarity
 Tetrahedron: Polarity Of
 Vector Equilibrium: Polarization Of
 Minimum Polar Triangle
 Coring
 Toration
 Topological Aspects: Inventory Of
 Synergetic Proclivity
 Positive & Negative: Four Kinds
 Eternal Pole
 One-dimensional Polarity
 Two-dimensional Polarity
 Pentagonal Polarity

TEXT CITATIONS

Pole Vault:

Total Thinking, I&I, p.228, May'49

Polar: Polarity: Pole: Polarization: (2)

Four Intergear Mobility Freedoms, 2 Nov'73
 See Angular Sinus Takeout, Dec'61*
 Brouwer's Theorem, 10 Nov'73
 Colloidal Chemistry, 1938
 Compound, 3 Nov'73
 Great Circle, 10 Nov'73
 Number: Even Number, 26 Sep'73
 Sixty Degreeeness, 11 Jul'62*
 System, 8 Jan'55; 1954
 Twoness, 23 May'72
 Vector Equilibrium, 11 Jul'62
 Organic Chemistry, 11 Jul'62
 Prime Numbers: Pairing Of, 17 Jan'74
 Synergetic Proclivity, 10 Nov'74*
 Positive & Negative: Four Kinds, 10 Nov'74
 Heaven & Hell, 31 May'71
 Fear & Longing, 1938
 Two-dimensional Polarity, 11 Sep'75*
 Nonpolarized, 12 Nov'75*
 Hex-pent Sphere Transformation into Geodesic
 Spiral Tube, (1)
 Tensegrity Fast: Pentagonal Polarity, 27 Dec'76

RBF DEFINITIONS

Pole Vault: Pole Vault:

See Charting Alternating Experiences, (4)
 Jet Stilts, 24 Jan'75
 Omnimedium Transport Sequence, (1)
 Repetition, 8 Mar'75

Polar: Polarity: Pole: Polarization: (3)

See Polar Coupling
 Polar Focus
 Polar Azimuthal Projection
 Polarized Precession
 Polar Symmetry
 Polarized System
 Polar Torque
 Polar Vertexes

RBF DEFINITIONS

Politicians:

"Politicians are merchants of war. They get elected because of what's bothering people NOW."

- Cite RBF to EJA at Kennedy Center in Washington after National Town Meeting of the Air, 10 Sep'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Politicians:</u></p> <p>(In response to newspaper account: "McGovern Wonders Why the Public is so Apathetic about the Watergate?")</p> <p>"Society has always assumed that politics is crooked. So if you just get experts to say this is so, why nobody is surprised. They just find it a little more sophisticated crookedness. Where the McGoverns and the Humphreys-- and even Adlai to some extent-- go wrong is when they try to appear as pure saints when they are politicians too. You couldn't be a politician and not have some important compromise in your background. You may not have done anything personally wrong. But you may have temporized. You may have put up with. You may have kept quiet. You may have looked the other way..."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash DC, 20 Oct '72</p>	<p>RBF DEFINITIONS</p> <p><u>Politicians & Defense Budgets:</u></p> <p>"Because of the rocketing costs of TV time and other public relations organizations, politicians have become electable only by the money power' either of unions or of business management; and since World War II's close, it has been left to the politicians to keep the mass-production economy going and growing--a task which politicians of all sides found could be best accomplished through \$50-100-billion-a-year 'defense' budgets, and having their military (or their satellite governments' military) establishments continually buy ever-advancing power, range, and accuracy of their armaments' hitting-power in anticipation of the always politically logical assumption of the 'next' vastly more sophisticated war."</p> <p style="text-align: right;">- Citation & context at <u>Building Industry</u>, (4); 20 Sep '76</p>
<p>RBF DEFINITIONS</p> <p><u>Politicians:</u></p> <p>"Politicians are going to confess the obvious-- that no human beings can keep in mind all the special interests of all people and all the whereabouts and unique behaviors of all the resources of Earth. No human beings can persuade other people to behave in unfamiliar, untried ways, but the computer can integrate and disclose the critical information and be completely convincing... As the world game is played progressively it will disclose a myriad of politically untried, unprecedented yet effective ways of solving hitherto unsurmountable problems. These will become big news items of the world's press and international wire services. As man gets into more critical proximity to a full-scale World War Three, the people of the world will begin to say in increasing numbers, 'Now that we can see a way in which this and that can be done, we must obviously adopt the policies indicated by the World Game.' Popular pressures will gradually force world politics to yield to these mutually beneficial world game programs.</p> <p>"Our greatest problem is the educational problem of getting man to realize in time what his programs are, and what the most effective priorities may be for saving them." + Whole Earth</p> <p style="text-align: right;">- Cite RBF quoted by Gene Youngblood in LA. Free Press, Cat. Mar+70</p>	<p><u>Politicians & Defense Budgets:</u></p> <p style="text-align: right;">See Houses & Infrastructure, 20 Sep '76</p>
<p>RBF DEFINITIONS</p> <p><u>Politicians:</u></p> <p>"The number of scientists today who really know the world could work is something less than one percent. Society doesn't know the world could work. Politicians haven't the slightest idea it could work. They really don't. They're the most earnest people, and I think we as human beings are putting a horrible load on politicians, who can't really solve the problems. Their lives are really quite horrible lives. And we're blaming them, and it really is just that they don't have the capabilities. So we're at fault in asking them to solve the problems. I'm perfectly confident that no politician can ever yield to the other politician on the other side; he'd be a traitor and he'd be immediately displaced, because the other politician is waiting to displace him that way. So I do know that every politician can yield to the computer."</p> <p style="text-align: right;">- Cite RBF to World Game at NY studio School, 12 Jun-31 Jul '69, Saturn Film transcript, Sound 1, Reel, 1, pp.108-109.</p>	<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"All politics are not only obsolete but lethal."</p> <p style="text-align: right;">- Citation and context at <u>War</u>, 13 Dec '73</p>
<p>RBF DEFINITIONS</p> <p><u>Politician:</u></p> <p>"The politician is someone who deals in man's problems of adjustment. To ask a politician to lead us is to ask the tail of a dog to lead the dog."</p> <p style="text-align: right;">- Cite DESIGNERS AND THE POLITICIANS, I&I, p.305, 1962</p>	<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"Politics is always on one side of how you deal with fundamental inadequacy."</p> <p style="text-align: right;">- Cite RBF address to Yale Political Union, New Haven, 9 Dec '73; as rewritten by him at 3200 Idaho, 13 Dec '73</p>

Synergetics Dictionary

RBF DEFINITIONS

Politics:

"Politics is always on the side of how you deal with fundamental inadequacy."

- Cite RBF address to Yale Political Union, New Haven, 9 Dec '73

RBF DEFINITIONS

Politics:

"We find that generally speaking the geographically larger the physical task to be done, the duller the conceptual brain is brought to bear upon the technically realized applications. Finally we get to international affairs and you know what is happening today. The most highly polished of the dullest class, scientifically and intellectually speaking, may wear their striped pants very beautifully and be charming fellows but they have not produced any mutually acceptable, constructive world peace generating ideas. They traffic successfully only in people's troubles and emergency compromises."

- Cite RBF quoted by Hal Aigner in ROLLING STONE, 10 June, 1971

RBF DEFINITIONS

Politics:

"My hopes then are not founded on acts of political wisdom or adoption of altruistic conventions. They are predicated exclusively on an informed and experienced competence adequate to the task of physically accomplishing fundamental cosmic success of humanity. Appropriate political actions must be sequatur to actual capability. Political actions without knowledge of how to attain universal success are inherently wishful and even specious, ergo doomed to failure, or to only momentary advantage gains of an exclusive nature."

- Citation and context at Design Science (3), 29 Jun '73

RBF DEFINITIONS

Politics:

"I'm confident that Politics is losing its credit with the world, while people are growing continually more confident in the kind of results they can get out of computers."

- Cite Transcript of RBF tape to Barry Farrell, Tape #2; Side A, p.4; Bear Island, 11 Aug '70

RBF DEFINITIONS

Politics:

"Unless you have the technical solution, politics can't do anything."

- Citation & context at Office Buildings: Conversion to Apartments, 28 Jun '72

RBF DEFINITIONS

Politics:

"Politics are only appropriate to an economy of scarcity. Within the scarcity context politics play tricks short-of-war by which the successful politicians' side monopolizes the limited survival supply. Death by want-- i.e., by metabolic inadequacies is much slower than by the sword or gun and causes much more anguish and pain than that of the swift hero's death. Death by want imposed on many by the successful politicians' warfaring only with laws and police guns obscures the identity of their executioner from both the politicians and the slow-dying victim. Only if there is an inherent major life support inadequacy aboard our planet and even in the Universe, politics and politicians are valid functions of Universes. If there is a fundamental adequacy of life support aboard our planet which is as-yet popularly unrealized, politicians can go on playing their trinkets in seemingly good conscience. But the politicians' self-deceptive scarcity game playing and the ultimately lethal consequences for many humans inherent in the politicians' one-sided victories tend to prolong and obscure from social consideration the now dawning scientific awareness of the technical feasibility of universal economic success for all!"

- Cite RBF Ltr. to Prime Minister Indira Gandhi, 4 Jan '70, p. 5.

RBF DEFINITIONS

Politics:

"Playboy: Is there a single statement you can make that expresses the spirit of your philosophy?"

"RBF: I always try to point one thing out-- if we do more with less, resources are adequate to take care of everybody. All political systems are founded on the premise that the opposite is true. We've been assuming all along that failure was certain, that our Universe was running down and it was strictly you-or-me, kill-or-be-killed as long as it lasted. But now in our century we've discovered that man can be a success on his planet, and that is the greatest change that has come over our thinking."

- Cite Barry Farrell Playboy Interview, 1972 - Draft, p. 1.

RBF DEFINITIONS

Politics:

". . . All politicians can and will yield enthusiastically to the computers . . . in bringing all of humanity in for a happy landing."

- Citation & context at Leaders Can Yield to the Computer, 1969
- Cite Operating Manual for Spaceship Earth, 1969

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Politics:</u> (1)</p> <p>"We need not be against politicians to realize that their local preoccupations are futile. They have good convictions and are individually moved as human beings by what they regard as a responsibility to 'their' side or 'our' side. But every political ideology and all extant political systems assume that there is not enough to go around: it is either you or me; there can't be enough for both. So we eventually assume war; and that is the cause of the weapons race.</p> <p>"The reasoning was once correct. When there is enough available a healthy human will eat three pounds of dry food a day, drink six pounds of water, and breathe 54 pounds of air: or six pounds net of oxygen. For most of the history of man on Earth there has not been enough of that dry food and humanity has fought about this, time and again. Many times there has not been enough water; and humanity has fought over this. There has been no time when there has not been enough air. Humanity has so much air available that no one has even thought of putting meters on air and trying to make money out of it. But there are times, for example in a great theater fire, when humanity, completely unused to competing for air, finds itself suffocating and goes mad."</p> <p>- Cite YEAR 2000, AD, Feb'67</p>	<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"An outmoded activity. . . A naive attempt to achieve through games of words what must ultimately be derived from technology."</p> <p style="text-align: right;">- Cite MARKS, P. 10, 1960</p>
<p>RBF DEFINITIONS</p> <p><u>Politics:</u> (2)</p> <p>"It seems perfectly clear that when there is enough to go around, man will not fight any more than he now fights for air. When man is successful in doing so much more with so much less that he can take care of everybody at a higher standard, then there will be no fundamental cause for war.</p> <p>"In the years ahead, as man does become successful, the root cause of war will be eliminated. Scientists assure us over and over again that this is feasible. There can be enough energy and organized capability for all men to enjoy the whole Earth.</p> <p>"This is the most important prediction I can make: in 10 years from now we will have changed so completely that no one will say that you have to demonstrate your right to live, that you have to earn a living. Within 10 years it will be normal for man to be successful-- just as through all history it has been the norm for more than 99 percent to be economic and physical failures.</p> <p>"Politics will become obsolete."</p> <p>- Cite YEAR 2000, AD, Feb'67</p>	<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"Politics can only reveal the inadequate cards. . ."</p> <p style="text-align: right;">- Cite I&I, THE COMPREHENSIVE MAN, p. 81. Jan'59</p>
<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"Science paces technology, technology paces industry, industry paces economics, and economics paces <u>politics</u>. Quite clearly, then, political leaders are at the tail end of affairs. And for man to ask change of political leaders is like asking the cow's tail to redesign to cow."</p> <p>- Cite RBF quoted by Michael S. Gruen, Harvard Crimson story on Charles Eliot Norton lectures, January 1962.</p>	<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"At present all the world's industrial, or surfaced, processed and reprocessed, functional functional tonnage is in the service of one-quarter of the world's population. . . All the <u>politicians</u> can do regarding the problem is to take a fraction of that inadequate ratio of supply from one group and apply it to another without changing the overall ratio. . . All that money can do is shower paper bills of digits on the conflagration. . ."</p> <p>- Cite RBF quoted by Elaine de Kooning in Art News, Sept. '52</p>
<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"The unfamiliar complex of the new wealth accounting requirements of the evolving human experiences emerges as an aggregate of unique and popularly discerned everyday 'news' problems. In turn the popularly discerned inventory of problems altogether provides the raw materials to be processed by the machinery of <u>politics</u>. It is the purpose of <u>politics</u> to digest the problems and to provide adequate accounting and readjustments to the unexpected and often disconcerting changes in the patterns of technical advantage realizations. <u>Politics</u> must thus implement life's continually increasing sweepout and penetration of Universe with a continually changing set of operational rules and accounting conventions."</p> <p>- Cite NO NON-STRUCTURED GUN, Preface, pp. ix, x, 9 May'62</p> <p>- Citation and context at Science-Technology-Industry-Economics-Politics Sequence (2)(3), 9 May'62</p>	<p>RBF DEFINITIONS</p> <p><u>Politics:</u></p> <p>"No politician can yield to another politician but all politicians can-- and eventually will-- yield to the complex problem solutions of the computer."</p> <p style="text-align: right;">- Cite NLSWICK, "Architecture, The Present Scene," p. 10</p> <p style="text-align: right;">- Citation & Context at Leaders Can Yield to the Computer, undated</p>

Synergetics Dictionary

RBF DEFINITIONS

Politics:

"...Political force . . . is one of the survivals of feudalistic patronage systems, embodying self indulgence of the few. Industry is replacing political control. Unscrupulousness in politics thrives on the unenlightenment and unindividualism of mobs. So called 'mob psychology' is only group motivation through animal instinct, self-consciously denying itself of its individual reasoning power. . . ."

- Cite 4-D, Chapter 5, May 1928

RBF DEFINITIONS

Political Mandates: Inventory Of:

"...Little humans on tiny planet Earth each becoming Mr. Big with a suddenly mistaken sense of power over environmental transformations-- participation in which permitted him to feel himself as a manager of inventories of logistical multiplicities which, at the most ignorant level, manifests itself as politically assured mandates and political-world gambling = gambling = ideological warfare = national sovereignties = morally rationalizing public = body politic = individual nations as United Nations."

- Citation & context at Nature's Subvisible Order (2), 27 Dec'73

RBF DEFINITIONS

Politics: Accessory After the Fact:

"Politics are an accessory after the fact."

- Cite RBF to steak crowd at LBJ Grille, Carbondale, Ill. 1 April 1971

RBF DEFINITIONS

Politics & Property:

"The young people recognize the integrity of the Queen-- in contrast to the corruptibility of all the big politicians."

"There were no radical or hostile demonstrations anywhere over the 4th of July...although, in a new phase of the psycho-guerrilla warfare, the young are developing their own antibodies to political exploitation."

"The young are frustrated by the obsolescence of our politics and our economics, but they are all now coming to realize that nothing worthwhile is for sale!"

- Cite RBF in response to direct query from Anthony Crosland, UK Foreign Secretary, re US youth's interest in the royal visit; at a small reception given by the Queen and Prince Philip aboard the Royal Yacht Britannia, Philadelphia, PA., 6 Jul'76.

RBF DEFINITIONS

Politics: Accessory After the Fact:

"Politics exists and will always exist-- but it must always be an accessory after the fact... an accessory after the fact of whatever the circumstances may be. So if you change the environment, the circumstances change and politics will have to have new problems. Politics can't really begin until you have a plow at hand, or a pick-axe at hand. They can't create that; and once you do have tools at hand, then you use them. And that becomes part of the circumstances. I'm not saying there isn't going to be political action, but it must be an accessory after the fact. So I can see that we can get the political mood, the mood of man, to simply demand that their political parties on both sides merely yield in a direction that neither of them ever thought of before. The one will not be yielding to the other man's policy at all. He'll be yielding to the computer. And I find that anybody can yield to the computers. He can't lose face by yielding to a machine."

- Cite transcript of RBF tape to Barry Farrell, Tape #3, Side A, p.10; Bear Island, 12 Aug'70

RBF DEFINITIONS

Political Revolution:

"It is impossible for us under the present comprehensive design pattern of world industrialization to make the Earth's total metals serve 100 percent of humanity exclusively through political revolutions or peaceful reforms and rearrangements of the way of administering the economic accounting of the commercial and social affairs of man. All we can do politically with the fundamental resource inadequacy is to take from one group and give to another. Competitive enterprise assumes exclusive success."

- Cite MEXICO '63, p.2, 10 Oct '63

RBF DEFINITIONS

Politics: Accessory After the Fact:

"Political reform is only and always accessory after the fact."

- Citation and context at Problem: Statement of the Problem, 1954-59

RBF DEFINITIONS

Politics vs. World Game:

Bill Wolf: "Is there an evolutionary or gradual path from the present to the goals of World Game, or is there a sharp discontinuity?"

RBF: "I say politics is an exclusive system at this point and World Game is an inclusive system. Whatever it is, and to the extent that the exclusive system is running itself out, and it equals out to simply the inverse of what's out. So it simply melts into one another at some point."

- Cite Tape #3, p. 13; RBF to W. Wolf, Phila., PA, 15 Jun'74

Synergetics Dictionary

<p><u>Politicians:</u> <u>Politics:</u> (1A)</p> <p>See Bias on One Side of the Line Circuitry: Thermionic and Political Analogy Conservatism Democracy Leaders Leaders Can Yield to the Computer Leaders: Take Away the Leaders Freeways Nation Narcotics as Political Strategy Peace Revolution Socialism Sovereignty Science-Technology-Industry-Economics-Politics Sequence Survival Recourse: Last Chance Adoption of Unheeded Principles Technocracy Social Organization</p>	<p><u>Poll:</u> <u>Polling:</u></p> <p>See Electronic Voting</p>
<p><u>Politicians:</u> <u>Politics:</u> (1B)</p> <p>See United States: One of the Most Difficult Sovereignties To Break Up War War: Official War & Unofficial War World Game: Men Landing on Moon Nonpolitical Politics vs. World Game Social Economics Apolitical World-around Communication Transcends Politics Ideology Ideologies Become Supranational Merchants of Woe Global Political Revolution</p>	<p><u>Pollen:</u> <u>Pollination:</u> (1)</p> <p>See Bee: Honey-seeking Bee Inadvertence: Inadvertent</p>
<p><u>Politics:</u> <u>Politicians:</u> (2 A-N)</p> <p>See Air Delivery & Submarine Cities, (3) Automobile, 5 May'72 Building Industry, (11)(12) Communications, 1967 Culture, 27 Jan'77 Doing What Needs to be Done, (1)(2) Design Science, (3)* Ego, 9 Nov'75 Electrical Network, 12 Jun'69 Fuller, R.B: On Drinking Liquor, 22 Jun'77 Individual Economic Initiative, 2 Jun'71; 13 Jul'74 Inhibit, 9 Apr'40 Invented Jobs, 20 Sep'76 Laissez-faire Process, 10 Oct'63 Neek Have Inherited the Earth, 10 Oct'63 No Energy Crisis, (A)-(C)</p>	<p><u>Pollen:</u> <u>Pollination:</u> (2)</p> <p>See Male & Female, 1 Feb'75 New York City (12)</p>
<p><u>Politics:</u> <u>Politicians:</u> (2 O-Z)</p> <p>See Obsolescence, Apr'72 Office Buildings, 28 Jan'72* Population Explosion, (1) Private Enterprise, 9 May'57 Problem: Statement Of, 1954 Soleri, Paolo, 8 Feb'76 Structure, 8 Sep'75 Sweepout, 9 May'62</p>	<p>RBF DEFINITIONS</p> <p><u>Pollution:</u> "Man talks carelessly and ignorantly of such words as... (the popular, modern) <u>pollution</u>... where nothing but absolute order is subvisibly maintained by Universe and her transformation arrangements unfamiliar to man. Universe does not have any <u>pollution</u>. All the chemistries of Universe are always essential to the integrity of eternal transformation..."</p> <p style="text-align: right;">_ Citation & context at <u>Nature's Subvisibile Order</u> (1), 27 Dec'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Pollution:

"I'm perfectly confident that the way we are going to get around pollution and so forth is by developing much better tools for handling energy. You make / a tool / and you have it available. If it does work it makes things obsolete that have been inadequate... Desperate people say 'I'm not going to pollute.' But oil is coming out of the refinery down there and people are using the automobile. People can't design their own automobiles. They can't design refineries as a body politic. Somebody has to take the trouble to discover how you refine and how you don't pollute. This can be done."

- Quoted by Rasa Gustaitis, WHOLLY ROUND, p.153 (Holt, Rinehart & Winston, NY) 1973 - Feb '73

RBF DEFINITIONS

Pollution:

"Ignorant humans aboard Space Vehicle Earth are now screaming, "Pollution!" There is no such phenomenon. What they call pollution is extraordinarily valuable chemistry essential to Universe and essential to man on Earth. What is happening is that the egocentricity of omnispecialized man makes him ignorant of the value with which his processing is confronting him. The yellow-brown content of fume and smog is mostly sulfur. The amount of sulfur going out of the smokestacks around the world each year is exactly the same as the amount of sulfur being taken from the Earth each year to keep the world ecology going. It would be far less expensive to catch that sulfur while concentrated in the stack, and to distribute it to the original users, than to do the original mining and to get it out of human lungs, etcetera, when all the costs to society over a deteriorating 25 years are taken into account. But humanity insists on holding to this year's profits, crops, and elections. World society is lethally shortsighted."

- Cite RBF Introduction to Genes Youngblood's EXPANDED CINEMA, 1970, p. 21.

RBF DEFINITIONS

Pollution:

"All the chemistries of Universe are essential to Universe. Nature has no pollution."

- Cite RBF at Catholic University Address, Washington DC, 24 Feb '72

RBF DEFINITIONS

Pollution:

"When people use the word pollution it simply means that they have some chemistry they aren't familiar with. . . There is powerful evidence as you study the total Universe and the total relative abundancies that there is an extraordinary continuous interplay of those chemistries, and so it's simply a matter of man getting much too overspecialized and not realizing that what you have here, is exactly what's needed there."

- Cite RBF to World Game at NY Studio School, 12 Jun-31 Jul '69, Saturn Film transcript, Sound 2, Part 3, p.75.

RBF DEFINITIONS

Pollution:

"Pollution is a natural resource that we are failing to harvest."

(Slightly adapted.)

- Cite article on RBF by Barry Farrel, LIFE, 26 Feb '71

RBF DEFINITIONS

Pollution:

"For the strange carelessness of urban society in polluting and corrupting the beauty of the environment is an inherited precedent set by big corporation factories belching smoke into the sky and vomiting chemical residues into the waters. Finding one's self born within the ugly city streets with no fundamental outlet for the innate energies and explorational initiatives, breeds early contempt for the environment and for those who perpetuate its inadequacies. Because humanity has been born without asking so to be, and must frequently grow within environments which disregard their developing needs, most of society tends to cast aside its refuse in unmeditated disdain for the economic masters who seem exclusively preoccupied with making quick profits out of men's desperately vital needs."

- Cite BEAR ISLAND STORY, galley p.32, 1968

RBF DEFINITIONS

Pollution:

"Collect it in the nozzle-- not in the spray!"

- RBF to EJA, 1970

RBF DEFINITIONS

Pollution Control:

(1)

"I was told by the chief engineer of Combustion Engineering that the apparatus for precipitating all of the fumes, particularly the sulfur which makes the public utilities the worst urban sky polluters, was in complete mechanical solution. I asked what the additional cost per kilowatt hour would be if the apparatus were installed. The answer was 25 percent additional.

"On speaking to the Edison Electric utility managers I pointed this out and was told by them that the chief customers were industries and that the industries only buy from them because the public utilities can provide power at only a fraction less than it would cost the companies to produce their own. Therefore, if they did add the 25 percent, the public would gladly pay but their prime customers would forsake them; ergo, they could not do so.

"The sulfur coming out of all the world's chimneys annually exactly equals what we are taking out of the Earth annually to supply industry's rubber making and other such needs. Vast amounts of energy, knowledge, and skill are expended in the progressive stages of separating out and refining metals from"

- Cite RBF Ltr. to Marshall McLuhan, 2 Sep '74

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pollution Control:</u> (2)</p> <p>"their original random ore matrix. This process of separating out that which the processor desires inadvertently produces a left-over concentrate of chemical substances unwanted by the producer, which are now or soon may be essential constituents of other humanity serving industries. Therefore the unwanted or so-called waste products are highly valuable concentrates-- before diffusion of the stacks or nozzles.</p> <p>"Nature has no exclusively polluting substances. All physical substances consist of complexes of some of the 92 regenerative chemical elements all of which are essentials at different frequencies of time and in different magnitudes to the success of eternally regenerative Universe. Pollution is a word invented by and manifesting human ignorance.</p> <p>"Many metallic elements may be combined to produce special behavior alloys which other elements serve as catalyzers, and so forth, while altogether accommodating all of Universe's intertransformative capabilities with only a few of which humanity is as yet familiar and many of which may be essential to humanity's future survival and service functions."</p> <p>- Cite RBF Ltr. to Marshall McLuhan, 2 Sep'74</p>	<p>RBF DEFINITIONS</p> <p><u>Pollution: Infinite Room to Pollute:</u></p> <p>"If there is an infinite system, then there are an infinite number of resources to be exploited. You can be just as careless and stupid as you want, since there are an infinite number of resources out there and we'll never run out. And there's an infinite amount of space in which you can get rid of all your filth as you waste all those resources. But in a closed system you can't do that-- and that's the kind of system we're in. We have anything but an infinite number of resources! We have just enough to make the experiment."</p> <p>- Cite APPROACHING THE BENIGN ENVIRONMENT, pp. 77-78, 1970</p>
<p>RBF DEFINITIONS</p> <p><u>Pollution Control:</u> (3)</p> <p>"When any one of our various competitively producing industrial companies are told that they must stop polluting the atmosphere or waters, they say that the added cost would prevent them from competing in their respective industries; ergo pollution abatement would mean bankruptcy for them; ergo no compliances. The atmospheric airs drift and the waters flow interconnectedly around our planet. They and all resources are essential to all humanity and the Universe of which humans are just such a function.</p> <p>"Clearly the problem won't be solved until central governments make complete precipitation mandatory and rebate the costs thereof from the annual taxes of the industries while forcing the utilities to turn over to the central government all the valuable chemical elements recovered. The governments would find their stockpiles worth many times what they seemingly were losing in tax rebates. The saving to governments in medicare and general pollution-caused deteriorations would be profound. The computers would soon inform the government that they were saving so much money that they could almost completely eliminate taxes. They would be converting commonwealth to sorted-out metals that would continually recirculate and with each 22-year"</p> <p>- Cite RBF Ltr. to Marshall McLuhan, 2 Sep'74</p>	<p>RBF DEFINITIONS</p> <p><u>Pollution: Infinite Room to Pollute:</u></p> <p>"Thinking of Universe only as an infinitely extensive plane, humanity felt itself logically justified in throwing away its refuse outside the boundaries of its particular domain-- there was infinity into which all pollution would be ultimately dissipated into infinite innocuousness. It meant nothing to dump a teacup into an infinite ocean. If there is an infinitely extended world, then we may assume that when we exhaust the present familiar resources, we will, as in the past, keep on finding new and better alternate resources, ad infinitum-- so why should we worry and be fussy. Never mind about tomorrow. Never mind about the other fellow. The more ruthlessly selfish one is, the better off is one and all has dependents."</p> <p>"So the difference between closed system surfaces and a closed Universe in respect to the utterly open, infinite flat slab world concept with which man has been ignorantly rationalizing all past experience, is the 'similar difference' between humanity's extinction or its continuation upon this beautifully equipped and provisioned, closed system, space vehicle Earth. It is clearly to be utopia or oblivion-- and no half measures. We must begin today to expose our youth and ourselves to the fundamental self-discipline conceptioning which is the only real educational process." - NERHUSPEECH, pp.22-23 13Nov'69</p>
<p>RBF DEFINITIONS</p> <p><u>Pollution Control:</u> (4)</p> <p>"average recirculation would employ the interim harvest of improved know-how to produce the manyfold performance increase per pound of the previous recirculation. As for instance, each melted down Cadillac today can produce two superior-to-Cadillac Japanese vehicles. I am not promoting automobiles, just clarifying the point."</p> <p>- Cite RBF Ltr. to Marshall McLuhan, 2 Sep'74</p>	<p><u>'Pollution' as an Invented Word:</u></p> <p>See Pollution Control (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Pollution: Infinite Room to Pollute:</u></p> <p>"If the Earth was flat-- out to infinity-- there'd be infinite room to pollute. You just get rid of it. It goes to infinity. That's been the practical idea up to now. And if it went to infinity there'd be an infinite amount of resources to replace the resources we've exhausted. That's been our experience in the past. Let's be practical. Let's get down to Earth! That's the way it is. . . . And then look at the extraordinary editorial in yesterday's N.Y. Times quoting Maurice Stans, the Secretary of Commerce, saying let's go slow on environmental controls: if it gets in the way of making money, we can't afford it. I think it is a most ghastly demonstration of the magnitude to which humans are really entrapped by shortsightedness and selfishness. Now I don't think ill of any of my fellow men. Each one has his own evolutionary pattern, but I am intent, wherever I can, to free my fellow men of the entrapment in ignorance and shortsightedness. . . ."</p> <p>- Cite RBF at SIBS, U. Mass., Amherst, 22 July '71, Talk 13, pp. 20-21</p>	<p>RBF DEFINITIONS</p> <p><u>Pollution: News as Most Polluted Resource:</u></p> <p>"Probably our most polluted resource is that of the tactical information to which humanity spontaneously reflexes,"</p> <p>- Citation at Information: Tactical Information, 13 Nov'69 - Cite NERHUS SPEECH, p. 17, 13 Nov'69</p>

Synergetics Dictionary

<p><u>Polygraph:</u></p> <p style="text-align: center;">See Planetary Democracy, (6)</p>	<p>RBF DEFINITIONS</p> <p><u>Polyhedron:</u></p> <p>"The word polyhedron has to go because it says 'many-sided' which implies a continuum. We don't even have the faces. Faces become spaces. They become intervals. They become nothing. The Einsteinian finite Universe is predicated on the absolute finiteness of the local energy event packages."</p> <p style="text-align: right;">- Cite SYNERGETICS at Sec. 1023.12, 20 Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Polyhedra:</u></p> <p>"Polyhedra consist only of polyhedra. Polyhedra are always pro tem, constellations of polyhedra. Polyhedra are defined only by polyhedra--and only by a minimum of four polyhedra.</p> <p>"All systems are polyhedra: all polyhedra are systems.</p> <p>"The observed or tuned-in polyhedra whose plurality of corners, faces, and edges and frequency of subdividing are ██████████ tunably discernible to the tuning-in station (the observer) consist of corners which are infra-threshold-tunable polyhedra and whose faces or openings are ultra-threshold-tunables."</p> <p style="text-align: right;">Cite RBF to EJA and RBF rewrite; 3200 Idaho, Wash, DC: 18 Jul'76, incorporated in SYNERGETICS, 2nd. Ed. at Sec. 400.55-400.57.</p>	<p>RBF DEFINITIONS</p> <p><u>Polyhedral Understanding:</u></p> <p>"...Great circles, unlike spiral lines, always return upon themselves in the most economical manner. All the system's paths must be topologically and circularly interrelated for conceptually definitive, locally transformable, <u>polyhedral understanding</u> to be attained in our spontaneous-- ergo, most economical-- geodesically structured thoughts."</p> <p style="text-align: right;">- Citation & context at <u>Geodesic</u>, 1969</p>
<p>RBF DEFINITIONS</p> <p><u>Polyhedral Systems:</u></p> <p>"All the interrelationships of system foci are conceptually representable by vectors. A system is a closed configuration of vectors. It is a pattern of forces constituting a geometrical integrity which returns upon itself in a plurality of directions. Polyhedral systems display a plurality of polygonal perimeters all of which eventually return upon themselves. Systems have an electable plurality of view-induced polarities. The polygons of polyhedra peregrinate systematically and sometimes wavelinearly around three or more noncongruent axes."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 400.09, RBF rewrite, 25/2 May'72</p>	<p><u>Polyhedron:</u> <u>Polyhedra:</u> (1)</p> <p>See Conceptuality as Polyhedral</p> <ul style="list-style-type: none"> Equi-edged Polyhedra Interpolyhedral Nuclear & Nonnuclear Polyhedra Prime Hierarchy of Symmetric Polyhedra Regular Polyhedra Rollability of Polyhedra System Enclosure Cheese Polyhedra Clear Space Polyhedra Sphere = Polyhedron String-connected Polyhedra Domains of Polyhedra Minimum Polyhedron Cosmic Hierarchy Triacontrahedron as Limit Regular Polyhedron Euler's Uncored Polyhedral Formula
<p>RBF DEFINITIONS</p> <p><u>Polyhedron:</u></p> <p>"But operationally speaking a plane exists ██████████ only as a facet of a polyhedral system. Because I am experiential I must say that a line is a consequence of energy: an event, a tracery upon what system? A polyhedron is a system separated out of Universe. Systems have an inside and an outside. A picture in a frame has also the sides and the back of the frame which is in the form of an asymmetrical polyhedron."</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed. at Sec. 1007.25, 1 Jan'75</p>	<p><u>Polyhedron:</u> <u>Polyhedra:</u> (2)</p> <p>See Halo Concept, 22 Feb'72</p> <ul style="list-style-type: none"> Superficial, 6 Mar'73 Topology: Synergetic & Eulerian, 2 Jun'74 Centers of Energy Rebirth, 16 Nov'72 Open Triangular Spirals, Nov'71 Quantum Mechanics: Minimum Geometrical Fourness, (1) Triclinic, 31 Aug'76 Hex-pent Structure of Purines, 15 Dec'76 Generalization & Special Case, 23 Jan'77

Synergetics Dictionary

Polynesians:

See Binary, 1970

RBF DEFINITIONS

Population of Cities:

Q. - (William Raspberry): "Mr. Fuller, should we put a gate up in the city and keep the people out after it reaches a certain size, or not? Should we limit the size of our cities? Should we limit the population of our cities?"

A. - (RBF): "We shouldn't limit anything. That's what human beings are all about... to delimit their capabilities, to give them a chance to really function. We're probably here to find out how it's supposed to function. So I do not expect anything positive from negative beginnings."

- Cite RBF to "Town Meeting of the Air," Wash., DC; 10 Sep'75

Ponderable:

(1)

See Imponderable
Weighable

RBF DEFINITIONS

Population Density:

"All the cities of the world occupy less than one percent of the Earth's surface."

- Cite I SEEM TO BE A VERB, Queen, May '70 (Not in Bantam version)

Ponderable:

(2)

See Metaphysics, Jun'66
Universe, (B); Oct'66; 13 Nov'69

RBF DEFINITIONS

Population Density: Manhattan Cocktail Party:

"All the people in the world today could be housed in the buildings of Manhattan with each person having as much room as at a cocktail party."

- Cite I SEEM TO BE A VERB, Queen, May '70 (Not in Banatm edition)

RBF DEFINITIONS

Population:

"I find that as industrialization increases, the population decreases. With industrialization, the life expectancy increases. When that happens, families don't have to be large. In the last five years the absolute number of babies has been less each year. The big bulge everyone's worried about occurred because all the people that used to die have not been dying, particularly at birth. This bulge is working up to a time when there will be a great, great many people who are very old. But the number coming in at the bottom is lessening very rapidly."

- Cite RBF to William Marlin, Architectural Forum, Feb'72

RBF DEFINITIONS

Population Density: Manhattan Jet Dispersal:

"Here is how New York is going to solve its transportation problem. First you'll have to do away with the automobile altogether. It is a matter of geometries. You take a point and then a line. That's what a highway is, a line between two points. Well, you have areas which are much vaster than lines, and you have all the volume above the areas, which is space. If you take all the 30 million people of the New York metropolitan area and give them little harnesses with jets and have them put on the proper clothes, and if you send them up in the air to a reasonable altitude, say 10,000 feet, where they wouldn't need any additional oxygen, all simultaneously, people would be so far apart they couldn't see each other. That would solve your traffic jams!"

- Cite RBF quoted in New York magazine, p.27, 30 Mar'70

Synergetics Dictionary

<p><u>Population Density:</u> <u>Manhattan Cocktail Party:</u></p> <p>See New York City, 1938; (8) Population Explosion, (1)(2); 1959</p>	<p>RBF DEFINITIONS</p> <p><u>Population Explosion:</u> (1)</p> <p>"Desirable time investment alternatives inherently decrease overall baby-making time. That explains 'the rich getting richer and the poor getting children.' Prime designing commands the fundamental solution of the overpopulation threat. As with all the fundamental problems of man on Earth fundamental solutions are not to be had by political reforms of either the peacetime prohibitory law enforcement variety, or of the never convincing wartime annihilation variety. Fundamental solutions are not for sale. Mass subscriptions to support professional do-gooders are futile.</p> <p>"Fortunately <u>population explosion</u> is only the momentary social hysteria's cocktail conversation game. Real population crisis is fundamentally remote. There is room enough indoors in New York City for the whole 1963 world's population to enter, with room enough inside for all hands to dance the twist in average nightclub proximity. There is ample room in the New York streets for one-half the world's population to amble about in, leaving enough room inside buildings for the other half to lie down and sleep. This would be a good moment to call for all scientists, engineers, tool makers, machine fitters, mechanics, and aircraft pilots present, all of whom"</p> <p>- Cite PRIME DESIGN, I&I, p.248, May'60/63</p>
<p><u>Population Density:</u></p> <p>See Community Privacy Proxemics Proximity ≠ Neighborliness</p>	<p>RBF DEFINITIONS</p> <p><u>Population Explosion:</u> (2)</p> <p>"amount to less than one per cent of humanity, and to send them out from New York City all around the world to get total automation of world production and services going. After this the world's population could start enjoying the whole Earth as students, archaeologists, playwrights, players, poets, artists, dancers, skin divers, tourists, etc. There would be no further muscle and reflex jobs to be done and no need to earn a living, for the living would be generated as effortlessly as apples grow on trees."</p> <p>- Cite PRIME DESIGN, I&I, pp.248-249, May'60/63</p>
<p>RBF DEFINITIONS</p> <p><u>Population Explosion:</u></p> <p>"The population explosion is a myth. As we industrialize, down goes the annual birth rate. If we survive, by 1985, the whole world will be industrialized, and, as with the United States, and as with all Europe and Russia and Japan today, the birth rate will be dwindling, and the bulge in population will be recognized as accounted for exclusively by those who are living longer.</p> <p>"When world realization of its unlimited wealth has been established there as yet will be room for the whole of humanity to stand indoors in greater New York City, with more room for each human than at an average cocktail party.</p> <p>"We will oscillate progressively between social concentrations in cultural centers and in multideployment in greater areas of our Spaceship Earth's as yet very ample accommodations. The same humane will increasingly converge for metaphysical intercourse and deploy for physical experiences."</p> <p>- Cite OPERATING MANUAL FOR SPACESHIP EARTH, pp.131-132, 1959</p>	<p>TEXT CITATIONS</p> <p><u>Population Explosion:</u></p> <p>"Thinking Out Loud (1): Disproving the Population Explosion," World Mag. 3 Jul'73</p> <p>"Playboy, Ltrs. to Editor, Feb'72 pp. 50-51, (Discussion of RBF Views.)</p>
<p>RBF DEFINITIONS</p> <p><u>Population Explosion:</u></p> <p>"There has been a great debate about the so-called population explosion in recent years. . . The cause of the bulge in census population is, of course, that more people are living longer. But the underlying reality of the population problem, if there is a problem, is that as we industrialize the rate of births decrease. . . Clearly, as man industrializes and improves the probability of human survival, whatever the drives or controls of nature are, she does not have to have anywhere as many birth 'starts.' This is one of the fundamental points about industrialization. . . which will be world wide by 1985."</p> <p>- Cite THE YEAR 2000, San Jose State College, 1966 Column 4.</p>	<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (1)</p> <p>"There are many prognostications about immediate technology... It is all Buck Rogers and it will happen. But, such speculation is a waste of time, it is more important to consider what will happen to our relationship one with another.</p> <p>"In its broadest aspect this area must be considered under 'population.' There has been a great debate about the so-called population explosion in recent years. This has been occasioned in part by the fact that we have only recently had accurate census in many countries. Even in Europe population figures only go back a short time.</p> <p>"In the USA, though there was an increase in the post-war birth rate between 1947 and 1954, since then it has declined. This trend is also evident in all the industrialized countries, including Russia. During the last 12 years then the birth rate has been declining in the industrialized countries, yet the main problem is thought to be population increase. The cause of the bulge in census population of these countries, is of course, that more people are living longer. But the underlying reality of the population problem, if there is a problem, is that as we industrialize, the rate of births decreases. We may see this most clearly in, for example, the US, where the"</p> <p>- Cite THE YEAR 2000, reprinted in AD, Feb'67</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (2)</p> <p>"the early settlers had an average of 13 children per family and survival rate was very poor. We may then plot the decrease in number of children per family against improvement in technological services, public health, indoor water supply, bathrooms, refrigeration, general improvement in life expectancy, and so on. Clearly as man industrializes and improves the probability of human survival, whatever the drives or controls of nature are, she does not have to have anywhere as many birth 'starts.' This is one of the fundamental points about industrialization.</p> <p>"We should also consider the rate at which countries become industrialized. England took 200 years to get industrialization going and up to the present level. The US 'took off' from England's vantage point and did it in 100 years. Russia came in and accomplished in 50 what had taken the USA 100 years, because it was able to start at a more advantageous point. We find the new countries come in where others left off, not where they started. Japan did not start flying with the Wright Brothers bi-planes, but with the 'Zero' and 'Spitfire' types; China has never flown anything but jets. China came into the world of industrialization after the transistors, computers, and atomic fission were available-- so she will come to indus"</p> <p>- Cite THE YEAR 2000, reprinted in AD, Feb'67</p>	<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (6)</p> <p>"philosophic awareness of the significance of the whole human experience. There will be a rediscovery of what Einstein described in 1930, in an article on the 'cosmic religious sense'-- the intellectual integrity of the Universe and an orderliness that was manifestly a priori to man.</p> <p>"We are going to have an increasing number of human beings as scientists and philosophers thinking about the total significance of human experience and realizing that there is an intellect far greater and far more powerful than that of man-- and anticipatory of the whole trend of his development. An era of extraordinary integrity might ensue.</p> <p>"This would be for me, the most important and exciting aspect of all the trend curves-- that in A.D. 2000, to a marked extent, the integrity of humanity will be of an unbelievably high order. What one human being says to another regarding what he thinks or what he has observed, will be reliable. There will be play-acting still, but it will very clearly be play-acting. In looking forward to the year 2000 it is not the 'Buck Rogers' details which are important but whether the world will be a good place for our children and grandchildren. In the past,"</p> <p>- Cite THE YEAR 2000, reprinted in AD, Feb'67</p>
<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (3)</p> <p>"trial parity with the west in about five years. India will probably be even faster. The acceleration of capabilities coming to bear on India and Africa are of the very highest. As far as one can see, industrialization will be worldwide by 1985.</p> <p>"By this date, as the world industrial process is completing, and birth rates reducing, every individual human being will still have about ten acres of dry land and approximately 20 acres of ocean averaging half a mile deep. In terms of a family of five that would be 50 acres of land and 100 acres of ocean-- 150 acres per family. The amount of food supply would be ample.</p> <p>"We may glimpse in such patterning certain total behaviors in Universe that we know little about. We noted, for instance, that as survival rate and life sustaining capability increased fewer birth starts were required. This may be related to our developing capacities in interchanging our physical parts, of producing mechanical organs, of having progressively fewer human organisms to replenish. The drive in humanity to reproduce as prodigally as possible decreases considerably. This may be reflected in social behaviors-- when all the girls"</p> <p>- Cite THE YEAR 2000, reprinted in AD, Feb'67</p>	<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (7)</p> <p>"man had to do many things shortsightedly and we have wasted a great deal of our natural heritage. We have squandered the fossil fuels which represented an extraordinary 'savings' or energy capability account stored up in the Earth. The great change now will be in a new type of accounting when we begin to draw more consciously on the fabulous 'income' energies of Sun, water, wind, and tidal powers-- which, if not used, will not be 'saved' or impounded on the Earth. We will adopt new accountancy standards for all wealth. To account our success in terms of gold and various traditional banking practices is irrelevant. Real wealth is organized capability. One of its major characteristics is that it is irreversible. No matter how much wealth you have, you cannot change one iota of yesterday. Wealth can only be used now and in the future. What we really mean by wealth is how many days forward we have energy available and organized for work to keep the machines running, to keep the foods growing, the refrigeration, transportation, and so on. The basis for our new accounting system will be 'How many forward days of organized capability do we have available to serve how many men'. We will be able to make the working assumption that it is normal not only for man to be successful but also normal for him to move as freely as he wishes without interfering with any other man. Our overall"</p> <p>- Cite THE YEAR 2000 reprinted in AD, Feb'67</p>
<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (4)</p> <p>"begin to look like boys and boys and girls wear the same clothes. This may be part of a discouraging process in the idea of producing more babies.</p> <p>"We shall have to stop looking askance on trends in relation to sex merely as a reproductive capability, i.e., that it is normal to make babies. Society will have to change in its assessment of what the proclivities of humanity may be. Our viewpoints on homosexuality, for example, may have to be reconsidered and more wisely adjusted.</p> <p>"Central to such readjustment will be the concept that man is not alone the physical machine he appears to be. He is not merely the food he consumes, the water he drinks, or the air he breathes. His physical processing is only an automated aspect of a total human experience which transcends the physical. As a knot in a series of spliced ropes of manila, cotton, nylon, etc., may be progressively slipped through all the material changes of thickness and texture along the length yet remain an identifiable pattern configuration, so man is an abstract pattern integrity which is sustained through all the physical changes and processing."</p> <p>- Cite THE YEAR 2000, reprinted in AD, Feb'67</p>	<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (8)</p> <p>"accounting assumption will be based on whatever amount of organized energy capability is required so as to make it possible for any man to travel around and enjoy the whole Earth, and be completely supported in doing so. There will be no such thing as deficit accounting. You cannot live on deficit accounting. You cannot eat deficitly or drink water deficitly. What is to eat is there-- as the water is there.</p> <p>"All such negative accounting procedures went along with the need for exploiting others in the 'you or me' phase of man's past struggle for basic survival.</p> <p>"Much of the most exciting and important part about tomorrow is not the technology or the automation at all, but that man is going to come into entirely new relationships with his fellow men. He will retain much more in his everyday relations of what we term the naive and idealism of the child. This will be completely justified and not exploited or exploitable in any way. I think then that the way to see what tomorrow is going to look like is just to look at our children."</p> <p>- Cite THE YEAR 2000 reprinted in AD, Feb'67</p>
<p>RBF DEFINITIONS</p> <p><u>Population Sequence:</u> (5)</p> <p>"We become more aware of this uniqueness of organising principle in the Universe, in science. The long-held myth that science wrests order out of chaos is fast disappearing in due ratio to the extent that all great scientists have found the Universe to exhibit an a priori orderliness. All the various specialties are discovering that their variously remote studies which seemingly 'ordered' local aspects of nature are converging within progressively simpler and more comprehensive patterns. The 'ordering' is coming together. When we refer to the computer and automation taking over we refer really to man's externalization of his internal and organic functions into a total organic system which we call industrialization. This metabolic regenerating automated organism is going to be able to support life in an extraordinary way. The machines will increasingly assume various specialized functions. Man who was born spontaneously comprehensive but was focused by survival needs into specialization is now to be brought back to comprehensivity.</p> <p>"As enormous numbers of men are freed for more education and research and as they become more and more comprehensive in their dealings with nature, there will be engendered a total"</p> <p>- Cite THE YEAR 2000, reprinted in AD, Feb'67</p>	<p>RBF DEFINITIONS</p> <p><u>Population: Stabilization Of:</u></p> <p>"Japan was the first country in the world to actually stabilize its population. China is going in for birth control in a major way if they industrialize, and they industrialize at a very rapid rate. The only place where we're making an enormous amount of babies is in the nonindustrial countries where the probability of survival is very poor: just as clearly identified as it can be. . . ."</p> <p>- Cite RBF to World Game at NY Studio School, 12 Jun-31 Jul'69, from Saturn film transcript, Sound 1, Take 1, p. 9.</p>

Synergetics Dictionary

<p><u>Population: Center of World Population:</u></p> <p>See Three-way Weaving vs. Two-way Crisccross, 13 Mar'75</p>	<p><u>Porcupins: Runover Porcupins:</u></p> <p>See Cartography: Conventional Projections, (1) Twenty-foot Earth Globe & 200-foot Celestial Sphere, (9)</p>
<p><u>Population: Population Stabilization:</u> (1)</p> <p>See Acres per Individual Human Being Homosexuality Procreation Womb Population</p>	<p><u>Porpoise Sounds:</u></p> <p>See Universal Language, 28 Apr'71</p>
<p><u>Population: Population Stabilization:</u> (2)</p> <p>See Artifacts, 28 Apr'74 Lags (1) India, 12 May'75</p>	<p><u>Porpoise:</u></p> <p>See Pet, 31 Jan'75 Pure Principle, 6 Jul'62 Surfing: Surfboarding, 5 Jul'62</p>
<p><u>Population:</u> (3)</p> <p>See Population of Cities Population Density Population Density: Manhattan Cocktail Party Population Density: Manhattan Jet Dispersal Population Explosion Population: Stabilization Of Population: Center of World Population</p>	<p><u>Ports:</u></p> <p>See Seaports</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Positive and Negative:</u></p> <p>"...Right' and 'left' should be replaced by the nonequal and opposite words '<u>positive</u>' and '<u>negative</u>'..."</p> <p style="text-align: center;">Left & Right,</p> <p>- Citation and context at [redacted] 4 May'57</p>	<p><u>Positive & Negative:</u> (1)</p> <p>Active & Passive See Annihilation Complementarity Energetic Functions Interwave Behavior of Number Mite: Positive & Negative Functions Motion: Six Positive & Negative Motions Nonmirror Image Oscillation Parity & Disparity Polar & Hemispherical Positive-negativeness Pulsation Reciprocity Structural Functions Tensegrity: Miniature Masts: Positive & Negative Plus & Minus Outside-out vs. Inside-out Basic Event Symmetry: Positive or Negative</p>
<p>RBF DEFINITIONS</p> <p><u>Positive & Negative: Four Kinds:</u></p> <p>"There are four kinds of positive and negative:</p> <ol style="list-style-type: none"> (1) the sternal, equilibrium-disturbing plurality of differentially unique, only-positively-and-negatively-balanced aberrations; (2) the north and south poles; (3) the concave and convex; and (4) the inside (microcosm) and outside (macrocosm) always cosmically complementing the local system's inside-concave and outside-convex limits." <p>- Citation & context at <u>Two Kinds of Twoness</u>, (A), 10 Nov'74</p> 	<p><u>Positive & Negative:</u> (2A)</p> <p>See Aberration, 22 Nov'73 Algebra, Oct'66 Antientropy, 10 Oct'63 Atomic Computer Complex, (2) Axis of Spin: Tetrahedron, 7 Oct'71</p>
<p><u>Positive & Negative Set of the Whole:</u></p> <p>See Physical Reality, 11 Jul'62</p>	<p><u>Positive & Negative:</u> (2C)</p> <p>See Considerable Set, 1959 Crystallography, 17 Aug'70</p>
<p><u>Positive & Negative:</u></p> <p>See Positive & Negative, 4 May'57</p>	<p><u>Positive & Negative:</u> (2D)</p> <p>See Dynamic Symmetry, 31 May'71</p>

Synergetics Dictionary

<p><u>Positive & Negative:</u> (2E)</p> <p>See Energy, 16 Sep'67 Energy Event, 9 Jul'62 Equilibrium, 25 Feb'69 Eternity, (2)</p>	<p><u>Positive & Negative:</u> (2L)</p> <p>See Left & Right, 4 May'57</p>
<p><u>Positive & Negative:</u> (2P)</p> <p>See Frequency: Half Frequency, 29 Nov'72</p>	<p><u>Positive & Negative:</u> (2M)</p> <p>See Mite & Coupler, 13 May'73 Mites & Quarks as Basic Notes, (1)-(3)</p>
<p><u>Positive & Negative:</u> (2G)</p> <p>See Game of Cosmic History, 27 Dec'73</p>	<p><u>Positive & Negative:</u> (2N)</p> <p>See Nature, Jun'66; 13 Nov'69 News & Evolution, (1)(3)(4)</p>
<p><u>Positive & Negative:</u> (2I)</p> <p>See Information Transmitting & Nontransmitting Model, 27 May'75 Invisible ≠ Negative, 28 May'75 Intertransforming, Jun'66</p>	<p><u>Positive & Negative:</u> (2O)</p> <p>See Odd Ball, 27 Sep'72 Optimism: I Am Not an Optimist, 26 Apr'77</p>

Synergetics Dictionary

<p><u>Positive & Negative:</u> (2P)</p> <p>See Particle, (1)(2) Physical Reality, 11 Jul'62* Planetary Democracy, (6) Population of Cities, 10 Sep'75 Plastic Flowers, Oct'70 Powering: Fifth Dimension, 29 Nov'72 Prime Dichotomy, (1)(2) Prime Structural Systems, 11 Jul'62; 3 Nov'75 Principle, May'49*</p>	<p><u>Positive & Negative:</u> (2T)</p> <p>See Tetrahedron: Nine Schematic Aspects, 30 Aug'75 Tetrahedral Dynamics, (2) Tetrahelix, 10 Sep'74 Tidal, 9 Nov'73 Triangle, (A); (a); Nov'71; Jun'71 Twoness, 23 May'72; 1967</p>
<p><u>Positive & Negative:</u> (2Q)</p> <p>See Quantum: Event-paired Quanta, Jun'66 Quanta Loss by Congruence, (1)</p>	<p><u>Positive & Negative:</u> (2 UVWXYZ)</p> <p>See Vector Equilibrium, (I) X Configuration with One Ball at the Center, (1)(2) Zero, 9 Apr'40; May'49</p>
<p><u>Positive & Negative:</u> (2R)</p> <p>See Reality, 11 Jul'62*; Jun'66 Reflection Sequence: Applew, (1)(2) Rudderling, May'65</p>	<p><u>Positive:</u> (1)</p> <p>See Low Pressure vs. Positive</p>
<p><u>Positive & Negative:</u> (2S)</p> <p>See Seeability, 31 May'71 Scenario vs. Absolute Symmetry, 11 Dec'75 Star Event & Degrees of Freedom, 12 May'75 Stability, 18 Mar'69 Syte, 31 May'71 Six Motion Freedoms & Degrees of Freedom, (1)(4)(5)</p>	<p><u>Positive:</u> (2)</p> <p>See Navy Sequence (7) Optimism: I Am Not an Optimist, 26 Apr'77</p>

Synergetics Dictionary

REF DEFINITIONS

Positron:

See Electron & Positron

Possible Into Probable:

See Life, 16 Aug'50

REF DEFINITIONS

Possession:

"Galen Handy's quote, 'since truth is universal, truth cannot be possessed, only the untruth can be possessed;' to which I append that all possession must be founded on delusions, lies, or self-deceptions."

- Cite RBF Ltr. to N. Kaiser, p.1; 10 Jun'74

Possibility:

See Question-asking Possibility

REF DEFINITIONS

Possession:

"Possession is becoming progressively burdensome and wasteful and therefore obsolete."

- Cite Operating Manual for Spaceship Earth, 1969

REF DEFINITIONS

Posterioral Osculations:

"'Soldiering,' pretentious hustling, officiousness, abstract posterioral osculations are amplifications of the momentum of the subconsciously sustained fallacious notion of a necessity of evidenced quasi-justification of existence."

- Citation and context at Industrial Hypocrisy, May'32

Possession:

See Mine: That's Mine
Ownership
Private Property
Thing: Thingness

Post-uranium:

See Ninety-two Elements: Chart of Rate of Acquisition Superatoms

Synergetics Dictionary

Potential vs. Operative:

See Vector, Oct'59
Vector Equilibrium, 2 Nov'73

Potential vs. Radiant:

See Cube: Diagonal of Cube as Wave Propagation Model,
22 Jun'72

Potential vs. Physically Realized:

See Line, Oct'59
Theoretical, 26 May'72

Potential Ratios of Volume to Quanta Values:

See Universal Integrity: Manifest Ratios & Potential
Ratios, 1 Apr'72

RBF DEFINITIONS

Potential vs. Primitive:

"The potential activation of tetravolume quantation in the geometric hierarchy is still subfrequency but accounts for the doubling of volumetric space.

"The potential activation of tetravolume accounting is plural; it provides for nucleation. Primitive tetravolume accounting is singular and subnuclear."

- Cite RBF to EJA, 3200 Idaho, Wash. DC; 12 May'77
(Incorporated in SYNERGETICS 2 draft at Sec. 1033,181.)

Potential vs. Realized:

See Angle & Frequency Design Control, Jul'71
Metaphysical & Physical, 1971
Nucleus, 12 Jul'62
Vector, 26 May'72
Wavilinear, 28 Oct'73

Potential vs. Primitive:

See Vector Equilibrium: Potential & Primitive
Tetravolumes

RBF DEFINITIONS

Potential Sphere:

"All spheres are potential spheres."

- Citation & context at Six Motion Freedoms & Degrees of Freedom, 8 Aug'77

Synergetics Dictionary

<p><u>Potential:</u> (1)</p> <p>See Copotentials Embryo Full Potential Interpotential Perfection Relevant System Potential Superficial Potential Latent Behavior Potential</p>	<p>RBF DEFINITIONS</p> <p><u>Pound:</u> <u>Ezra Pound:</u> (1885-)</p> <p>"Before Heisenberg's 'indeterminism,' T.S. Eliot said 'the act of considering history alters history.' Ezra Pound anticipated them both when he remarked much earlier that 'the act of thinking alters thought.'"</p> <p style="text-align: right;">- Cite The Generalized Laws of Design, p. 1, 22 Apr'68</p>
<p><u>Potential:</u> (2)</p> <p>Coamic Hierarchy, 23 Jan'77 Eternal Instantaneity, 22 Jun'72 See Fix, 6 Nov'73 Fuller, R.B.: On Creativity, 23 May'72 God, 26 May'72 Ideals, 14 Feb'72 Immaculate Conception, 25 Jan'72 Invisible Architecture, (E)* Metaphysical & Physical, 1971 Powering: Third Powering, 15 Oct'72 Reality: Structurings as the Only & Inescapable Reality, 1963* Sixty Degreeeness, 8 Dec'72 Synergetic Strategy of Commencing with Totality, 28 May'72 Tension & Compression, 1944 Theoretical, 26 May'72 Tongue: Bite Your Tongue, Aug'72 Vector, 14 Oct'72 Vector Equilibrium, Oct'59; 1971; 23 Oct'72 Vector Equilibrium: Zero Model, 31 May'71 Individual Life as One Way Universe Could Have Turned Out, 5 Jun'75</p>	<p><u>Pound, Ezra:</u></p> <p style="text-align: right;">See Heisenberg-Eliot-Pound Sequence</p>
<p><u>Potential:</u> (3)</p> <p>See Potential vs. Active Potential vs. Manifest Potential vs. Operationally Effective Potential vs. Operative Potential vs. Radiant Potential Ratio of Volume-to-Quantum Values Potential vs. Realized Potential vs. Primitive Potential Sphere</p>	<p>RBF DEFINITIONS</p> <p><u>Poverty:</u></p> <p>"And humanity's enlightenment is delayed Because the Earth planet is so large, And man is so infinitely tiny And so myopically preoccupied with personally avoiding The erroneously assumed inevitability of poverty for the many, which has slavishly and fearfully conditioned his reflexes."</p> <p style="text-align: right;">- Cite BRAIN & MIND, p.94 May '72</p>
<p>RBF DEFINITIONS</p> <p><u>Pound:</u> <u>Ezra Pound:</u></p> <p>"Heisenberg said that observation alters the phenomenon observed. T.S. Eliot said that studying history alters history. <u>Ezra Pound</u> said that thinking in general alters what is thought about. Pound's formulation is the most general, and I think it's the earliest."</p> <p style="text-align: right;">- Cite Hugh Kenner, "The Rope and the Knot," Kentucky Review, Autumn 1968, who attributes this quote to R.S.F.</p> <p style="text-align: right;">████████████████████ ████████████████████ ████████████████████</p>	<p><u>Poverty:</u> <u>Slow Slum Death:</u> (1)</p> <p style="text-align: right;">See War: Official & Unofficial War: Slow Death by Slums vs. War as Quick Death</p>

Synergetics Dictionary

Poverty: Slow Slum Death:

(2)

See Design Science, (2)
Resource Inadequacy, May'72

RBF DEFINITIONS

Powering:

"In the topology of synergetics powering is identifiable only with the uni-angular vectorial convergences."

Citation and context at Convergence, 16 Nov'72

Poverty: Poor:

See Success, 10 Sep'75
News & Evolution, 15 Mar'77
Enough to Go Around, (1)(2)

RBF DEFINITIONS

Powering:

"Number powers refer to the number of times any given number is multiplied by itself. While empty set numbers may be theorized as multipliable by themselves, so long as there is time to do so, all experimental demonstrability of science is inherently time limited. Time is the only dimension. It is expressible as frequency."

- Cite Synergetics Draft at Sec. 960.03, 16 Nov'72

Power Factoring:

See Six Motion Freedoms & Degrees of Freedom, 11 Aug'77

RBF DEFINITIONS

Powering:

"Powering means the multiplication of a number by itself."

- Cite SYNERGETICS draft at Sec. 960.02, 16 Nov'72

Power Generation:

See Electromagnetic Generating
Wind Power Sequence
Inanimate Energy Power

RBF DEFINITIONS

Powering:

"Powering is numbers self-multiplying."

- Cite RBF to EJA, 3200 Idaho, 28 Oct'72

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>"Powering means the development of dimensions that require the introduction of constant angular interception of a constant angle system of planes by a plane not already in the system."</p> <p style="text-align: right;">- Cite RBF re-write of Oregon Lecture #4, p. 131 on 12/13 Sep '71, in SYNERGETICS draft 770.01; Jan. '72.</p>	<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>"Nature needs only triangles to identify arithmetical <u>powering</u> for self-multiplication of numbers. Therefore, 'triangling' is twice as efficient as 'squaring.'"</p> <p style="text-align: right;">- Cite Carbondale Draft Return-to-Modelability, p. V.9</p> <p style="text-align: right;">- Cite NASA Speech, p.75, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>"In the topology of synergetics powering is identifiable only with uni-angular vectorial convergences. The number of superficial vertex convergences of the system are identified with second powering, and not with anything we call 'areas,' that is, not with the surfaces nor with any experimentally nondemonstrable continuums."</p> <p style="text-align: right;">- Cite Nasa Speech, p. 90 as rewritten 12/13 Sep '71, by RBF in SYNERGETICS Draft at Sec. 770.02, Jan '72.</p>	<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>Re Equation $10 P^2 + 2$:</p> <p>"That is a very interesting kind of mathematics for you to think about for certain reasons. To start off, you have second power. This second power is a number characterizing layers or surfaces. What we use for surface is a shell-- in a sense it becomes the 'surface' or a package in the system. I get a bigger package and I can tell what the number is by using the second power. We have been very used to using second power for the surface of a cube or any other thing. We say the linear measure is first power: this is the radius or edge of the cube and the surface is the second power, and the volume is the third power. Second power has been connected uniquely with surface area and it is still the surface or the shell. But what it is showing is very interesting: there is no continuous shell, there are actually only points. They are little spheres. You can have this very high frequency and we would be counting the points in the shell, and not the surface as a whole, so we find second power representing points in the system and not surface. . . What we really discover in physics is that there are no such things as solids, and there are no such things as surfaces, because what we simply meant was a solid surface."</p> <p style="text-align: right;"><u>Powering - Sec 774.05</u> - Cite Oregon Lecture #7, p.239, 11 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>"In a radiational (eccentric) or gravitational (concentric) wave system:</p> <p><u>Second powering</u> is identified with the point population of the circumferential arrays of any given radius stated in terms of frequency of modular subdivisions of the circumferential array radially-read system's concentricity layering;</p> <p><u>Third powering</u> is identified with the total point population of all the successive wave layers of the system;</p> <p><u>Fourth powering</u> is identified with the interpointal domain volumes; and</p> <p><u>Fifth and Sixth powerings</u> are identified as products of multiplication by frequency doublings and treblings, etc."</p> <p style="text-align: right;">- Cite SYNERGETICS Draft, Corollaries - May 1971 (44) See Secs. 240.44 and "Modelability, Powering," Secs. 772.3, 773.1, 774.1, and 775.1.</p>	<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>"We have been used to the idea of the second power for plotting the solid surface. In the quantum and wave phenomena, they have been dealing in individual packages that do all of their accounting. They don't have continuous surface at all. Suddenly we find here then a congruence of the phenomena we have been very familiar with, the second power, and we understand it now to mean the shell and you can identify the second power with points or little separate packages and not as a continuous solid surface. You could relate it to little energy actions, little separate stars, and you are coming out all right. This is what you really mean by quantum. Now you have actually conceptually in respect to the quantum."</p> <p style="text-align: right;">- Cite Oregon Lecture #7, pp.239-240, 11 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>"'Powering' . . . in this topology is identifiable only with the vertexes and not with something we call 'area,' that is, not with a surface or an experimentally non-demonstrable continuum."</p> <p style="text-align: right;">(Adapted.)</p> <p style="text-align: right;">(I deleted "second" before "powering.")</p> <p style="text-align: right;">- Cite NASA Speech, p. 90, Jun'66</p> <p style="border: 1px solid black; padding: 2px; margin-top: 10px;">PRINCIPLES 223.54 + POWERING 770.02</p>	<p>RBF DEFINITIONS</p> <p><u>Powering:</u></p> <p>"Science had thought that it was impossible to be conceptual because it had felt that fourth dimensionality which had been showing up time and again as an arithmetical behavior of the physics, could not be accommodated by the XYZ coordinate system and it can be accommodated by synergetics. Why can it be? Because the vector equilibrium has a volume of 20. You can get eight cubes around one point, and so the third power of two, which is eight, has used up all the space, but using the tetrahedra I can get a volume of 20 around one point as I do in the vector equilibrium. Twenty is two to the fourth power plus two to the second power and it makes it quite possible to make models of fourth powering by using tetrahedroning. In fact we find vector equilibrium is unity because its edge module is one, as is the cube the module of one. It is when it is one, when it is unity, that its volume is 20. When its edge module is two, it is two to the third power times 20 which is 160 and the volume is 160 where the edge module is two. It will accommodate very high powering, the sixth powering, and so forth. It makes possible the actual modelling of the multi-powers that have characterized some of the physics and some of the chemistry which have not been modifiable before and had only been treatable mathematically-- and calculatable but</p> <p style="text-align: right;">- Cite Oregon Lecture #6, p.233, 10 Jul'62</p>

Synergetics Dictionary

RBF DEFINITIONS

Powering:

(2)

"not modellable. Now that they are modellable again, we find that modellability goes with using the right coordinate system and therefore conceptuality and modelability has returned and is valid so that we will probably have an entirely new kind of day dawning for man because it is going to mean that it is possible for the scientist really to talk to the kindergarten children and these are very simple increments. We are not having any numbers that are not easy to handle in the very earliest phases, so the coordinating capability of the child is going to be able to accommodate the nuclear physics and that is a very new kind of day."

- Cite Oregon Lecture #6, p.233, 10 Jul'62

RBF DEFINITIONS

Powering: Zero Power:

"Zero power is the fix. It can be just an angle, which is subcyclic. It is a fix. No module."

- Cite RBF to EJA, 3200 Idaho, DC, 14 Oct'72; as rewritten by RBF, 15 Oct'72

RBF DEFINITIONS

Powering:

"Powering, the development of dimensions that require a unique perpendicularity to a plane not already in the system."

- Cite Oregon Lecture #4, p. 131.6 July 1962.

POWERING SEC. 770-01

RBF DEFINITIONS

Powering: Zero Power:

"Zero power is the point. It can be just an angle, which is subcyclic. It is a fix. No module."

- Cite RBF to EJA, 3200 Idaho, DC, 14 Oct'72

RBF DEFINITIONS:

Powering: (Synergetics' Six Dimensional Reference Frames.)

". . . I identify second powering with the point population of any one radiant (eccentric) or gravitational (concentric) wave systems circumferential arrays of any given radius stated in terms of frequency of modular subdivisions of the circumferential arrays radially-read systems' concentricity layering; third powering with the total point population of all the successive wave layers of the system; fourth powering with the interpointal domain volumes; fifth and sixth powering as products of multiplication by frequency doublings and treblings, etc. . . The Doppler effect or wave reception frequency-modulation caused by motions of the observer and the observed are concentric wave system fourth and fifth power accelerations."

- Cite INTRODUCTION TO OMNIDIRECTION HALO, P. 126, [27] 1959

POWERING - SECS - IN 770

RBF DEFINITIONS

Powering: One Dimension:

"We say the linear measure is the first power, that is, the radius of the sphere or the edge of the cube. First powering expresses only one vector, i.e. one-twelfth of relevant system potential."

- Powering, Jan'71 as rewritten by RBF 15 Oct'72

RBF DEFINITIONS

Powering. (Synergetics' Six Dimensional Reference Frames.)

"All local events of universe may be calculatively anticipated by inaugurating calculation with a local vector equilibrium frame and identifying the disturbance initiating point, direction, and energy of introduced action."

"[Synergetics'] six positive and six negative dimensional reference frames are reinitiated and regenerated in respect to specific local developments and interrelationships of universes."

"Arithmetical one dimensionality is identified geometrically with linear, pointal frequency.
 "Arithmetical two dimensionality is identified geometrically with areal pointal frequency.
 "Arithmetical six dimensionality is identified geometrically with vectorial system modular frequency relationship.
 "Arithmetical size dimensionality is identified geometrically with relative frequency modulation."

- Cite COLLIER'S, P. 114, Oct'59

RBF DEFINITIONS

Powering: One Dimension:

"We say the linear measure is the first power, that is, the radius of the sphere or the edge of the cube."

- Cite SYNERGETICS text at Sec. 773.02, Jan'71

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Powering:</u> (Second and Third Powering.)</p> <p>"Second powering = point aggregate quanta = area. "Third powering = volumetric quanta = volume."</p> <p style="text-align: center;">- Cite P. PEARCE, Inventory of Concepts, June 1967</p> <p>POWERING - SEC. 774.01+</p>	<p style="text-align: right;"><u>Powering:</u> <u>Third Powering:</u> (1)</p> <p style="text-align: center;">See Third-power Rate of Variation Model</p>
<p>RBF DEFINITIONS</p> <p><u>Powering:</u> <u>Third Powering:</u></p> <p>"Synergetical third-powering is identified with cumulative total point population of all the successive wave layer embracements of the system."</p> <p style="text-align: center;">- Citation and context at <u>Dimensionality</u> (1), 28 Oct'73</p>	<p style="text-align: right;"><u>Powering:</u> <u>Third Powering:</u> (2)</p> <p style="text-align: center;">See Dimensionality, (1) Gravity: Circumferential Leverage, (4) Nothingness, 16 Nov'72 Perpendicularity, 17 Nov'72 Powering: Sixth Powering, 20 Dec'73 Somethingness, 16 Nov'72 Synergetic Constant, (1)(2)</p>
<p>RBF DEFINITIONS</p> <p><u>Powering:</u> <u>Third Powering:</u></p> <p>"Third power is volume modularly and areally embraced. Third powers express full potentials."</p> <p style="text-align: center;">- Cite <u>Powering: Third Powering</u>, 14 Oct'72 as rewritten by RBF 15 Oct'72</p>	<p>RBF DEFINITIONS</p> <p><u>Powering:</u> (Three and Four Dimensions:)</p> <p style="text-align: center;">". . . The four dimensionality works in convergences and divergences. Parallelism is uniquely characterizing the three dimensional system."</p> <p style="text-align: right;">OREGON LECTURE #7, p. 245 - Cite Carbondale Draft Nature's coordination WI, 30 11 Jul'62</p> <p style="text-align: center;"><u>POWERING - SEC 776.03</u></p>
<p>RBF DEFINITIONS</p> <p><u>Powering:</u> <u>Third Powering:</u></p> <p>"Third power is volume modularly and areally embraced."</p> <p style="text-align: center;">- Cite RBF to EJA, 3200 Idaho, Wash DC, 14 Oct'72</p>	<p style="text-align: right;"><u>Powering:</u> <u>Three & Four Dimensions:</u></p> <p style="text-align: center;">See Hole in the Victrola Disc, 24 Jan'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Powering: Fourth Dimension:</u></p> <p>"While nature oscillates and palpitates asymmetrically in respect to the frame of the omirational vector equilibrium, the plus and minus magnitudes of asymmetry are rational fractions of the omirationality of the equilbrious state, ergo omirationally commensurable and modelable to the <u>fourth power</u> volumetrically, which order of powering embraces all experimentally disclosed physical volumetric behavior.</p> <p>"The volume of the vector equilibrium = $20 F^3$. When frequency = 20, we have $20 \times 20 \times 20 \times 20$; Vol. = 20^4."</p> <p>- Cite same caption, 21 Dec'71 to which RBF added "volumetrically" on 26 Nov'72 - SYNERGETICS Sec. 966.11, 18 Nov'72, modified accordingly</p>	<p>RBF DEFINITIONS</p> <p><u>Powering: Fourth-Powering:</u></p> <p>"Synergetical fourth-powering is identified with the interpointal domain volumes."</p> <p>- Citation and context at <u>Dimensionality (1)</u>, 28 Oct'73</p>
<p>RBF DEFINITIONS</p> <p><u>Powering: Fourth Dimension:</u></p> <p>"It was the failure of the exclusively three-dimensional XYZ coordination that gave rise to the concept that fourth dimensionality is experimentally undemonstrable, ergo its arithmetical manifestation even in physics must be a mysterious, because nonconceivable, state which might be spoken of casually as the "time dimension."</p> <p>- Cite SYNERGETICS draft at Sec. 966.06, 18 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Powering: Fourth Powering:</u></p> <p>"Fourth powering would be always the nuclear propogative as described in convergence and divergence. Fourth power would thus be the energy content: the energy involvement as mass and frequency, vectorially expressed. Radiation vs. gravity are fourth power behaviors. Fourth power expresses behaviors."</p> <p>- Cite <u>Powering: Fourth Powering</u>, 14 Oct'72 as rewritten by RBF 15 Oct'72</p>
<p>RBF DEFINITIONS</p> <p><u>Powering: Fourth Dimension:</u></p> <p>"While nature oscillates and palpitates asymmetrically in respect to the frame of omirational vector equilibrium, the plus and minus magnitudes of asymmetry are rational fractions of the omirationality of the equilbrious state, ergo omirationally commensurable to the <u>fourth power</u>, which order of powering embraces all experimentally disclosed physical behavior. The volume of the vector equilibrium = $20 F^3$. When frequency = 20 we have $20 \times 20 \times 20 \times 20$; Vol. = 20^4."</p> <p>- (For later context see <u>A Priori Four-dimensional Reality</u>, (1) 20 Dec'73.)</p> <p>- Originally derived from RBF statement to EJA at 3200 Idaho, 21 Dec'71. Above text is altered and expanded version incorporated in SYNERGETICS draft at Sec. 966.13, 18 Nov'72</p> <p><u>MODELABILITY</u> SEC. 966.10</p>	<p>RBF DEFINITIONS</p> <p><u>Powering: Fourth Powering:</u></p> <p>"Fourth powering would be always the nuclear propogative as described in convergence and divergence. Fourth power would thus be the energy content: the energy involvement as mass and frequency, vectorially expressed."</p> <p>- Cite RBF to EJA, 3200 Idaho, Wash. DC, 14 Oct'72</p>
<p>RBF DEFINITIONS</p> <p><u>Powering: Fourth Powering:</u></p> <p>"Fourth powering identifies the nuclear propagation rates inherent in the radiation vs. gravity, convergent and divergent interoscillatory wave propagations which pulsate through the omnidirectional serophase of the vector equilibrium. Fourth powering identifies the magnitude of energy involvement as either particulate mass or wave frequency, vectorially expressed."</p> <p>- Cite RBF rewrite of <u>Powering: Fourth Powering</u>, 15 Oct'72 incorporated in SYNERGETICS, 2nd. Ed. at Sec. 966.13, RBF reqrite as of 9 Sep'75</p>	<p><u>Powering: Fourth Powering:</u> (1)</p> <p>See Fourth Dimension</p>

Synergetics Dictionary

RBF DEFINITIONS

Powering: Fifth Dimension:

"Five-dimensionality is realized by the pulsation of the positive-negative VE -- Icosa -- VE -- as 2.5 -- five."

- Cite SYNERGETICS draft at Sec. 527.54, 29 Nov'72

RBF DEFINITIONS

Powering: Fifth & Eighth Powering:

"The vector equilibrium at initial frequency (frequency²) manifests the fifth powering of nature's energy behaviors. Frequency begins at two. The vector equilibrium of frequency² has a ~~tetra~~ prefrequency, inherent tetravolume of $160 (5 \times 2^5 = 160)$ and a quanta-module volume of $120 \times 2^4 = 1 \times 3 \times 5 \times 2^5$ nuclear-centered system as the integrated product of the first four prime numbers; 1, 2, 3, 5. Whereas a cube at the same frequency accommodates only eight cubes around a nonnucleated center."

(Sec. 1006.33) (2nd. Ed.)

-Cite SYNERGETICS, 2nd. Ed., at Sec. 1006.33; 25 Jan'76

Powering: Fourth, Fifth & Sixth Dimensions:

See Fourth Dimension, 21 Dec'71*
 Future of Synergetics, 19 Apr'66*
 Six Motion Freedoms & Degrees of Freedom, (B)
 Synergetics, Dec'61
 Synergetics Constant, (A)

RBF DEFINITIONS

Powering: Fifth & Eighth Powering:

"The vector equilibrium at initial frequency (frequency²) manifests the fifth powering of nature's energy behaviors. Frequency begins at two. The vector equilibrium of frequency² has a tetravolume of 160 modules ($5 \times 2^5 = 160$) and a quanta-module volume of $120 \times 2^4 = 3 \times 5 \times 2^5$. Whereas the cube at the same frequency² accommodates only 8 cubes around a nonnucleated center."

- Cite RBF to EJA + RBF holograph, Wash., DC; 11 Dec'75

RBF DEFINITIONS

Powering: Fourth Dimension and Sixth Dimension:

"... Whereas we can only get eight cubes around a point. . . 90 degreeeness uses up all the space around a point. When I am dealing in 60 degreeeness, when I am using tetrahedron as unity, we can get the whole volume of 20 tetrahedra around one point. The tetrahedron is unity. Then we are getting 20 around a point instead of eight around a point. Eight is the third power of two. When I have a stack of cubes coming together around a point, the edge count is two cubes. Unity is two there. There is just one set of radii from the center of gravity in the system and you can only have a total volume of eight which is the third power of two. If I have a volume of 20 around a point, then two to the fourth power is 16, plus two to the second power. I can then accommodate two to the fourth power plus two to the second power around a point. It is very easy to make models of the fourth dimensionalities. We discover that when we do that-- this is what we call the vector equilibrium-- the edge count is ~~two~~ one. When the edge count is one we have a vector equilibrium, not two as in the cubes. The volume is 20. You start with unity as 20. . . And we find that we are able to accommodate sixth powering."

- Cite Oregon Lecture #4, pp. 137-138, 6 Jul'62

RBF DEFINITIONS

Powering: Sixth Dimension:

"Sixth-powering is all the perpendiculars to the 12 faces of the rhombic dodecahedron."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 621.05, 9 Nov'73

RBF DEFINITIONS

Powering: Fifth- and Sixth-Powerings:

"Synergetical fifth- and sixth-powerings are identified as products of multiplication by frequency doublings and treblings, and are geometrically identifiable."

- Citation and context at Dimensionality (1)(2), 28 Oct'73

RBF DEFINITIONS

Powering: Sixth Dimension:

"Synergetical six-dimensionality is identified geometrically with vectorial system modular frequency relationship."

- Citation and context at Dimensionality (2), 28 Oct'73

Synergetics Dictionary

RBF DEFINITIONS

Powering: Sixth Dimension:

"Linear, as manifest in the tetrahedron, the simplest structural system of Universe, is six dimensional, providing for the six degrees of universal freedom and the operational six-wave (sexave) phenomenon of number."

- Cite SYNERGETICS draft at Sec. 527.41, 29 Nov'72

RBF DEFINITIONS

Powering: Sixth Powering:

"Sixth powering is all the perpendiculars to the rhombic dodecahedron which is all the internal truncations of the tetrahedron."

- Cite RBF to EJA, Bear Island, 25 August 1971.

TETRAHEDRON - SEC 621.05

RBF DEFINITIONS

Powering: Six Dimensions:

"Synergetics posits six positive and six negative dimensional reference frames corresponding to the 12 universal degrees of freedom unique to each point in Universe. The six dimensional reference frames are reinitiated and regenerated in respect to specific local developments and interrelationships of Universe."

(N.B. On 30 Oct'72 RBF wrote in margin of this passage at Sec. 972.01 Synergetics draft:
"Sonny: drop out this paragraph. The six edges of the tetrahedron lie in three planes.")

- Cite COLLIER Ltr, p. 113, Oct'59
- Incorporated in SYNERGETICS draft at Sec. ~~770.06~~, Aug'71 later re-edited as Sec. 972.01, Jan'72.

Powering: Sixth Powering: Sixth Dimension:

See Chess: A Priori Intellect Invents a Game Called "Life", (2)
Vector Equilibrium, 21 Dec'71; 19 Nov'74

RBF DEFINITIONS

Powering: Sixth Powering:

"Since the original point was a tetrahedron and already, a priori volumetric, the third powering is in fact sixth powering: $N^3 \times N^3 = N^6$."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 965.01, 20 Dec'73

RBF DEFINITIONS

Powering: Seventh Powering: Seventh Dimension:

"Like the octahedron, the vector equilibrium also has eight triangular facets; while also explosively extroverting the octahedron's three square central planes, in two ways, to each of its six square external facets, thus providing seven unique planes, i.e., seven-dimensionality."

- Cite SYNERGETICS text at Sec. 1011.23; rewrite of 26 Dec'73

RBF DEFINITIONS

Powering: Sixth Powering:

"While nature oscillates and palpitates asymmetrically in respect to the frame of the omnirational vector equilibrium, the plus and minus magnitudes of asymmetry are rational fractions of the omnirationality of the equilibrium state, ergo omnirationally commensurable and modelable to the sixth power vectorially, which order of powering embraces all experimentally disclosed physical vectorial behavior."

- Cite Vector Equilibrium, 21 Dec'71
- Cite same caption, 21 Dec'71 to which RBF added "vectorially" on 26 Nov'72

MODELABILITY
766-16

Powering: Powers: (1)

See Dimensional Growth
Dimensional Supremacy
Equatability of Volumes & Powers
Fourth Dimension
Limit of Powering
Sixty-degree Modulatability
Triangling
Volumes = Powers
Scheherazade Numbers: Declining Powers Of
Multirepowerings
Point Growth Rate

Synergetics Dictionary

Powerings: Powers:

(2)

See Convergence, 16 Nov'72*
Perpendicularity, 17 Nov'72
Pythagoras, 18 Jun'71
Time-size, 20 Dec'73

Pragmatism:

(1)

See Operational
Specializations of Residual Physical Reality

Power Structure: Symbols Of:

See Child Sequence, (3)
Interrelatedness vs. Names, (1)

Pragmatism:

(2)

See Intuition, 1971

Power Transmission:

(1)

See High Voltage Power Transmission
World Power Grid

Practical: Practice:

See Earth: Let's Get Down to Earth
Reduction to Practice

Power Transmission:

(2)

See Communications Theory, Oct'66
Invention Sequence, (2)

Prayer: Praying:

See Christ, 7 Oct'71

Synergetics Dictionary

RBF DEFINITIONS

Precession:

"It could be that in always-and-only-coexisting action-reaction

180°-ness begets 90°-ness	}	ergo (active)
and		
90°-ness begets 180°-ness	}	ergo (potential)"
and		
60°-ness is neutral)	

- Cite RBF holograph, New Belhi, 8 Dec'72

PRECESSION - SEC. 533.11

RBF DEFINITION:

Precession:

"Precession is the behavioral interrelationship
Of remote and differently velocityed,--
Differently directioned,
And independently moving bodies
Upon one another's
Separate motions
and motion inter^lpatternings."

- Cite INTUITION ~~Draft Dec 20, p. 7a~~
p.30, May '72

RBF DEFINITIONS

Precession:

"Precession is synergetic to mass attraction."

- Citation and context at Hierarchies, 16 Jun'72

RBF DEFINITION:

Precession:

"Mass attraction is to precession
As a single note is to music.
Precession is angularly accelerating
Regeneratively progressive
Mass attraction."

- Cite INTUITION ~~Draft Dec 20, p. 7a~~
p.30, May '72

RBF DEFINITIONS

Precession:

(A) ■

"Precession is a second-degree synergy
Because it is not predicted by mass attraction
Considered only by itself.
Mass attraction
Is experienced intimately by Earthians
As gravity's pulling
Inward toward Earth's center
Any and all objects
Within critical proximity
To Earth's surface,
And moving through space
At approximately the same speed
And in the same direction
As those of planet Earth.

"Not until we learn by observation
That the mass attraction
Of any two, noncritically proximate
Bodies in motion
Imposes a motional direction
At ninety degrees
To their interattraction axis,"

- Cite INTUITION, p.31 May '72

RBF DEFINITIONS

Precession:

"Precession is the effect of any moving system upon any other moving system and the closer the proximity the more powerful the effect. Mass attraction is inherent in precession. Mass attraction is to precession as a single note is to music. We do not pay much attention to precession because we think only of our own integral motions instead of the Universe, though we are processing the Universe every time we take a step."

- Cite SYNERGETICS draft at Sec. 533.02, Nov'71

RBF DEFINITIONS

Precession:

(B) ■

"Do we learn of this second surprise behavior
Of two or more bodies,
They no longer 'fall-in,'
One to the other.

"Thus is the Moon
Precessed into elliptical orbit about the Earth
As the Earth and Moon, together,
Are precessed into elliptical orbit around the Sun,
Yielding only in a ninety-degree direction
To the Sun's massive pull--
Being beyond
The critical proximity distances
For falling into one another."

- Cite INTUITION, pp.31-32 May '72

RBF DEFINITIONS

Precession:

"And the transition from being an entity to being a plurality of entities is precession, which is a peeling off into orbit rather than falling back in to the original entity. This explains entropy intimately."

- Citation & context at Entropy, 28 Feb'71

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Critical proximity occurs where there is a 90° angular transition from falling back in at 180° which is precession."</p> <p style="text-align: center;">- Cite RBF to add Beverly Hotel, New York 28 Feb 1971</p> <p>- Citation at <u>Critical Proximity</u>, 28 Feb '71</p>	<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"The effects of one moving system upon another moving system.</p> <p>Precession is describable in vectorial terms: i.e., of physically-realized, design, expressed differentially as relative angle, velocity and mass (size) modification's in respect to an axis.</p> <p>The precessional result of all events are always three-fold, embracing (1) action, (2) reaction, and (3) resultant. None of these interprecessional event components occur at 180° to any other components. A system must have a minimum of four vertexes in order to have an anti-directional insiderness and outsiderness and six is the minimum number of vectorial edges uniquely connecting the four vertexes of the minimum system. The six vectorial edges are comprised of two energy event's inherent three-vector compositionation of action, reaction, and resultant."</p> <p style="text-align: right;">- Cite "Word Meanings," EXISTICS, Vol. 28, No 167 Oct '69</p> <p style="text-align: center;"><u>1st SENTENCE - PRECESSION - SEC. 533.02 + 533.06</u></p>
<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Precession is the behavioral interrelationship of remote and differently velocitized, Differently directed, And independently moving bodies Upon one another's Separate motions And motion inter-patterings.</p> <p>Mass attraction is to <u>precession</u> As a single note is to music. <u>Precession</u> is angularly accelerating, Regeneratively progressive Mass attraction.</p> <p>The elliptic orbiting Of the sun's planets As well as the solar system's motion Relative to the other star groups Of the galactic nebula Are all and only accounted for By <u>precession</u>."</p> <p>PRECESSION - SEC. 533.11 + 533.5 - Cite INTUITION, Draft Feb '71, p. 19</p>	<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Precession is the effect of one moving system upon another.</p> <p>"Precession always produces Angular changes of the movements Of the affected bodies And at angles other than 180 degrees, That is, the results are never Continuance in a straight line. Ergo all bodies of Universe Are affecting the other bodies In varying degrees, And all the intergravitational effects Are precessional angular modulations And all the interradiation effects Are frequency modulations."</p> <p style="text-align: right;">- Cite HOW LITTLE I KNOW, p.73, Oct'66</p> <p style="text-align: center;"><u>PRECESSION - SEC. 533.03 + 533.07</u></p>
<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Because precession imposes angles other than 180° upon all interactions of all moving systems of the Universe there are no straight lines demonstrated in Nature. The fundamental wave behavior of all nature is a consequence of the omnireffective precession."</p> <p style="text-align: right;">- Citation & context at <u>Social Science: Analogue to Physical Science</u>, (1), 13 Nov'69</p>	<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Reactions and resultants are always precessional."</p> <p style="text-align: right;">- Citation & context at <u>Action-reaction-resultant</u>, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Precession is the effect of any body in motion upon any other body in motion and the closer the proximity the more powerful the effect, and since all known bodies of macro-micro Universe are always in motion all the inter-effects of all bodies are always precessional and those effects always result in the production of an angular change of course in the affected bodies-- thus, for instance, does the Sun's pull on the Earth induce its orbiting in a course around the Sun at 90 degrees to the gravitational pull; that is, the effect on the other body is always produced as an angular re-direction other than a 180 degrees direction towards or away from one another. . . .</p> <p>"Mass attraction is also involved in precession, which is another of the important, but popularly unknown, generalized principles. Precession allows a spinning top to lean over sideways without tipping further. Precession makes the gyro-compass hold its true north orientation without magnets and despite the ship's changes in course."</p> <p style="text-align: right;">Cite NEHRU SPEECH, P. 35, 13 Nov'69</p> <p style="text-align: center;"><u>1st SENTENCE - PRECESSION - SEC. 533.02</u></p>	<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Parallel and antiparallel <u>are</u> precession."</p> <p style="text-align: right;">- Cite RBF marginalis date! 5 Sept. 1965 in "The Scientific Endeavor," (1963) - page 12</p>

Synergetics Dictionary

RBF DEFINITIONS

Precession:

"... We don't pay much attention to precession because we think only of our own integral motions instead of the universe, though we are processing the universe every time we take a step. Precessional effects are always angular and always something other than 180 degrees; they are very likely to be 90 or 60 degrees. . . Precessions are regenerative."

- Cite LEDGEMONT, pp. 46, 47, 15 Oct '64

PRECESSION - SEC. 535.02

RBF DEFINITIONS

Precession:

"There are five motions we are all familiar with: spin, orbit, turn inside out, expand and torque.
"There is a sixth motion which very few people are familiar with called precession."

~~- Cite OREGON Lecture #4 - p. 143, 6 Jul '62~~

- Citation and context at Motion: Six Positive and Negative Motions, 6 Jul '62

RBF DEFINITIONS

Precession:

The energy event action itself "is inherently precessional because it is against gravity. It is a linear acceleration and an angular acceleration simultaneously as functions with a prominent resultant and a prominent reaction. Because we have now learned that these are going to be at angles of other than 180° and this three-fold affair is obviously not going to occur in a plane. Therefore, we are not surprised to find our event. . . make the tetrahedron."

- Citation & context at Energy Event, 9 Jul '62
- ~~Cite Oregon Lecture #5, p. 175, 9 Jul '62~~

RBF DEFINITIONS

Precession:

"When the stone drops in the water it impinges on the atoms and everything is in motion, and immediately there is a resultant at 90°. The resultant is the wave and the 90 degreeeness begets another 90 degreeeness and this 90 degreeeness begets another 90 degreeeness and so on until you have a series of 90 degreeenesses. . .
"Precession is regenerative and that is why you have the wave. It is very simple to see why there is a wave. Pure precession."

~~- Cite Oregon Lecture #4, p. 152, 6 Jul '62~~

- Citation and context at Wave Pattern of a Stone Dropped in Liquid, 6 Jul '62

PRECESSION SEC 533.04

RBF DEFINITIONS

Precession:

"The effects of all components of universe in motion upon any other component in motion is precession and inasmuch as all the component patterns of universe seem to be motion patterns, in whatever degree they do affect one another, they are interaffecting one another precessionally and they are bringing about angular resultants other than the 180 degreeenesses."

- Cite OREGON Lecture #5 - p. 164, 9 Jul '62

PRECESSION - SEC 533.01

RBF DEFINITIONS

Precession:

(1)

"Precession plays the major role in my re-statement of the first law of motions, which says, 'The entire regenerative hierarchy of major, intermediate, and minor constellations of component-patterns-within-component-patterns of Universe are continual processes of synchronous, yet independent and unique, transformative patternings. That is, all components of Universe are in continually accommodative, associative-disassociative motion reciprocity, and all the moving components of Universe continuously affect all the other moving components-- in varying degrees, ranging between high and low tide reciprocities of critically intense to critically negligible. All of these intereffects of all the motional components upon one another are precessional, and precession always produces transformative resultants in vectorial patterns which always articulate angular accelerations in directions other than the 'straight' lines of directions between the inter-effective components.'

"This is to say that the effects of all local motion systems in the Universe are always precessional, and that none of the resultants of any forces operative between them are

- Cite "Tensegrity," PORTFOLIO AND ART NEWS, p.119, Dec '61

RBF DEFINITIONS

Precession:

"There are no straight lines. Nobody has ever thrown a straight ball. Everything is always moving in the direction of least resistance. That is one thing about the relation of all the forces. A body in motion affecting another body in motion . . . the effect is always precession. When the top is in motion and you in motion touch it, then the result is precession. Now inasmuch as the whole Universe is in motion, all the parts affecting each other are always precessing each other. Precession is the most predominant. You might say the first law of motion is precession. You could say that the first law of motion, if it had been properly written, was that all the Universe is continually in motion and all the other affecting it in various degrees: the effect is always precession."

- Cite Oregon Lecture #4, p. 151, 6 Jul '62

RBF DEFINITIONS

Precession:

(2)

"ever straight line patterns. Individual lines of vectorial trajectory interactions never go through the same points. They diverge periodically to innocuity of inter-effectiveness, or they periodically converge to critical proximities. Their local interferences, through critical proximity, produce reflections, refractions, and regenerative-shunting patterns."

- Cite "Tensegrity," PORTFOLIO ART NEWS, p. 119, Dec. '61

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Universe is the minimum as well as the maximum closed system of omni-interacting, <u>precessionally</u> transforming, complementary transactions of synergetic regeneration. . . ."</p> <p style="text-align: right;">- Cite <u>UNIDIRECTIONAL HALO</u>, p.135. 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Precession & Degree of Freedom:</u> (2)</p> <p>"The 56 axes of cosmic symmetry (see Sec. 1042.05) interprocess successively to regenerate the centripetal-centrifugal inwardness, outwardness, and aroundnesses of other inwardnesses, outwardnesses, and aroundnesses as the omnipulative cycling and omniinter-resonated eternally regenerative Universe, always accommodated by the six positive and six negative alternately and maximally equieconomical degrees of freedom characterizing each and every event cycle of each and every unique frequency-quantum magnitude of the electromagnetic spectrum range."</p> <p style="text-align: right;">- Cite <u>SYNERGETICS</u>, 2nd. Ed. at Sec. 533.22, 19 Nov'74</p>
<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"...The effect of all the local systems of events upon any and all other systems of local events is <u>precessional</u>."</p> <p style="text-align: right;">- Citation and context at <u>Newton's First Law of Motion: RBF Restatement Of</u>, 4 May'57</p>	<p><u>Precessional Intertransformability:</u></p> <p style="text-align: right;">See <u>Acceleration: Angular & Linear</u>, 11 Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Precession:</u></p> <p>"Synergetic geometry precession explains radial-circumferential acceleration transformations."</p> <p style="text-align: right;">- Citation and context at <u>Gravitational System Zone</u>, 14 Jan'55</p>	<p><u>Precessional Peel-off:</u></p> <p style="text-align: right;">See <u>Doing what Needs to be Done</u>, 26 Jan'75</p>
<p>RBF DEFINITIONS</p> <p><u>Precession & Degree of Freedom:</u> (1)</p> <p>"Despite the angularly modified resultant complexities of omnidirectionally operative precessional forces upon ever varyingly interpositioned cosmic bodies, Universe may be manifesting to us that there is always and only operative an omnintegrated cosmic coordination of cosmic independents' actions and reactions wherein, with radial broadcasting of energy there is an exponentially increasing diffusion as well as disturbance-diminishing resultant energy effectiveness producing widely varying angular aberrations of the precession, wherein nonetheless there is always an initial individual-to-individual operative attractiveness whereby</p> <p style="text-align: center;">180-degreeeness begets 90-degreeeness and 90-degreeeness begets 180-degreeeness</p> <p>all of whose angularly aberrated complexity of resultant directional effects always pulsate in respect to a neutral or static 60-degreeeness which (only staticly) imposes an everywhere-else 60-degreeeness of resultants which in turn induces the coexistence of the isotropic vector matrix."</p> <p style="text-align: right;">- Cite <u>SYNERGETICS</u>, 2nd. Ed. at Sec.533.21, 19 Nov'74</p>	<p>TEXT CITATIONS</p> <p><u>Precession of Side Effects & Primary Effects:</u></p> <p style="text-align: right;"><u>Synergetics</u>, 2nd. Ed. draft Sec. 325.10ff</p>

Synergetics Dictionary

Precession of Side Effects & Primary Effects:

See Good & Badding Kind of Idea

Precession: Analogy of Precession & Social Behavior:

See Social Sciences: Analogy to Physical Sciences, (1)

Precession of Octa Edge-vector:

See Octahedron as Photosynthesis Model, 11 Dec'75

RBF DEFINITIONS

Precession of Two Sets of 10 Closest-packed Spheres: (1)

"I'm sure a number of you have been with me at previous lectures and you may have seen these / two sets of 10 closest-packed spheres--see sec. 260, 50 /, but the majority of you, I am sure, still have not been with me all this time. I know that four years ago I was asked to speak at a congress of mathematics teachers in Oregon and there were 2000 mathematicians there and I asked them if any of them were familiar with these objects. And they said 'No.' And I said would any of them be willing to come up on the stage with me and put them together in a way that we would all agree is the way. There is a the way.

"So one of them came up and he looked them over, and he saw these two quadrangles and he tried matching those... then he saw two triangles and he tried matching those... then he saw these--what we call trapezoids--and he tried matching those. So then he tried to put them together like that, and that didn't seem to be too impressive either. Then he tried what we might call like a raft and that wasn't too good either. So he started all over again and I saw he wasn't getting anywhere, so I said I'm going to have to show you how to do it."

- Cite RBF talk at Am. Museum of Natural History, NYC, EJA transcript, pp.8-9; 1 May'77

RBF DEFINITIONS

Precessionally Shunted Pattern Relay:

"Resistance... in synergetics is called the precessionally shunted pattern relay."

- Citation and context at Tunability, 1960

RBF DEFINITIONS

Precession of Two Sets of 10 Closest-packed Spheres: (2)

"One reason that this is not self-evident is that because, in all the great motions employed by Universe, there are six fundamental kinds of motion and five of them very familiar: spinning, orbiting, turning inside-out, expanding, and turning... These are very well-known fundamental behaviors of nature. But there's a sixth one called precession. And you say: I don't remember... I've heard of it. I've heard of the word precession, but that's about the most people can do....

"Precession is one of the most important things to understand--and its the mistaken 180-degree-ness that finds humanity missing a lot. At any rate, I'm going to precess these (two sets of 10 closest-packed spheres) now at 90 degrees. OK? And I'm going to now put them together and obviously they are now not going to fit! (Applause.) And the reason you didn't see that--and the thing about it is--that you all went to school being taught the XYZ coordinates of parallels and perpendiculars... And you try to bring in together perpendicularly. But Universe is not operating that way. Universe is operating in radiational-divergence and gravitational-convergence. Divergent and convergent: that's the way Universe operates. This is nothing like the XYZ coordinates"

- Cite RBF talk at Am. Museum of Natural History, NYC, EJA transcript, pp. 9-10, 1 May'77

RBF DEFINITIONS

Precession: Analogy of Precession and Social Behavior:

"Mass attraction and precession
Provide the first scientific means
Of elucidating social behavior.
When humans affect one another
Metaphysically,
The least thoughtful
Goes into local system orbit
Around the most thoughtful,
When humans tense one another
Physically,
The least strong
Falls into the other,
'Falls' in love.
When they repel one another physically
The least strong is rocketed
Into remote system orbit."

- Cite INTUITION, pp.33-34, May '72

RBF DEFINITIONS

Precession of Two Sets of 10 Closest-packed Spheres: (3)

"and all that--they have nothing to do with the way the Universe works. Things in parallel never get resolved. Convergent things get beautifully resolved, they get exactly... they get nature into a corner... that's why you couldn't have a nucleus in a perpendicular-parallel system. You can only have nuclei when you have convergence. And that's why I say how far out our schooling really is."

- Cite RBF talk at Am. Museum of Natural History, NYC, EJA transcript, pp.9-10; 1 May'77

Synergetics Dictionary

<p>TEXT CITATIONS</p> <p><u>Precession of Two Sets of 10 Closest-Packed Spheres:</u> Synergetics : Sec. 260.50 (2nd. Ed.) 527.08</p>	<p><u>Precession of Tetra Edges:</u></p> <p style="text-align: center;">See Interconnection of Any Two Lines in Universe</p>
<p>TEXT CITATIONS</p> <p><u>Precession of Two Sets of 60 Closest-packed Spheres:</u> 417: 417.01-417.04 (Fig. 417.01) 527.08</p>	<p>RBF DEFINITIONS</p> <p><u>Precessional Thinking:</u> The "central and surface angle understandings are fundamental to <u>precessional thinking</u> which deals locally with the falling-inward critical proximities outwardly of which gravity suddenly induces precession at 90 degrees to the earlier falling-inward proclivity." - Cite Synergetics draft, Sec. 860., August 1971.</p>
<p><u>Precession - Tension:</u></p> <p style="text-align: center;">See Interaffecting, 9 Jul'62</p>	<p><u>Precessed Triangle:</u></p> <p style="text-align: center;">See Yin-yang, 28 Jan'75</p>
<p>RBF DEFINITIONS</p> <p><u>Precession of Tetra Edges:</u> "There are six edges of a tetrahedron, and each edge precesses the opposite edge toward a 90-degree-maximum of attitudinal difference of orientation. Any two discrete, opposite edges can be represented by two aluminum tubes, X and Y, which can move longitudinally anywhere along their respective axes while the volume of the irregular tetrahedra remains constant. They may shuttle along on these lines and produce all kinds of asymmetrical tetrahedra, whose volumes will always remain unit by virtue of their developed tetrahedra's constant base areas and identical altitudes. The two tubes' four ends produce the other four interconnecting edges of the tetrahedron, which vary as required without altering the constantly uniform volume." - Cite SYNERGETICS text at Sec. 923.10, Apr'72</p>	<p><u>Precession:</u> (1A)</p> <ul style="list-style-type: none"> Angular Precession See Chemical Bonds Energetic Functions Intereffects Interprecess Knight's Move in Chess Motion: Six Positive & Negative Motions Mass Attraction Omnimotions Orbiting Omniprecessional Petal: Tetrahedron as Three-petaled Flower Bud Polarized Precession Poisson Effect Shunting: Relative Motion Patterns Critical Proximity Primary vs. Side Effects Sideways Synergy vs. Precession Reprecession

Synergetics Dictionary

<p><u>Precession:</u> (1B)</p> <p>See Precession = Tension Metaphysical Precession Complementary Precess Reciprocal Self-processors Regenerative Intersupport Modulation vs. Precession Gyrocompass; Gyroscopes Regenerative Precession Quantum Model Wave Pattern of a Stone Dropped in Water</p>	<p><u>Precession:</u> (3)</p> <p>See Precession & Degrees of Freedom Precessional Intertransformability Precessional Peel-off Precession of Side Effects & Primary Effects Precessionally Shunted Pattern Relay Precession: Analogy of Precession & Social Behavior Precession = Tension Precession of Tetra Edges Precessional Thinking Precessed Triangle Precession of Two Sets of 10 Closest-Packed Spheres Precession of Two Sets of 60 Closest-Packed Spheres Precession of Octa Edge-vector</p>
<p><u>Precession:</u> (2A)</p> <p>Breakwater, 15 Jun'74 See Bonding Hierarchies, 19 Dec'73 Chemical Bonds, May'72 Compression, 19 Jun'71 Design Covariables: Principle Of, 1959 Energy Event, 9 Jul'62* Entropy, 28 Feb'71* Gravitational Zone System, 14 Jan'55* Hierarchies, 16 Jun'72* Mass Attraction, 6 Mar'73 Multiorbital, 1960 Newton's First Law of Motion: RBF Restatement Of, 4 May'57* Pull, 25 Sep'73 Radiation-Gravitation, Oct'66; (2)(3)* Rectilinear Frame, 24 Sep'73* Side Effects, 9 Dec'73 Supersynergetically, May'72 Synergetics, p33, undated Step, Nov'71 Eccentricity, 7 Feb'71</p>	<p><u>Prediction: Socio-economic vs. Engineering:</u></p> <p>See Structural Sequence, (C)</p>
<p><u>Precession:</u> (2B)</p> <p>See Tetrahedral Dynamics (1)(2) Tetrahedron, 10 Dec'73; 1 Feb'75 Twelve-inch Steel World Globe (B) Transformations, 10 Oct'50 Vector Equilibrium: Spheres & Spaces (1) Wave, 13 Nov'69 Wave Pattern of a Stone Dropped in Liquid, 6 Jul'62* Action-reaction-resultant, Jun'66*; May'71 Tidal, 15 Oct'64 Truth & Love, 16 Feb'73 Polarization, 10 Nov'74 Scratched Surface, 27 Jan'75 Prism, 31 May'71 Gravity, 6 Apr'75 Inward Explosion, 8 Apr'75 In, Out & Around Experiences, (1)(2) Invisible Quantum as Tetrahelix Gap Closer, 23 May'75 Octahedron as Conservation & Annihilation Model, 23 Jun'75 Yin/yang, (2)</p>	<p><u>Predictability: Prediction:</u> (1)</p> <p>See Prognostication Synergetic Advantage: Principle Of Synergetic Hierarchies Synergy: Degrees Of Synergy of Synergies Unpredictable: Unpredicted Viral Steerability Semantic Unpredicted: Sequence of Unpredicted Events Planets: Prediction of Unknown Planets Forecasting Capability</p>
<p><u>Precession:</u> (2C)</p> <p>See Geometrical Function of Mine, (1) Octahedron as Photosynthesis Model, (B)(C) Social Sciences: Analogy to Physical Sciences, (1)* Six Motion Freedoms & Degrees of Freedom, (5)(6)</p>	<p><u>Predictability: Prediction:</u> (2)</p> <p>See Ignorance (2) Jet Engine (1) Science, p.7, 1947 Synergetic Accounting Advantages: Hierarchy Of (3) Hierarchy of Patterns, 1954 Nature Permits It Sequence (3) Synergetic Integral, 1960 Education, 1 Jul'62 Verticial Topology, Aug'71 Modelability, (b) Modulations, 17 Jun'75 Structural Sequence, (C)</p>

Synergetics Dictionary

<p><u>Pre-experienceable:</u></p> <p style="text-align: center;">See Primitive Regeneration, 27 Dec'74</p>	<p>RBF DEFINITIONS</p> <p><u>Prefix:</u></p> <p style="text-align: center;">See Deprefixing</p>
<p><u>Prefabricated Credos:</u></p> <p style="text-align: center;">See Fuller, R.B: Crisis of 1927, 14 Apr'70 Robin Hood Sequence (1)</p>	<p><u>Prefrequency:</u> (1)</p> <p style="text-align: center;">See Presize Subfrequency Prime</p>
<p><u>Prefabrication:</u></p> <p style="text-align: center;">See Prestressed Concrete Sequence, (2)</p>	<p><u>Prefrequency:</u> (2)</p> <p style="text-align: center;">See Conceptuality Independent of Size & Time, 2 Jun'74 Prime, 20 Dec'74 Primitive Regeneration, 27 Dec'74 Fourth Dimension, 19 Feb'76 Powering: Fifth & Eighth Powering, 11 Dec'75; 25 Jan'76 Generalization & Special Case, 23 Jan'77 Six Motion Freedoms & Degrees of Freedom, (B)</p>
<p><u>RBF DEFINITIONS</u></p> <p><u>Preferred Directions of Least Resistance:</u></p> <p style="text-align: center;">See Fuller, R.B: What I Am Trying To Do, 8 Jan'66</p>	<p><u>Pregnant Mother: Communication with Child She is Bearing:</u></p> <p style="text-align: center;">See Tactile Sense, 6 Jun'69 Tactile Sequence, (1)</p>

Synergetics Dictionary

Pregnancy: Pregnant:

See ■ Unique Frequencies, 18 Aug'70

Pre-Scenario:

See Dynamic vs. Static, 12 Nov'75

RBF DEFINITIONS

Prehending:

"Prehending is pure tension; it's like gravity."

Pre-science:

See Poets, 1970

- Cite RBF to EJA, 3200 Idaho, Wash, DC, 19 Dec'74

Prehending:

See Intuition, 26 Dec'74

Present Otherness:

See No-time-and-away-ago, 28 May'75
Tetratuning, 30 May'75
Environment, (A)

Prehierarchical:

See Prime, 20 Dec'74

Present:

(1)

See Omnipresent
Now

Synergetics Dictionary

<p><u>Present:</u> (2)</p> <p style="padding-left: 40px;">See Minimum of Four Tetrahedra, 22 Feb'77</p>	<p>RBF DEFINITIONS</p> <p><u>Pressive;</u> [REDACTED]</p> <p style="text-align: right;">See Compression, 1 Apr'49</p>
<p><u>President of the U.S.:</u></p> <p style="padding-left: 40px;">See Error: Pullout from Error, 17 Jul'73 The One: Watergate, 13 May'73 United States: Most Difficult Sovereignty to Break Up, (2)</p>	<p>RBF DEFINITIONS</p> <p><u>Pressure:</u></p> <p style="padding-left: 40px;">"Velocity gives [REDACTED] us what we call <u>pressure</u> or heat; it can be read either way."</p> <p style="text-align: right; padding-right: 40px;">- Cite ORGON Lecture #5, p. 187, 9 Jul'62</p> <p style="text-align: right; padding-right: 40px;">- Citation at <u>Velocity</u>, 9 Jul'62</p>
<p><u>Presize:</u> (1)</p> <p style="padding-left: 40px;">See Conceptuality Independent of Size Prefrequency Subsize Sizeless</p>	<p><u>Pressure = Heat:</u></p> <p style="padding-left: 40px;">See Balloon (C)</p> <p style="padding-left: 40px;">Sec. 763.02</p>
<p><u>Pre-special Case:</u></p> <p style="padding-left: 40px;">See Primitive Regeneration, 27 Dec'74</p>	<p><u>Pressure:</u> (1)</p> <p style="padding-left: 40px;">See Interattraction of Pressure Compression</p>

Synergetics Dictionary

<p><u>Pressure:</u> (2)</p> <p>See Gravity: Circumferential Leverage, (3)</p>	<p>RBF DEFINITIONS</p> <p><u>Prestressed Concrete Sequence:</u> (3)</p> <p>"This principle of tensional blueprints-- prestressed concrete is an example-- is manifesting itself as the direction which building will take. In order to make the resources of the Earth adequate to the needs of all people, we must increase the performance per pound of those resources in a very big way, thus giving man environmental controls. This must be done to accommodate all the new shifting patterns of man around the face of the Earth. We will have to employ nature's much more economical grand logistical strategies. Emulating nature, man must distribute mathematical information as basic pattern, which does not weigh anything at all. The highly technical components of very fine high-tension steels and aluminums and fine alloys can then be centrally processed and distributed. Those will be used primarily for tensional functions, and will be rigidified by the local compressional pneumatics and hydraulics.... This is the most comprehensive statement that I could make regarding the most recent discovery of nature's forever permitted structural strategies."</p> <p>- Cite CONCEPTUALITY OF FUNDAMENTAL STRUCTURES, Ed. Kepes., 1965. P. 88.</p>
<p><u>Press:</u></p> <p>See Stretch-press</p>	<p><u>Prestressed Concrete:</u></p> <p>See Colloidal Chemistry Hydraulics</p>
<p>RBF DEFINITIONS</p> <p><u>Prestressed Concrete Sequence:</u> (1)</p> <p>"I began to initiate such a 'regenerative tree' [See Trees] strategy in experimental undertakings in structures about a third of a century ago. I gave myself the task of exploring the practicality of assembling the components of buildings under the most preferred conditions of technology and science, in order to achieve a very high degree of efficiency. This collection of components had to be capable of economical air transport to any part of the Earth. I saw that the essentials were local hydraulics and pneumatics and generalized tensional packages-- broadly speaking. Familiar examples of this are all kinds of pneumatic structures, from inflatable toy sea horses and life rafts to dirigibles. Beyond these, there are very complex structures. For examples, I have made geodesic domes-- omnitriangulated spheres-- with pneumatic components. Geodesic tensegrity spheres are highly magnified, pneumatic principle structures."</p> <p>- Cite CONCEPTUALITY OF FUNDAMENTAL STRUCTURES, Ed. Kepes, 1965, p. 86.</p>	<p><u>Pretence Bio-organism:</u></p> <p>See Corporation, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Prestressed Concrete Sequence:</u> (2)</p> <p>"The hydraulics possibilities include the local cements, water, air, gravel, sand, and rocks. The economic theory behind prestressed concrete is based on prefabrication and shipping only the small bulk of steel as a tensional sinew system, and applying the local water, sand, gravel, and cement as the building bulk. The particles which make up cement are sifted sand and gravel, which, though they look rough, pack averagedly as spheres would pack-- in 60-degree angular packing. Few people think of cement that way, but if it is shaken down, agitated well, and lubricated together with a colloid, it will automatically avail itself of nature's tetrahedral structuring in closest packing pattern."</p> <p>- Cite CONCEPTUALITY OF FUNDAMENTAL STRUCTURES, Ed. Kepes, 1965, p. 86.</p>	<p>RBF DEFINITIONS</p> <p><u>Pretending:</u></p> <p>"There's nothing wrong with pretending; in fact we have to pretend. Pretending is just the same thing as our imagination. We have to formulate something like 'going down town' before we can actually go down town. Even Christopher Robin with Alice. It's really not a matter of pretence but more of a trial balance. It's not a pretence: you might just not have had time to do it yet."</p> <p>"You write the play; Then you act the play. You have to write it first. It's like the lag between the navigating and the conception. You can't just go... except off the deep end, and even a child knows better than that!"</p> <p>(N.B: Above comments in response to EJA showing RBF a quote from Wittgenstein (Philosophic Investigations: II, xi - 229a: "A child has much to learn before it can pretend.")</p> <p>● - Cite RBF to EJA, 3200 Idaho, Wash., DC, 8 Apr'75</p>

Synergetics Dictionary

<p><u>Pretending = Image-ination:</u></p> <p style="text-align: center;">See Pretending, 8 Apr'75</p>	<p><u>Previous Otherness:</u></p> <p style="text-align: center;">See Awareness, 24 Apr'72</p>
<p><u>Pretime:</u> (1)</p> <p style="text-align: center;">See Prefrequency Timeless</p>	<p><u>Pride:</u> (1)</p> <p style="text-align: center;">See Selfishness Sheath of Pride Ego Self-deception Vanity</p>
<p><u>Pretime:</u> (2)</p> <p style="text-align: center;">See Conceptuality Independent of Size & Time, 2 Jun'74 Synergetics vs. Model (B)-(D)</p>	<p><u>Pride:</u> (2)</p> <p style="text-align: center;">See Genius: Children Are Born Geniuses, (1) Life is a Sumtotal of Mistakes, (1) Mistake, 7 Nov'75 Crowd-reflexing, 7 Nov'75</p>
<p><u>Pravent: Preventiva:</u></p> <p style="text-align: center;">See Pathology: Preventive vs. Curative</p>	<p><u>Priestly, Joseph:</u> (1733-1804)</p> <p style="text-align: center;">See Lavoisier, 1 Oct'71</p>

Synergetics Dictionary

<p><u>Primacy:</u> (1)</p> <p>See Prime Number Primitive</p>	<p>RBF DEFINITIONS</p> <p><u>Primary vs. Side Effects:</u></p> <p>"Nature arranges for the side effects-- at 180° to become the major thrusts. We tend to think of the chromosomal 180° 'drive' programming as the primary effect, but it's not.</p> <p>"Only mind can discover mind: that's what society is doing right now. The brain is the honey-bee, honey-money reflex."</p> <p style="text-align: right;">- Cite RBF to Yale Students, New Haven, 10 Dec'73 (See also, RBF Holographs)</p>
<p><u>Primacy:</u> (2)</p> <p>See Trigonometric Limit: First 14 Primes, 14 Jan'74</p>	<p><u>Primary vs. Side Effects:</u> (1)</p> <p>See Precession of Side Effects & Primary Effects Evolution by Inadvertence</p>
<p><u>Primary Faculties:</u></p> <p>See Intellect & Quickness</p>	<p><u>Primary vs. Side Effects:</u> (2)</p> <p>See Ecology Sequence, (F)(G) Proton & Neutron, (B) Two Kinds of Twoness, (B) Ecology, 3 Apr'75 Planetary Democracy, (3)</p>
<p>RBF DEFINITIONS</p> <p><u>Primary vs. Side Effects:</u></p> <p>"We don't pay enough attention to the side effects. The primary effects are really very, very tiny. What we have is the intercomplementation of the primary effects with the side effects, in which the side effects-- due to precession-- become the really important operation."</p> <p style="text-align: right;">- Cite RBF to Yale students, New Haven, 9 Dec'73</p>	<p>RBF DEFINITIONS</p> <p><u>Primary Structure:</u></p> <p>"Whenever cutting or joining is introduced, complex structures occur. That is, the hole may be filled with a <u>primary structure</u> and therefore all the structural events of the surrounding ring are second-layer structural emergences of the <u>primary structure</u>."</p> <p style="text-align: right;">- Citation and context at <u>Möbius Strip</u>, 10 Jan'50</p>

Synergetics Dictionary

<p><u>Prime Conceptuality:</u> (1)</p> <p>See Conceptuality Independent of Size & Time A Priori</p>	<p><u>Prime Design:</u></p> <p>See Artist-scientist, May'60</p>
<p><u>Prime Conceptuality:</u> (2)</p> <p>See Domain & Quantum, (2) Unity as Plural, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Dichotomy:</u> (1)</p> <p>"In the <u>prime dichotomy</u> of Universe into a thinkable tetrahedral zone between unconsiderable irrelevancies, which in turn requires a secondary zonal separation into macro-micro momentarily unthinkable cosmoses, it becomes evident that the tetrahedral zone itself introduces a <u>tertiary dichotomy</u> into the two inherent twilight zones of almost ■considerable bigness and almost considerable littleness, respectively.</p> <p>"We find a fourth stage dichotomy of Universe when we consider that the big and little twilights each respectively are again also comprised of two tetrahedra as minimal requirement, one as the concave inward tetrahedron and the other as the convex outward tetrahedron.</p> <p>"We next, fifthly, discover that the positive-negative (convex-concave) tetrahedra constitute only the <u>minimum functional dichotomy</u> of finite Universe resulting in a minimum portion of the Universe disposed in the microcosm and a maximum portion of the Universe assigned to the macrocosm. An approximately spherical <u>polyhedral zonal dichotomy</u> of finite"</p> <p>- Cite OMNIDIRECTIONAL HALO, pp.140-141, 1960</p>
<p><u>Prime Convergence:</u></p> <p>See Vertex, 11 Oct'71</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Dichotomy:</u> (2)</p> <p>"Universe by a spherical array of considered relevancies provides the minimum portion of sum totally finite Universe assigned to the macrocosm and the maximum relative portion of finite Universe assignable to the microcosm..."</p> <p>"The alternate relative proportions of finite Universe's micro-macro magnitude limits of definitive dichotomy as tetrahedral minimum or spherical maximum introduce an inherently alternative propensity of universal finite accountability whose alternative eccentric-concentric reciprocity of omnidifferential-lag-rate compensations inherently propagate and regenerate preferably considered universal evolution accomplished by omnidirectionally expansive-contractive, wave propagating oscillations."</p> <p>- Cite OMNIDIRECTIONAL HALO, pp.143-144, 1960</p>
<p>RBF DEFINITIONS</p> <p><u>Prime Definition:</u></p> <p>"Whenever I can I always try to make a comprehensive <u>prime definition</u> then break it into the main parts. . ."</p> <p>- Citation and context at <u>Environment</u> (1), 19 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Domain:</u></p> <p>"A vector equilibrium is not a <u>prime domain</u> or a prime volume, because it has a nucleus and consists of a plurality of definitive volumetric domains. The vector equilibrium is inherently subdivisible as defined by most economical triangulation of all its 12 vertexes into eight tetrahedra and 12 quarter-octahedra, constituting 20 identically volumed, minimum <u>prime domains</u>."</p> <p>- Citation & context at <u>Vector Equilibrium</u>, 26 Dec'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Prime Domains:</u></p> <p>"While generalizably conceptual the prime structural systems and their prime domains, linear, areal, and volumetric, are inherently subfrequency, ergo independent of time and size."</p> <p style="text-align: right;">- Citation and context at <u>Subfrequency</u>, 17 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Epistemology:</u></p> <p>"Prime epistemology is generalized thinkability. Epistemology discovers intuition."</p> <p style="text-align: right;">- Citation & context at <u>Prime Thinkability</u>, 26 Dec'74</p>
<p><u>Prime Domains:</u></p> <p>See Prime Volumes Spheric Domain</p>	<p><u>Prime Generation:</u></p> <p>See Seven Axes of Symmetry: Prime Generation Of</p>
<p>RBF DEFINITIONS</p> <p><u>Prime Enclosure:</u></p> <p>"Omnitopology describes prime volumes. Prime volume domains are described by Euler's minimum set of visually unique topological aspects of polyhedral systems. Systems divide all Universe into all of the Universe occurring outside the system, all of the Universe occurring inside the system, and the remainder of the Universe constituting the system itself. Any point or locus inherently lacks insiderness. Two event points cannot provide enclosure. Two points have betweenness but not insiderness. Three points cannot enclose. Three points describe a volumeless plane. Three points have betweenness but no insiderness. A three-point array plus a fourth point which is not in the plane described by the first three points constitutes <u>prime enclosure</u>. It requires a minimum of four points to definitively differentiate cosmic insiderness and outsiderness, i.e., to differentiate macrocosm from microcosm, and both of them from <u>here</u> and <u>now</u>."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1011.11, 17 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Hierarchy of Symmetric Polyhedra:</u></p> <p>"It was our synergetics' discovery and strategy of taking the two poles out of Euler's formula that permitted disclosure of the omnirational constant relative abundance of the V's, F's, and E's, and the disclosure of the initial additive twoness and multiplicative twoness whereby the unique prime number relationships of the <u>prime hierarchy of omnisymmetric polyhedra</u> occurred, showing Tetra = 1; octa = 2; cube = 3; VE or Icosa = 5."</p> <p style="text-align: right;">- Citation & context at <u>Constant Relative Abundance</u>, 29 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Prime Enclosure:</u></p> <p>"... Two points do not constitute enclosure. A point by itself does not enclose. Three points do not constitute enclosure. Three points constitute a plane. A three-point array plus a fourth point not in the plane of the first three points do constitute <u>prime enclosure</u>. Four points minimum have insiderness and outsiderness."</p> <p style="text-align: right;">- Cite Synergetics draft, Sec. 1011.11 ^{1011.11}, August 1974, 30 JAN'73</p>	<p><u>Prime Hierarchy of Symmetric Polyhedra:</u></p> <p>See Equations: Primary Systems</p>

Synergetics Dictionary

Prime Interrelationships:

See Understanding, May'67

Prime Nucleated System:

See Vector Equilibrium, 2 Nov'73

Prime Invention:

See Dome, 9 Jul'73

RBF DEFINITIONS

Prime Nucleus:

"The isotropic vector matrix equilibrium multiplies omnidirectionally with increasing frequency of concentric vector-equilibrium-conformed, closest-packed uniradius sphere shells, conceptually disclosing the cosmically prime unique sequence of developed interrelationships and behaviors immediately surrounding a prime nucleus."

- Citation and context at Atomic Computer Complex (2), 13 May'73

Prime Minimum System:

See Mites as Prime Minimum System

Prime Nucleus:

See Energy Event, May'71

RBF DEFINITIONS

Prime Nuclear Structural Systems:

"All prime nuclear structural systems have one-- and only one-- (unity two) interior vertex.

"Nuclear structural systems consist internally entirely of tetrahedra which have only one common interior vertex: omniconvertex.

"In nuclear structural system each of the surface system's external triangles constitutes the single exterior facet of an omnisystem-occupying set of inter-triple-bonded tetrahedra, each of whose single interior-to-system vertexes are congruent with one another at the convergent nuclear center of the system.

"In all nonredundant prime nuclear structural systems the congruently interior-vertexed, omnisystem-occupying tetrahedra of all prime structural systems may all be interiorly truncated by introducing special case frequency, which provides chordal as well as radial modular subdivisioning of the isotropic-vector-matrix intertriangulation of each radial, frequency-embracing wave layer, always accomplished while sustaining the structural rigidity of the system."

- Cite SYNERGETICS, 2nd. Ed., at Secs. 1074.10-.13, 27 Dec'74

RBF DEFINITIONS

Prime Number:

"...There really is a number one, and there is a number two. The prime numbers are unique behaviors.... Prime numbers are unique to what I call primitive experience and minimum experience."

- Citation & context at Human Beings & Complex Unifera, (7), 16 Feb'78

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Prime Number:</u></p> <p>"Man accommodated the primes one, two, three and five in the decimal and the duodecimal system. But he left out seven. After seven the next two primes are eleven and thirteen: man calls these very bad luck. In playing dice seven and eleven are crapping and thirteen is awful."</p> <p style="text-align: right;">- Cite SYNERGETICS, "Numerology," p. 16 Oct. '71.</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Number:</u></p> <p>"Electromagnetic frequencies of systems are sometimes complex but always constitute the <u>prime rational integer</u> characteristic of physical systems."</p> <p style="text-align: right;">- Cite NASA Speech, p. 91, Jun'66</p> <p style="text-align: right;">- Citation at <u>Frequency</u>, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Prime Number:</u></p> <p>"We have some absolutely beautiful rememberable numbers which are all primes. I have discovered that all the primes until 31 would form the positives and the negatives of all the phenomena we can possibly group in the permutations of the elements. The number of these permutations is a rememberable number. Every so often out of absolute chaos of millions and billions of numbers there suddenly comes a rememberable number which shows the beautiful balance at work in nature."</p> <p style="text-align: right;">- Cite SYNERGETICS, "Numerology," pp. 17-18, Oct. '71.</p>	<p><u>Prime Numbers Factorial:</u> (1)</p> <p style="text-align: right;">See Scheherazade Numbers: Scheherazade Numbers: Declining Powers Of</p>
<p>RBF DEFINITIONS</p> <p><u>Prime Number:</u></p> <p>"A prime number cannot be produced by the interaction Of any other numbers-- It is only divisible by itself and one.</p> <p style="text-align: right;">- Cite NUMEROLOGY Draft, p. 32 - April 1971</p>	<p><u>Prime Numbers Factorial:</u> (2)</p> <p style="text-align: right;">See Triacotrahedron: Great Circles Of, 27 Apr'77</p>
<p>RBF DEFINITIONS</p> <p><u>Prime Number:</u></p> <p>"A <u>prime number</u> is a basic event. Every event has three parts."</p> <p style="text-align: right;">- Cite RBF to BSA Basically Howel, New RBF 7-11-74</p> <p style="text-align: right;">- Citation at <u>Basic Event</u>, 7 Mar'71</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Number: First 15 Primes:</u></p> <p>"But so long as the comprehensive cyclic dividend fails to contain prime numbers which may occur in the data to be coped with, irrational numbers will build up or erode the processing numbers to produce irrational, ergo unnatural, results. We must therefore realize that the tables of the trigonometric functions include the first 15 primes 1, 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 41, 43."</p> <p style="text-align: right;">- Cite RBF addition to SYNERGETICS galley at Sec. 1230.11, Santa Monica, CA, 14 Jan'74</p>

Synergetics Dictionary

RBF DEFINITIONS

Prime Numbers: Pairing Of:

"The pairing of prime numbers has something to do with the poles. . . . It has to do with the 14 poles of the seven axes of symmetry."

- Cite RBF to EJA by telephone from LaJolla to Wash, DC, 17 Jan'74

RBF DEFINITIONS

Prime Number Inherency of Structural Systems: Principle of:

"Omnitriangulated symmetric systems are polyhedra whose vertexes derive from the external set of the closest packing of spheres and are rationally accountable in terms of the first four prime numbers (N), that is 1 or 2, or 3, or 5.

$$\text{Equation: } X = 2 N (F^2) \pm 2$$

where: X = number of crossings, vertexes, or spheres in the outer layer or shell of any symmetrical system

N = one of the first four prime numbers: 1, 2, 3, or 5

F = edge frequency, i.e., the number of outer layer edge modules.

- Cite SYNERGETICS Draft, March 1971 (Rev)

TEXT CITATION

Prime Numbers: Pairing Of:

Synergetics draft at Sec. 1239.20, galley

RBF DEFINITIONS

Prime Number Inherency of Structural Systems: Principle Of:

"What I have discovered is that: the number of vertexes of every omnitriangulated symmetrical system is always 2 (polar vertexes of the neutral axis of spin) plus the product of 2 multiplied by one of the first four primes (1, 2, 3, or 5) times frequency to the second power; and the number of triangular faces will always be two times, and the number of edges three times the number of nonpolar vertexes."

- Cite RBF Ltr. to Dr. Robt. W. Horne, 14 Feb'66, p.2.

RBF DEFINITIONS

Prime Number Inherency & Constant Relative Abundance:

"Structural systems are always special case operational realizations in which there is a constant relative abundance of all the topological and system characteristics with the only variable being a quantity multiplier consisting of one of the first four prime numbers-- 1, 2, 3, and 5-- or an intermultiplied plurality of the same first four prime numbers."

- Cite SYNERGETICS, 2nd, Ed. at Sec. 1072.10, 27 Dec'74

RBF DEFINITIONS

Prime Number Inherency and Constant Relative Abundance of Structural Systems: Principle Of:

"The precessionally regenerative concentricity of structure is antientropic and evolves toward optimally economic local compressibility and symmetry.

[This principle of] "omni-optimally-economic, omnitriangulated point system, symmetry relationships and relative abundance of frequency-modulated multiplicative subdivision of unitary local systems; i.e., M (mass) means: All the Universe's self-interfering complexes having concentrically self-processing, local-focal-holding patterns resulting in locally regenerative constellar associabilities as positive-outside-in structures. C (radiation) means: All the Universe's nonself-interfering complexes having eccentrically interprocessing, omnidirectionally diffusing patterns resulting in comprehensively degenerative negative limits of dissociabilities as negative (inside-out) de-structures."

- Cite INTRODUCTION TO OMNIDIRECTIONAL HALO, p.126, 1959

RBF DEFINITIONS

Prime Number Inherency of Structural Systems: Principle Of:

"What I have discovered is that: the number of vertexes of every omnitriangulated symmetrical structural system is always rationally accountable as 2 (polar vertexes of the neutral axis of spin) plus the product of 2 multiplied by one of the first four primes (1, 2, 3, or 5) times frequency to the second power; and the number of triangular faces will always be two times, and the number of edges three times the number of nonpolar vertexes.

"This is the principle of prime number inherency and constant relative abundance of the topological characteristics of structural systems."

- Cite RBF Ltr. to Dr. Robt. W. Horne, p.2, 14 Feb'66; as rewritten by RBF Feb'72

RBF DEFINITIONS

Prime Number Inherency & Constant Relative Abundance: Table:

"The table of synergetics hierarchy (223,64) makes it possible for us to dispense with the areas and lines of Euler's topological accounting and provide a definitive description of all omnitriangulated polyhedral systems exclusively in terms of points and prime numbers."

- Cite RBF to EJA, 3200 Idaho, Wash., DC., 28 May'75

Synergetics Dictionary

<p>TEXT CITATIONS</p> <p><u>Prime Number Inherency and Constant Relative Abundance of the Topology of Symmetrical Structural Systems: Principle Of:</u> Synergetics, Sec. 223</p>	<p>TEXT CITATIONS</p> <p><u>Prime Number Consequences of Spin-halving of Tetrahedron's Volumetric Domain Unity:</u> Table s1033.192</p>
<p><u>Prime Number Inherency & Constant Relative Abundance of The Topology of Symmetrical Structural Systems: Principle Of:</u> (1)</p> <p>See Vertexial Topology Shell Growth Rate Equation: Omnidirectional Closest Packing Of Spheres</p>	<p><u>Prime Number:</u> (1)</p> <p>See Low Order Prime Numbers One as a Prime One as Not a Prime Primacy Primitive Scheherazade Numbers SSRCD Trigonometric Limit</p>
<p><u>Prime Number Inherency & Constant Relative Abundance of The Topology of Symmetrical Structural Systems: Principle Of:</u> (2)</p> <p>See Ten, 22 Jun'75 Vector Equilibrium: Unarticulated VE, 2 Nov'73</p>	<p><u>Prime Number:</u> (2)</p> <p>See Basic Event, 7 Mar'71* Cube, (1) Disparate, 22 Mar'73 Frequency, Jun'66* Modulo 10, 26 Sep'73 Octant, 20 Jul'73 XYZ Quadrant at Center of Octahedron, 14 May'75 Human Beings & Complex Universe, (7)*</p>
<p><u>Prime Numbers: First Four Primes:</u></p> <p>See Quantum Mechanics: Minimum Geometrical Fourness, (4) Triacontrahedron: Great Circles Of, 27 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Prime One:</u> "Unity is plural and at minimum two. There is a <u>prime one</u>, but it is one-half of unity."</p> <p style="text-align: center;">- Citation at <u>Unity Is Plural</u>, 26 Jan'72</p>

Synergetics Dictionary

Prime One:

See One as a Prime

Prime Otherness:

(2)

See Intereffects, 25 Sep'73
Environment, (A)

RBF DEFINITIONS

Prime Otherness:

"Prime otherness demands identification of the other's-- initially nebulous-- entity integrity, which entity and subtentities' integrities first attain cognisable self-inter-patterning stabilization, ergo, discrete considerability, only at the tetrahedron stage of generalizable entity interrelationships. Resolvability and constituent enumerability, and systematic interrelationship cognition of entity regeneration presence, can be discovered only operationally. (See Secs. 411, 411.10, 411.20, and 411.30.) After the four-ball structural interpatterning stability occurs, and a fifth ball comes along and, pulled by mass attraction, rolls into a three-ball nest, and there are now two tetrahedra bonded face-to-face."

- Cite SYNERGETICS draft at Sec. 540.06, 24 Sep'73

RBF DEFINITIONS

Prime Rational Integer Characteristics:

"The frequencies of systems modify their prime rational integer characteristics."

- Cite SYNERGETICS draft at Sec 223.41, Feb '72

RBF DEFINITIONS

Prime Otherness:

"Prime otherness was first hypothetically discovered in the early 1920's and was identified by the term 'fundamental complementarity.'

"Prime otherness has been experimentally evidenced in 1956 when the Nobel prize was given for the proof that the complementaries were inherently dissimilar, non-mirror-imaged systems. For instance, proton and neutron always and only coexist; they are interchangeable but have different masses and other dissimilar characteristics.

"The limit case of prime otherness is that of the point and the no-points; the events and the novents. Numerically, one vs.zero. Because it is the limit case it is prime. Zero is prime otherness."

- Cite RBF to EJA, 3200 Idaho, Wash DC, 23 Sep'73

RBF DEFINITIONS

Prime Rational Integers:

"Other characteristics of systems: Prime rational integer characteristics: Electromagnetic frequencies of systems are sometimes complex but always exist in complementation of gravitational forces to constitute the prime rational integer characteristics of physical systems.

"Systems may be symmetrical or asymmetrical.

"Systems are domains of volumes. Systems can have nuclei, and prime volumes cannot."

- Cite SYNERGETICS text at Secs. 400.50-.51-.52; partly from NASA Speech, p.91; last rewrite, 28 May'72

Prime Otherness:

See Plural Otherness
Past Otherness
Present Otherness
Single Otherness
Future Otherness

RBF DEFINITIONS

Prime Rational Integer Characteristics:

"Electromagnetic Frequencies of systems are sometimes complex but always constitute the prime rational integer characteristic of physical systems."

- Cite SYNERGETICS text at Sec. 515.32; from NASA Speech (p.91), Jun'66

Synergetics Dictionary

<p style="text-align: center;"><u>Prime Rational Integer Characteristics:</u> (1)</p> <p style="text-align: center;">See Rational Whole Numbers Single Integer Differentials Geometry & Number</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: center;"><u>Prime Structural Systems:</u> (1)</p> <p>"The domain of the tetrahedron is the tetrahedron as defined by four spheres in a tetrahedral, omni-embracing, closest-packed tangency network. The domain of an octahedron is an octahedron as defined by six spheres closest packed octahedrally. The domain of an icosahedron is an icosahedron as defined by 12 spheres closest packed without a nucleus. All of the three foregoing non-nuclear-containing domains of the tetrahedron, octahedron, and icosahedron are defined by superficially omnitriangulated closest packing of the four spheres, six spheres, and 12 spheres, respectively, which we have defined elsewhere as omnitriangulated systems or as <u>prime structural systems</u>. There are no other symmetrical non-nuclear-containing domains of closest-packed volume-embracing agglomerations.</p> <p>"While other total closest-packed-sphere embracements, or agglomerations, may be symmetrical or superficially asymmetrical in the form of crocodiles, alligators, pears, or billiard balls, they constitute complex associations of prime structural systems. Only the tetrahedral, octahedral, and icosahedral domains are basic structural systems without nuclei."</p> <p style="text-align: right;">- Cite RBF marginalia at Synergetics draft "Omni-topology," July '71 See Sections 1010.10+11+12, Apr. '72</p>
<p style="text-align: center;"><u>Prime Rational Integer Characteristics:</u> (2)</p> <p style="text-align: center;">See Frequency, 17 Nov '72 Physical, Jun '66</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: center;"><u>Prime Structural Systems:</u> (2)</p> <p>"All the Platonic polyhedra and many other more complex multidimensional symmetries of sphere groupings can occur. Non of them can occur as a consequence of closest packed spheres having no nucleus."</p> <p style="text-align: right;">- Cite RBF marginalia at Synergetics draft "Omni-topology," July '71 See Sections 1010.10+11+12, Apr '72</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: center;"><u>Prime State:</u></p> <p>"The systems as described in Columns 1 through 9 are in the <u>prime state</u> of conceptuality independent of size: metaphysical. Size is physical and is manifest by frequency of length, area, volume, and time. Size is manifest in the four variables of relative length, area, volume, and time; these are all four expressible in terms of frequency. Frequency is operationally realized modular subdivision of the system enclosure."</p> <p style="text-align: right;">- Cite SYNERGETICS Table of topological hierarchies, Sec. 223.65 21 Mar '73</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: center;"><u>Prime Structural Systems:</u></p> <p>"The tetrahedron, octahedron and icosahedron are <u>prime structural systems</u>: there are no other symmetrical non-nuclear domains in closest packed agglomerations. . . . Their domains are defined by superficial omnitriangulation of 4, 6 and 12. The domain of a tetrahedron is a tetrahedron. The domain of an octahedron is six spheres closest packed octahedrally. The domain of an icosahedron is an icosahedron and is defined by the closest packing of twelve spheres without a nucleus."</p> <p style="text-align: right;">- Cite RBF to EJA, Fairfield, Conn., Chez Wolf. 18 June 1971.</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: center;"><u>Prime Structural Systems:</u></p> <p>"There are three types of omnitriangular, symmetrical structural systems. We can have three triangles around each vertex; a tetrahedron. Or we can have four triangles around each vertex; the octahedron. Finally we can have five triangles around each vertex; the icosahedron.</p> <p>"The tetrahedron, octahedron, and icosahedron are made up, respectively, of one, two, and five pairs of positively and negatively functioning open triangles.</p> <p>"We cannot have six symmetrical or equiangular triangles around each vertex because the angles add up to 360 degrees-- thus forming an infinite edgeless plane. The system with six equiangular triangles 'flat out' around each vertex never comes back upon itself. It can have no withinness or withoutness. It cannot be constructed with pairs of positively and negatively functioning open triangles. In order to have a system, it must return upon itself in all directions."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Secs. 610.21-.22-.23; second printing, 3 Nov '75</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p style="text-align: center;"><u>Prime Structural Systems:</u></p> <p>"Only the tetrahedron, octahedron and icosahedron are <u>prime structural systems</u> which can be arrived at in structural stability without a nucleus. All the Platonic "solids" and many more complex regular polyhedra are stable structural systems, but they all have a nucleus."</p> <p style="text-align: right;">- Cite RBF to EJA, Fairfield, Conn., Chez Wolf. 18 June 1971.</p>

Synergetics Dictionary

RBF DEFINITIONS

Prime Structural Systems:

"there are only three possible cases of fundamental omni-symmetrical, omni-triangulated, least effort structural systems in nature: the tetrahedron with three triangles at each vertex, the octahedron with four triangles at each vertex, and the icosahedron with five triangles at each vertex."

Cite SYNERGETICS ILLUSTRATIONS - # 7, 1967

RBF DEFINITIONS

Prime Structure and Prime System:

"Exploring experimentally, synergetics finds the tetrahedron, whose volume is one-third that of the cube, to be the prime structural system of Universe: prime structure because stabilized exclusively by triangles that are experimentally demonstrable as being the only self-stabilizing polygons; and prime system because accomplishing the subdivision of all Universe into an interior microcosm and an external microcosm; and doing so structurally with only the minimum four vertices topologically defining the insideness and outsideness."

- Cite SYNERGETICS draft at Sec 223.73, 26 Sep'73

RBF DEFINITIONS

Prime Structural Systems:

(A)

"A structure divides Universe into two main parts-- all the Universe that is inside and all the rest of the Universe which is outside of the structural system. We find that there are only three types of fundamental omnitriangular, symmetrical structural systems. We can have three triangles around each vertex of a symmetrical structure; this makes a regular tetrahedron. Or we can have four triangles around each vertex; this makes the regular octahedron. Finally we can have five triangles around each vertex which makes the icosahedron. The tetrahedron, octahedron, and icosahedron, are made up respectively of one, two, and five pairs of positively and negatively functioning open triangles. We cannot have six symmetrical or equilateral triangles around each vertex because the angles add up to 360°-- thus forming an infinite edgeless plane. The structural system with six equilaterals around each vertex never comes back upon itself. It can have no withinness and withoutness. It cannot be constructed with pairs of positive-negative function open triangles. In order to have a structural system it must return upon itself in all directions. If the system's openings are all triangulated it is structured with minimum effort."

- Cite Mexico '63, p. 27, 10 Oct'63

RBF DEFINITIONS

Prime Structural Systems:

"Of the three fundamental structures (tetrahedron, octahedron, and icosahedron) the tetrahedron contains the least volume with the most surface and is therefore the strongest structure per unit of volume."

- Cite MEXICO '63, p.28

10 Oct'63

* - Citation at Tetrahedron, 10 Oct'63

RBF DEFINITIONS

Prime Structural Systems:

(B)

"There are only three possible omnisymmetrical, omni-triangulated least effort structural systems in nature. They are the tetrahedron, octahedron, and icosahedron. When their edges are all equal in length, the volumes of these three structure are respectively: one; four and 18.51."

(Last word substituted.)

- Cite Mexico '63, p. 27, 10 Oct'63

RBF DEFINITIONS

Prime Structural Systems:

"Light (as typical wave frequency group) obstruction is greatest where structural components converge (grid photostats show this as stars at convergent points). A multi-axial or dynamical system cannot have only two triangles around one vertex. It can have three, four, or five equilateral triangles, but cannot have six or more equilateral triangles in a finite system."

(Above extract is in the context of a discussion of radomes)

- Cite Descript "Definitions by RBF," 29 Dec'58
Context at Radome Sequence (1)

RBF DEFINITIONS

Prime Structural Systems:

"We find there are only three possible omnitriangulated systems that subdivide Universe. There are the three faces around one vertex which is the tetrahedron; the four faces around one vertex which is the octahedron; and the five faces around one vertex which is the icosahedron."

"You can't have six because it would be flat and would not come back on itself to close the system. It would be neither concave nor convex. We have the positive and negative condition of these three things. Remember that you cannot have a polygon of less than three sides. So the triangle is minimum polygon; it is the only polygon that is inherently stable. We have learned that the triangle stabilizes itself with minimum effort, so we learn that triangulated systems are the systems of the least effort. If they are equilateral triangles then all the system is of equal effort in all directions... so that there are only three possible cases: tetrahedron, octahedron, and icosahedron."

- Cite Oregon Lecture #7, p.249, 11 Jul'62

TEXT CITATIONS

Prime Structural Systems:

- Synergetics - Sec. 1011.30 "Prime Tetra, Octa and Icosa."
 - Synergetics - Sec. 724 "Three and Only Basic Structures"
 - Synergetics - Sec. 610.20 "Omnitriangular Symmetry: Three Prime Structural Systems"
 - Synergetics - Sec. 532.40 "Three Basic Omnisymmetrical Systems"
 - Synergetics - Sec. 612.00 "Subtriangulation: Icosahedron"
 - Synergetics - Sec. 1010.20 "Nonnuclear Prime Structural Systems."
 - Synergetics - Sec. 1031.10 "Dynamic Symmetry. (Esp. 1031.13)
 - Synergetics - Sec. 611.00
 - Synergetics - Sec. 905.13
- | | |
|---------------|------------------|
| 223.73 | e251.19 |
| 982.02-982.06 | e937.14 |
| 1222.20 | e1074.10-1074.13 |

Synergetics Dictionary

<p><u>Prime Structural Systems:</u> (1)</p> <p>See Icosahedron Octahedron Tetrahedron</p> <p>Primary Structure Prime Volumes Tensegrity: Basic Tensegrity Structures: Three and Only Prime Minimum System Domains of Tetra, Octa & Icosa Tetra, Oct & Icosa</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Thinkability:</u> "Systematic Character of Prime Thinkability."</p> <p style="text-align: right;">- Cite section caption in SYNERGETICS, 2nd. Ed., at Sec. 1071.00, 20 Dec'74</p>
<p><u>Prime Structural Systems:</u> (2)</p> <p>See Cycle, 10 Feb'73; 1955 Least Effort, 1967 PatternStrip Aggregate Wrapabilities, 19 Dec'73 Radome Sequence (1)* Sphere, 25 Feb'74 Planck's Constant (A) Tetrahedron, 5 Mar'73; 10 Oct'63* Z Cobras, 6 Nov'73 Subfrequency, 17 Feb'73; 23 Aug'71 Physics: Difference Between Physics & Chemistry, 31 May'71 Frequency, Jun'66 Dyanamic Symmetry, (2) Octahedron Model of Doubleness of Unity, (1)(2) Quantum Sequence, (2)(5)</p> <p>Stable & Unstable Structures, & Jun'72 Icosahedron: Subtriangulation, 9 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Vector:</u> (1)</p> <p>"All structural accounting of nature is accomplished with rational quantities of tetrahedra. The IYZ coordinates may be employed to describe the arrangements, but only in awkward irrationality because the edge of the cube is inherently irrational in respect to the cube's facial diagonal. The hypotenuses actually function only as the edges of the positive and negative tetrahedra which alone permit the cube to exist as a structure. The hypotenuses connect the sphere centers at the cube corners; they function concurrently and simulataneously as the natural structuring of the tetrahedra edges in the omnidirectional isotropic vector matrix; as either hypotenuse or tetra edge they are <u>prime vectors</u>."</p> <p>"Of the eight corners of the cube only four coincide with the sphere centers of closest-packed, unit-radius spheres; therefore only the cube's facial diagonals can interconnect closest packed spheres. One closed set of six cube face diagonals can only interconnect four sphere centers corners of the prime tetrahedron which alone provides the structural stability of the cube, whose eight-cornered, structural stability completeness requires the saturation of the alternate set of six diagonals"</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed., at Secs. 540.11 +.12, 1y Nov'74</p>
<p><u>Prime System:</u> (1)</p> <p>See Minimum System Primary Systems Prime Nucleated System</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Vector:</u> (2)</p> <p>"In each of the cube's six faces, which alternate set of six diagonals intertriangulates the other four sphere centers of the cube's eight corners. The cube diagonals and the edges of the tetrahedra structuring the cube are two aspects of the same phenomenon. The tetra-edge, cube-face diagonals connecting the two sets of four corners each of the cube's total of eight corners are the <u>prime vectors</u> of the vector equilibrium and the isotropic vector matrix.</p> <p>"The second power of the length of the prime vector that constitutes the diagonal of the cube's face equals the sum of the second powers of any two edges of the cube. Because these two edges converge at the cube's corner to form one standing wave which may be multifrequenced to apparently coincide with the cube's facial diagonal, we discover that this relationship is what we are talking about in the deliberately nonstraight line. It is the same mathematical relationship demonstrated in the ancients' proof of the Pythagorean theorem, wherein the square of the hypotenuse is proven to be equal to the sum of the squares of the triangle's two legs. Thus the deliberately nonstraight line displays an evolutionary transformation from coincidence with the two sides of the parallelogram to"</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed. at Secs. 540.12 +.13, 19 Nov'74</p>
<p>RBF DEFINITIONS</p> <p><u>Prime Thinkability:</u> "Prime thinkability is inherently systemic. Prime epistemology is generalized thinkability. Epistemology discovers intuition."</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed., at Sec. 1071.26, 26 Dec'74</p>	<p>RBF DEFINITIONS</p> <p><u>Prime Vector:</u> (3)</p> <p>"Coincidence with the seemingly straight, wavelinear diagonal of the parallelogram.</p> <p>"<u>Prime vector</u> may be considered variously as</p> <ul style="list-style-type: none"> -- the axis of intertangency (Secs. 521.21 & 537.22); -- the control line of nature (Sec. 982.21); -- the deliberately nonstraight line (Sec. 522); -- the diagonal of the cube (Sec. 463); -- half vectors (Sec. 537.21); -- the hypotenuse (Sec. 825.26); -- the internuclear vector modulus (Sec. 240.40); -- the line between two sphere centers (Sec. 537.21); -- linear magnification unity (Sec. 982.51); -- the radial line (Sec. 537.21); -- the tetra edge (Sec. 982.51); or -- unit radius (Sec. 1106.23). <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed. at Secs. 540.13 +.14, 19 Nov'74</p>

Synergetics Dictionary

RBF DEFINITIONS

Prime Vector:

"Of the eight corners of the cube only four are sphere centers; therefore only cube diagonals can connect spheres.

"The diagonals of the cube which connect sphere centers coincide with the tetra edges of the two tetrahedra that structure the cube. They are two aspects of the same thing.

"The tetra edge connecting the two cube corners that are sphere centers is the prime vector-- just another aspect of the radial line connecting any two tangent sphere centers.

"This is what I am talking about in the Deliberately Nonstraight Line. It is what the ancients were talking about in the Pythagorean Theorem: the square of the hypotenuse equals the sum of the squares of the two legs."

- Cite RBF to EJA by telephone from Pacific Palisades, CA, 20 Jul'74

RBF DEFINITIONS

Prime Volumes:

"A prime volume has unique domains but does not have a nucleus.

"A prime volume is different from a generalized regenerative system. Generalized regenerative systems have nuclei; generalized prime volumes do not.

"There are only three prime volumes: tetrahedron, octahedron, and icosahedron. Prime volumes are characterized exclusively by external structural stability."

(Sec. 1010.01-.03)

- Cite SYNERGETICS text at Sec.s 1010.01-.02-.03; 17 Feb'73

Prime Vector:

(1)

- See Axis of Intertangency
- Control Line of Nature
- Cube: Diagonal Of
- Deliberately Nonstraight Line
- Hypotenuse
- Internuclear Vector Modulus
- Line of Interrelationship
- Line Between Two Sphere Centers
- Mensural Unity
- Pythagorean Theorem
- Radial Line as Tetra Edge
- Synergetics Constant
- Tetra Edge
- Vector: Half Vectors
- Vector: One-second Vector Length
- Radial Unity
- Unit: Unity
- Unit Radius: Unit Vector Radius

RBF DEFINITIONS

Prime Volumes:

"A prime volume is different from a system. Systems have nuclei and prime volumes do not. There are only three prime volumes: tetrahedron, octahedron, and icosahedron. Prime volumes are characterized exclusively by external structural stability."

- Cite SYNERGETICS text, at Sec. ~~880.1~~ ^{1010.02 - APR'72} ~~Sec 171~~

Prime Vector:

(2)

See T Quanta Module, (1)

RBF DEFINITIONS

Prime Volumes:

"A prime volume is different from a system. Systems can have nuclei and prime volumes cannot. There are only three prime volumes: tetrahedron, octahedron and icosahedron. They have to have exclusively external structural stability to be prime volumes."

Cit Synergetics draft, Sec. 880.1, August 1971.

RBF DEFINITIONS

Prime Vertices:

"The 25 great circles of the vector Equilibrium all go through the prime vertices."

- Citation & context at Seven Axes of Symmetry, 16 Aug'70

RBF DEFINITIONS

Prime Volumes:

"Systems can have nuclei and prime volumes cannot. There are only three prime volumes."

[EJA comment: Tetrahedron, Octahedron and Icosahedron.]

- Cite RBF to EJA, Fairfield, Conn., Chez Wolf, 18 June 1971.

SYSTEM - 400.53

Synergetics Dictionary

RBF DEFINITIONS

Prime Volumes:

"Systems can have nuclei and prime volumes cannot.
There are only three prime volumes."

- Cite RDF to EJA, Fairfield, Conn., Chez Wolf, 18 Jun '71

PRIME VOLUMES - SEC. 1010.02

Prime:

(2)

See Complex, 17 Feb'73
Originality, Apr'71
Subfrequency, 23 Aug'71*
Vector Equilibrium, 15 May'73
System, 27 May'72
Basic Nestable Configurations: Hierarchy Of, 29 May'72

Prime Volumes:

(1)

See Prime Enclosure
Spheric Domain
Tensegrity: Basic Tensegrity Structures: Three & Only
Three & Only Structural Systems in Nature
System vs. Prime Volume

Prime:

(3A)

See Prime Awareness
Prime Conceptuality
Prime Contractors
Prime Convergence
Prime Definition
Prime Design
Prime Dichotomy
Prime Domain
Prime Enclosure
Prime Hierarchy of Symmetric Polyhedra
Prime Interrelationships
Prime Invention
Prime Nucleated System
Prime Nucleus
Prime Number Inherency of Structural Systems:
Principle Of
Prime Number
Prime Numbers: Pairing Of
Prime Numbers: First Four Primes

Prime Volumes:

(2)

See Prime Domain, 26 Dec'73
Domain & Quantum, (1)(2)
Prime Rational Integers, 28 May'72

Prime:

(3B)

See Prime One
Prime Otherness
Prime Rational Integer Characteristics
Prime State
Prime Structural Systems
Prime System
Prime Vector
Prime Volumes
Prime Vertex
Prime Epistemology
Prime Thinkability
Prime Generation
Prime Minimum System

Prime:


(1)

See Between: Vector Equilibrium as Prime Between-ness
Model
Conceivable Entity - Prime
Limit
Primacy
Primitive
Vector Equilibrium as Prime Nucleated System
Tetrahedron as Prime Nonnucleated Structural System

RBF DEFINITIONS

Primitive:

"Primitive is what you conceptualize sizelessly without words. Primitive has nothing to do with Russian or English or any special case language. My original 4-D, convergent-divergent, vector equilibrium conceptualizing of 1927-28

was primitive  Bow Tie: the symbol of intertrans-formative equivalence as well as of complementarity:

convergence  divergence



Also the symbol of syntropy-entropy

and of wave and octave

-4, -3, -2, -1,

+1, +2, +3, +4"

- Cite RBF rewrite of 19 Jul'76; incorporated in Synergetics, 2nd. Ed. at Sec. 1033.453

Synergetics Dictionary

RBF DEFINITIONS

Primitive:

"Primitive is what you say without words. . . it has nothing to do with Russian or English. Like the triangular grid in "4-D." Frequency: Hex: In, out and around."

- Cite RBF to EJA, 3200 Idaho, Wash, DC; 18 Jul'76

RBF DEFINITIONS

Primitive Dimensionality:

"Primitive dimensionality is systemic. You could not point to something that is less than a system. The points are the ins. What is non-point-to-able is simply the untuned. This primitive way of looking at things affords prime intertransformable magnitude independent of size."

- Cite RBF to EJA, by telephone from Jim Fitzgibbon's in St. Louis; 1 Mar'76

RBF DEFINITIONS

Primitive:

"We may use the word 'primitive' to describe the initial self-starting condition of divergence.... Thus the primitive is quite different from the 'fundamental particles' game of the high-energy research physicists."

- Citation & context at Starting with Divergence, 19 Feb'76

Primitive Experience:

See Prime Number, 16 Feb'78

RBF DEFINITIONS

Primitive:

"Primitive is principle and not a special case. (virgin soil = primitive.) Virginity is an aspect of primitive. There can't be any ~~special~~ special case vrgins; virginity is prefrequency."

- Cite RBF to EJA, 3200 Idaho, 18 Dec'74

Primitive Fourness:

(1)

See Fourfold Twoness
Minimum of Four Tetrahedra
Minimum Tetrahedron
Tetrahedral Minimum

RBF DEFINITIONS

Primitive:

"Primitive means a priori, rather than prime."

- Cite RBF to EJA, Waldorf Astoria, 10 Jan'74

Primitive Fourness:

(2)

See Number: Cosmically Absolute Numbers, 5 Mar'73
System, 26 Dec'74
Cosmic Hierarchy, 23 Jan'77

Synergetics Dictionary

<p><u>Primitive vs. Frequency:</u> See Synergetics: Evolution Of, 14 Oct'76</p>	<p><u>Primitive Inventory:</u> See Quanta Loss by Congruence, (3)</p>
<p><u>Primitive Hierarchy:</u> (1) See Cosmic Hierarchy Geometric Hierarchy</p>	<p>RBF DEFINITIONS</p> <p><u>Primitive Regeneration:</u> "Prime = primitive. Primitive is generalized principle and not a special case. Virgin = primitive. 'Virgin soil' = special case. Virgin female human = special case, only because of the 'human' case realization. Virginity is a generalized aspect of primitive. There can be no special case generalized virgins. Virginity is not only prefrequency, it is pretime, pre-special-case, and pre-experienceable dimension." - Cite SYNERGETICS, 2nd. Ed., at Sec. 1076.10, 27 Dec'74</p>
<p><u>Primitive Geometric Conceptuality:</u> See Tetrahedron as Conceptual Model, 28 Jan'73</p>	<p><u>Primitive Regeneration:</u> See Conceptual Genesis Life's Original Event</p>
<p><u>Primitive Hierarchy:</u> (2) See Quanta Loss by Congruence, (2) Six Motion Freedoms & Degrees of Freedom, 11 Aug'77; (A)(B) Synergetics, 17 Oct'77</p>	<p><u>Primitive:</u> (1) See Conceptuality Independent of Size Conceptuality Independent of Size & Time Initial: Initiating Prefrequency Primacy Prime Prime Number Tetrahedron as Primitively Central to Life Virgin = Primitive Potential vs. Primitive</p>

Synergetics Dictionary

<p><u>Primitive:</u> (2)</p> <p>See Octave Wave, 5 Mar'73 Models, 9 Jan'74 Tetrahedron, 5 Mar'73 Time, (1) Universal Integrity: Second-power Congruence of Gravitational & Radiational Constants, 9 Jan'74 System, 26 Dec'74 Starting with Divergence, 19 Feb'76 Tunability, 24 Apr'76 Minimum of Four Tetrahedra, 22 Feb'77 Cosmic Hierarchy, 23 Jan'77 Generalization & Special Case, 23 Jan'77 Energetic Functions, 8 Aug'77</p>	<p>RBF DEFINITIONS</p> <p><u>Primordial Soup:</u> "All the scientific talk of probabilities is asinine. There is no probability about mass attraction. They all want <u>primordial soup</u>, out of which improbable selection would begin. But the LAWS were always there."</p> <p style="text-align: right;">- Cite REF in <u>USA, Royal Society (1971), N.Y., 14 Sept. 1971.</u> - Citation at <u>Probability</u>, 14 Sep'71</p>
<p><u>Primitive:</u> (3)</p> <p>See Primitive Furness Primitive Geometric Conceptuality Primitive Dimensionality Primitive Regeneration Primitive vs. Frequency Primitive Hierarchy Primitive Inventory Primitive Experience</p>	<p><u>Primordial:</u> (1)</p> <p>See Chaos Life's Original Event Orderliness Operative in Nature</p>
<p>RBF DEFINITIONS</p> <p><u>Primordial:</u> "One physicist remarked recently, 'I am tiring of the nonsense legend which finds one end of Universe closed, By a required beginning event And the other end open to infinity.' The concept of <u>primordial</u>-- Meaning before the days of order-- which imply an a priori, Absolute disorder, chaos, a beginning ('The primordial ooze-gooze explosion'), is now scientifically invalidated, <u>passé</u>."</p> <p style="text-align: right;">- Cite BRAIN AND MIND, p.156 May '72</p>	<p><u>Primordial:</u> (2)</p> <p>See Probability, 14 Sep'71"</p>
<p>RBF DEFINITIONS</p> <p><u>Primordial:</u> "The idea of anything <u>primordial</u> could not exist. There could not be anything prior to order. Man is disorderly only in his ignorance."</p> <p style="text-align: right;">- Cite REF to SINS Seminar, U. Mass., Amherst, 22 July 1971.</p>	<p>RBF DEFINITIONS</p> <p><u>Principle:</u> "Principles can be realized independent of size."</p> <p style="text-align: right;">- Citation & context at <u>Proofs</u>, 7 Oct'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Principle:</u></p> <p>"The principles are the only reality. They are so absolute that you can taste them. The physical aberration is always in our perceiving but it is not the reality."</p> <p style="text-align: right;">(1)</p> <p style="text-align: right;">- Cite RBF to EJA and BO'R, 3200 Idaho, Wash., D.C., 6 Apr'75</p>	<p>RBF DEFINITIONS</p> <p><u>Principle:</u></p> <p>"All principles are omniembracing, omnipervasive, omnisynergetic."</p> <p style="text-align: right;">- Citation and context at <u>Ecology Sequence (F)</u>, 5 Jun'73</p>
<p>RBF DEFINITIONS</p> <p><u>Principles:</u></p> <p>Q: How did you come to know what you know?</p> <p>RBF: I intuited principles. I don't know whether I discovered principles, as such, or not. You should say: How did we happen? and I don't know."</p> <p style="text-align: right;">(1)</p> <p style="text-align: right;">- Cite RBF videotaping session Philadelphia, Pa. 1 Feb'75</p>	<p>RBF DEFINITIONS</p> <p><u>Principle:</u></p> <p>"The principle is more of a reality than the qualities they produce. The teacher knew that Euclid's planes and lines didn't exist."</p> <p style="text-align: right;">- - Cite RBF to EJA, 3200 Idaho, DC, 22 Feb'72</p>
<p>RBF DEFINITIONS</p> <p><u>Principle:</u> (1)</p> <p>"I've worked very hard on my audiences to make sure that they understand that it's only the human mind that is able to discover those eternal principles that are operative, governing the eternal regeneration of the Universe. Humans are here for functioning in a special capability of reference to the eternal laws. When you have something as complex in design as the Boeing 747 you have to have all those instruments up forward and every once in a while the instruments tell the pilot that they're non functioning-- or they're not saying anything. It tells the pilot he's got to take over now himself, not to rely any more on automatic and only by direct access to the principles of the Universe can he possibly save his ship.</p> <p>"The Universe must be a problem of design of eternal regeneration, a design that makes the Boeing 747 look like a toothpick in simplicity compared to the complexity of eternally regenerative Universe. There must be some local things that go on as there would be in the Boeing 747, where you find out where the stresses are, or where the heat is, something you've got to attend to. You need a local monitor on some part of the Universe... and that's what we're here for.</p> <p style="text-align: right;">(1)</p> <p style="text-align: right;">- Cite tape transcript RBF to W. Wolf, Gloucester, Mass., p.13, 2 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Principle:</u></p> <p>"Principles governing all the atomic behaviors that associate triangularly and tetrahedrally with the 12 degrees of freedom all are eternal design evolution, such as must include the complex of potential, symmetry and asymmetrical limited, pulsative regeneration, all of which are ideally conceivable, as is experimentally manifest in synergetics and in my explorations of the idealistic ramifications."</p> <p style="text-align: right;">(Rewritten as <u>Nucleated Systems</u>, 15 Feb'72.)</p> <p style="text-align: right;">- Cite RBF marginalia in Eccles' "Facing Reality," p.3, 3200 Idaho, Wash DC, 14 Feb'72</p>
<p>RBF DEFINITIONS</p> <p><u>Principle:</u> (2)</p> <p>"The one thing common to all lives everywhere-- regardless of differences in size, or ethnicity-- the one thing common is that we're here with this beautiful mind with access to principles to solve problems by principles not by force. We're born as force; we're born as physical. But mind is our great function here. Our relationship to Universe is completely abstract.</p> <p>"We find then humanity is still in a bind with all the politics, all the big business, all the organization, all for the power structure... who's got the biggest gun? And I say, if we're going to stay here it's so we can actually graduate in our function. This is a priori."</p> <p style="text-align: right;">(2)</p> <p style="text-align: right;">- Cite tape transcript, RBF to W. Wolf, Gloucester, Mass., p.13, 2 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Principle:</u></p> <p>"There can't be a principle that has a 'beginning' and an 'ending.' We cannot suggest that an abstraction could have a beginning and an end. The words 'beginning' and 'end' have to do with the physical."</p> <p style="text-align: right;">- Citation and context at <u>Generalization Sequence (3)</u>, Jun-Jul'69</p>

Synergetics Dictionary

RBF DEFINITIONS

Principle:

"Principles do not begin and end. Experiences do."

- Cite RBF to Hugh Kenner, Santa Barbara, Dec'67

RBF DEFINITIONS

Principle:

"...In comprehensive Universe, dimension drops out and conceptual principle remains. Physical interferences of our sensibilities are alike true and real, or realizable, only in principle. Positive and negative cancel as the principle zero."

- Citation and context at Reciprocity (3), May'49

RBF DEFINITIONS

Principle:

"...The pure principles were generalizable and of no weight at all. The principles were always there and the generalizable had nothing to do with the special case. The generalizable was always present in the special case, but it had nothing to do with the avoidupois, for it is not weighable. Mathematics weighs nothing and this is mathematics. It is a mathematical correspondence."

- Citation and context at Orderliness Operative in Nature, (1)(2), 9 Jul'62

Principle vs. Aberration:

See Man as a Function of Universe, 21 Jan'75

RBF DEFINITIONS

Principle:

"By the word principle I mean those generally describable behaviors of local frequency and angle patternings subsidiary to obviously more comprehensive and universally integrative patternings; despite that the local patternings wavelengths are infra or ultra to our sensorial tunabilities, wherefore these infra and ultra sensorial wave frequencies and angle complexes are apprehensible and comprehensible only through relayed step-up or step-down transformations of the pattern as a generalizably recognizable pattern behavior as it consistently displaces locally cooperating frequency patternings of lesser or greater wavelengths, e.g., . . . the outwardly moving wave in water is a pattern comprehensivity by a plurality of reported patternings of local displacements of locally operative pattern relaying as water molecules of waves go in and out from the center of the Earth."

- RBF holograph, 12 Jun'56

Principles: Hierarchy Of:

See Generalization of Generalizations
Synergy of Synergies

RBF DEFINITIONS

Principle:

"... Magnitude vanishes; only principles endure.
The fantastic, being of purely superficial magnitude, vanishes in the face of principle."

- Cite TOTAL THINKING, I&I, p.226, May'49

Principle:

(1A)

- See Aggregates of Principles
- Antientropic Ordering Principles
- Blind Date with Principle
- Equatability of Generalized Principles
- Generalized Principle
- Industrial Principle
- Interference of Principles
- Inventory of Principles
- Inventory of Characteristics of Principles
- Lag Rates of Principles
- Objective Employment of Principles
- Organizing Principle
- Pure Principle
- Reciprocal Involvement of Experiences & Principles
- Reciprocal Patterning of Principles
- Reality as Structural Interaction of Principles
- Resource vs. Principle
- Self-organizing Principle

Synergetics Dictionary

<p><u>Principle:</u> (1B)</p> <p>See Synergetics Principles Undiscovered Principles Schematic of the Principles Intersoperativeness Omniinteraccommodative Fantasy vs. Principle Experiences & Principles Last Chance Adoption of Unheeded Principles Individual & Group Principle Bundle of Principles Mutual Survival Principles</p>	<p><u>Priority: Priorities:</u> (1)</p> <p>See Antipriorities</p>
<p><u>Principle:</u> (2)</p> <p>See Anticipatory, 3 Nov'64 Antientropy, 20 Jun'66 Artifacts (1)(2) Ecology Sequence (F)* Generalization Sequence (3)* Orderliness Operative in Nature, 9 Jul'62* Reciprocity (3)* Word, May'49 Chess: A Priori Intellect Invents a Game Called "Life" (1)(2) Adam & Eve, 2 Jun'74 Fantastic, May'49 Airplane, May'49 Proofs, 7 Oct'75*</p>	<p><u>Priority: Priorities:</u> (2)</p> <p>See Ship, (3)</p>
<p><u>Printing: Printing Press:</u> (1)</p> <p>See Benday Screen</p>	<p>RBF DEFINITIONS</p> <p><u>Prism:</u></p> <p>"A prism can twist to becoming two tetrahedra by precessing until the legs cross in the middle. Interconnect the corners and you have the octahedron."</p> <p style="text-align: right;">- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971</p>
<p><u>Printing Press: Printing:</u> (2)</p> <p>See Rolls, 20 Apr'72 Publishing, 30 Jan'75 Resolvability Limits, 30 Apr'77</p>	<p><u>Prison:</u> (1)</p> <p>See Inventions that Decrease the Degrees of Freedom</p>

Synergetics Dictionary

Prison:

(2)

See Teleology, 20 Jun'66

Privacy vs. Community:

(2)

See Dome, 3 Jan'71
Old Man River Project, 20 Sep'76

Pristine: Pristinity:

See Intuition of the Child, (4)
Nuclear Uniqueness, 18 Feb'73

Privacy:

(1)

See Community
Proxemics
Hearable You
Touchable You
Smellable You

RBF DEFINITIONS

Privacy:

"Get yourself the tools and ways of enclosing enormous amounts of space, and make it possible for large numbers of human beings to come together under more preferred conditions than have ever before come together. Then give them large clear spaces so that their privacy results from having sufficient distance between people or groups of people. Get over the idea of partitions. Partitions are like socialism. They came out of living and working in fortresses where there wasn't enough room to go around, so they put up partitions-- really making cells. Partitions simply say you shall not pass. That's all they do. They are improvised to make that which is fundamentally inadequate work 'after a fashion.'

"There are four kinds of privacy: if I can't touch you, we're tactilely private; if I can't smell you, we're olfactorily private; if I can't hear you, we're aurally private; and if I can't see you, we're visually private. Just a little space will take care of the first three. For the fourth-- since we can see a great distance-- all we need are delicate occulting membranes, possibly rose bushes or soap bubbles or smoke screens."

- Cite EDUCATION AUTOMATION, pp.83-84, 22 Apr'61

Privacy:

(2)

See Walls, 29 Jan'75

Privacy vs. Community:

(1)

See Introversion vs. Extraversion
Proximity ≠ Neighborliness
Proximity & Remoteness

RBF DEFINITIONS

Private Enterprise:

"Auto = $\frac{1}{2}$ Motorring
Highway = $\frac{1}{2}$ " "

"During the last twenty years while automobile companies produced and sold \$220 billion worth of autos the government spent \$200 billion on roads.

"'Private enterprise' is a dependent function. It is subsidized self-deceit."

- Cite RBF Holograph, Velos Conference, 1971.

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Private Enterprise:</u></p> <p>"This is a powerful trend. Private enterprise is taking the initiative entirely away from politics. Politics lingers in the twilight of geographical islands. Enterprise operates transcendently to such limits. Major enterprise is inherently bound by Universe alone..."</p> <p style="text-align: right;">- Citation and context at <u>World Corporations</u>, 9 May '57</p>	<p>RBF DEFINITIONS</p> <p><u>Private Property:</u></p> <p>"Private Ownership is going to go, not by political revolution, but because it becomes obsolete, onerous. Our young people are going to want to live around the world, and it just isn't possible to carry 'all that stuff' with them. So we will take all of the beautiful things out of the museums, rebuild Babylon, rebuild Egypt, and spend a week in Egypt living the way the people lived. We will call our dwelling rental service, tell them what we want, and it will be ready for us when we arrive."</p> <p style="text-align: right;">- Cite THE FUTURE OF THE FAMILY, undated, p. 8</p>
<p><u>Private Enterprise:</u></p> <p>See Capitalism Corporation Enterprise Free Enterprise</p>	<p><u>Private Property:</u></p> <p>See Capitalism False Property Illusion Obsolete: Inventory of Obsolete Concepts Possession Mine: That's Mine Property Real Estate Development Tollgate: Private Tollgate Yesterday's Private Castle Mentality</p>
<p>RBF DEFINITIONS</p> <p><u>Private Property:</u></p> <p>"Property Rights will stop because they are simply nonexistent!"</p> <p style="text-align: right;">- Cite RBF to SLS Seminar, U. Mass., Amherst, 22 July 1971.</p>	<p><u>Prize:</u></p> <p>See Enterprise, 1968</p>
<p>RBF DEFINITIONS</p> <p><u>Private Property:</u></p> <p>"Look for the obsolescence of Acquisitions and Possessions. Ownership will become progressively onerous, because it imposes undesirable local restraints and frustrates realization of world citizenship which is progressively accommodated by the service industries' ever higher performing rentable facilities."</p> <p style="text-align: right;">- Cite Dreyfuss Preface, "Decease of Meaning," 28 April 1971, p. 15</p>	<p>RBF DEFINITIONS</p> <p><u>Probability:</u></p> <p>"Probability is mathematically proven and useful but, as its name states, it is far from incisive prediction. It is a tool but a weak tool. If you want to cross the Atlantic to a given port, probability per se won't get you there. It can only say that your chances of getting there are such and such a bet-- as '48 to 1'. Probability says any easterly direction is more favorable than a westerly, but a westerly could probably get you there. But probability would not tell you anything useful about the rocks or continents that might intervene. 'There will probably be rocks and continents in your way.' Probability could not get you to a given port. Navigation can do so. Navigation is discrete and is a powerful tool."</p> <p style="text-align: right;">- Cite RBF Ltr. to James Coney, Sep'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Probability: (1)

"Nature's probability is not linear nor planar, but the mathematical models with which it is treated today are almost exclusively linear. Real Universe probability accommodates the omnidirectional interaccommodative transforming transactions of universal events which humanity identifies superficially as environment. Probability articulates locally in Universe in response to the organically integral generalized omnidirectional in, out, inside-out, outside-in, and around events of the self system as well as with the self system's extra-organic travel and externally imposed processing around and amongst the inwardly and outwardly contiguous forces of the considered system as imposed by both its synchronously and contiguously critically near macrocosmic and microcosmic neighbors.

"Real Universe's probability laws of spherically propagative whole systems' developments are intimately conditioned by the three-way great-circle grids inherently embracing and defining the nonredundant structuring of all systems as formingly generated by critical proximity interferences of the system's components' behaviors and their dynamical self-

- Cite SYNERGETICS draft at Secs. 538.01 + 02, 26 May '72

RBF DEFINITIONS

Probability:

"Probability is not linear nor planar, but it is following the laws of sphericity of whole systems. It ties up with the three-way grid and with the constant relative abundance of points, areas and lines as disclosed by synergetics."

- Cite RBF to EJA + BO'R, 3200 Idaho, DC, 17 Feb '72 (for expanded context see Three-Way Great Circling: Three-Way Grid, 17 Feb '72.)

RBF DEFINITIONS

Probability: (2)

"triangulations into unique system structuring symmetries whose configurations are characterized by the relative abundance patterning laws of topological crossing points, areas, and lines of any considered system as generally disclosed by the closed system hierarchy of synergetics.

"Synergetics, by relating energy and topology to the tetrahedron, and to systems, as defined by its synergetic hierarchy, replaces randomness with a rational hierarchy of omni-interttransformative phase identifications and quantized rates of relative intertransformations."

- Cite SYNERGETICS draft at Secs. 538.02 + 03, 26 May '72

RBF DEFINITIONS

Probability:

"Probability doesn't know anything about shapes. It's just number, purely mathematical."

- Cite RBF to EJA and BO'R, 3200 Idaho, WashDC, 17 Feb '72

RBF DEFINITIONS

Probability:

"Nature's probability is not linear nor planar as it is almost exclusively employed today. Probability accommodates the omnidirectional conditions of the universal environment of events and articulates, in response the the generalized omnidirectional in, out, and around-the-self system, and of the self-system around and amongst the inwardly and outwardly contiguous forces imposed upon the considered system by both its macrocosmic and microcosmic neighbors.

"Probability's laws of spherically propagative whole systems' developments are intimately conditioned by the three-way great-circle grids inherently embracing and defining all systems as formingly generated by critical proximity interferences of the system's components' behaviors and their dynamical self-triangulations into unique system structuring symmetries whose configurations are characterized by the relative abundance patterning laws of topological crossing points, areas, and lines of any considered system as generally disclosed by the closed system hierarchy of synergetics."

- Cite RBF 20 Feb re-write of 17 Feb citation, 20 Feb '72

PROBABILITY - SEC. 538.01 + 02

RBF DEFINITIONS

Probability:

"Probability is purely mathematics: just points on curves. But they are thought of as linear. Or planar. What I call planilinear. Gibbs, in his phase rule ties up the probability with chemistry. His phase rule and topology are the same. But still all the different chemistries and topologies seem to be random. But synergetics, by relating energy and topology to the tetrahedron, and to systems as defined, and by its synergetic hierarchy, replaces randomness with a rational hierarchy."

- Cite RBF to EJA, 3200 Idaho, DC, 17 Feb '72

LAST SENTENCE - PROBABILITY - SEC. 538.03

RBF DEFINITIONS

Probability:

"The specialized mathematical probability art and its developed tables is exclusively linear and is exclusively preoccupied with amorphous, planar graphable, and linearly plottable rate of covariant change calculus. Specialized probability disregards reality shapes and considers itself to be concerned with pure number abstractions."

- Cite RBF 19 Feb re-write of Probability, 17 Feb '72

RBF DEFINITIONS

Probability:

"Statistical Probability is a very crude tool-- like using a hammer for a screw driver."

- Cite RBF to EJA, Beverly Hotel, New York 15 Sept. '71.

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Probability:</u></p> <p>"All the scientific talk of <u>probabilities</u> is asinine. There is no <u>probability</u> about mass attraction. They all want primordial soup, out of which improbable selection would begin. But the LAWS were always there."</p> <p style="text-align: right;">- Cite RBF to EJA, Royal Scots Grill, N.Y. 14 Sept. 1971.</p>	<p>RBF DEFINITIONS</p> <p><u>Probability:</u></p> <p>"Probability, the strongest tool of statistics which deals only with parts, at its best is a weak tool.</p> <p>"Were probability strong it would predict stock-market behavior with precision and would foretell horse races results with reliability. Contrariwise, synergy and general systems theory are powerful forecasting tools and have been the backbone of modern physics, astronomy, and chemistry."</p> <p style="text-align: right;">- Cite DOXIADIS, p. 314, 20 Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Probability:</u></p> <p>"Probability is anything but comprehensively anticipatddy: if it had any force there would not be a stock market or a horse race."</p> <p style="text-align: right;">- Cite RBF to EJA, Somers Club, Boston, 22 April 1971</p> <p style="text-align: right;">- Citation & context at <u>Happening</u>, 22 Apr'71</p> <p><u>SYNERGETICS. SEC. 503</u></p>	<p>RBF DEFINITIONS</p> <p><u>Probability:</u></p> <p>"It is discovered in principle that <u>probability</u> probing of physical Universe on a statistical basis is now becoming of necessity frustrated while, probing in empty conceptual principle could be instituted and accelerated for further advancement or fundamental information. Exploration in principle is re-rewarding."</p> <p style="text-align: right;">- Citation and context at <u>Reciprocity</u> (2) + (3), May'49</p>
<p>RBF DEFINITIONS</p> <p><u>Probability:</u></p> <p>"You don't program 'happen.'"</p> <p><u>Probability</u> is anything but comprehensive.</p> <p>And we find that 'happenings' contradict <u>probability</u>.</p> <p style="text-align: right;">- Cite RBF to EJA Carbondale 2 April 1971</p> <p><u>SYNERGETICS. SEC. 503</u></p>	<p><u>Probability Laws:</u></p> <p style="text-align: center;">See Probability, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Probability:</u></p> <p>"Society has been trained to think only statistically and <u>probability</u> is the most powerful phase of statistics. But <u>probability</u> is a weak tool. If it were strong the stock exchanges and gambling houses would have to close their doors. . . . But nature does use synergy."</p> <p style="text-align: right;">- Cite RBF marginalia on Old Chap. 2, "Synergy," 18 Mar'69</p>	<p>RBF DEFINITIONS</p> <p><u>Probability Model of Three Cars On a Highway:</u> (1)</p> <p>"I am tying up the social experience, often observed, in which three independently and consistently velocitied automobiles (and only three) come into close proximity on the highway-- often with no other cars in sight. Mathematically speaking, three points-- and only three-- define both a plane and a triangle. The cars make a triangle; and because it is mathematically discovered that the total number of points, or areas, or lines of a system are always even numbers; and that this divisibility by two accommodates polar-and-hemispherical positive-negativeness of all systems; because the defining of one small triangle on the surface of a system always inadvertently defines a large triangle representing the remainder of the whole system's surface, and this large triangle's corners will always be more than 180-degrees each; ergo, the triangle is an 'inside-out,' i.e., negative triangle, and to convert it to positive condition requires halving or otherwise fractionating each of its three corners by great circle lines running together somewhere within the great negative triangle; thus there develops a minimum of four positive triangles embracing the Earth induced by such three-car convergences."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 538.11, 26 Sep'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Probability Model of Three Cars on a Highway: (2)

"The triangle made by the three cars is a complementarity of the three other spherical triangles on the Earth's surface. The triangle formed by the two cars going one way, and one the other way, gets smaller and smaller and then reverses itself, getting ever larger. There is always a closer proximity between two of the three. This is all governed by topological "pattern integrity." Probability is exclusively abstract mathematics: theoretically calculated points on curves. The statisticians think almost exclusively in lines or planes; they are what I call planilinear. Willard Gibbs in evolving his phase rule was engaged in probability relating to chemistry when he inadvertently and intuitively conceived of his phase rule for explaining the number of energetic freedoms necessary to introduce into a system complexly constituted of crystals, liquids, and gases, in order to unlock them into a common state of liquidity. His discovered phase rule and topology are the same: they are both synergetic. Despite the synergetic work of such pioneers as Euler and Gibbs, all the different chemistries and topologies still seem to be random. But synergetics, by relating energy and topology to the tetrahedron, and to systems as defined, and by its synergetic hierarchy, replaces"

- Cite SYNERGETICS draft at Sec. 538.12, 26 Sep'73

RBF DEFINITIONS

Probability Model of Three Cars on a Highway:

"In the early days of the auto on a lonely road-- when you saw another car coming-- there was always a third coming into view or already in view. Three cars frequently come to approximately the same highway point at approximately the same time. This is not surprising because when we, having first taken away the two points from the system to accommodate the axis of the observer, and you always have the topologically constant relative abundance of interference crossings, areas, and lines. Edges are lines. The guided car paths are in reality lines, traces, with universal three-foldness of energy event trajectory vectors. Universe keeps sorting its event traces into bundles of three. The social highway experience of three cars is the inexorably present, tri-complementarity relationship of the little local triangle on the earth's surface complemented by the three other great circle triangles of the terrestrial spherical tetrahedron always inevitably produced in all systems formulations and transformations law. Critical proximity imposes triangulation."

(For preamble to above see immediately preceding statement: Polar Vertexes, cited to 17 Feb '72.)

- Cite RBF 19 Feb re-write of same caption 17 Feb.

RBF DEFINITIONS

Probability Model of Three Cars on a Highway: (3)

"randomness with a rational, cosmic, shape-and-structural-system hierarchy. This hierarchy discloses a constant relative abundance of the constituents; i.e., for every nonpolar point there are always two faces and three edges. But systems occur only as defined by four points. Prime structural systems are inherently tetrahedral, as is also the quantum.

"A social experience of three cars: they make a triangle changing from scalenato equilateral to scalene. The triangles are where the cars don't hit. (These are simply the windows.) But you can't draw less than four triangles. The complementarity of the three triangles makes the spherical tetrahedron-- which makes the three-way grid. The little spherical triangle window is visible to human observers in greatest magnitude of human observability and awareness of such three-car triangles at 15 miles distance, which is 15 minutes of the spherical arc of our Earth. Such dynamically defined Earth triangulation is not a static grid because the lines do not go through the same point at the same time; lines-- which are always action trajectories-- never do. All we have is patterning integrity of critical proximities. There is always a nonviolated intervening boundary condition. This is all that nature ever has."

- Cite SYNERGETICS draft at Sec. 538.13, 26 Sep'73

Probability Model of Three Cars on a Highway: (1)

See Social Highway Experience: Three Autos Spherical Triangle Sequence

RBF DEFINITIONS

Probability Model of Three Cars on a Highway: (4)

"Nature modulates probability and the degrees of freedom, i.e., frequency and angle, leads to the tensegrity sphere; which leads to the pneumatic bag; all of which are the same kind of reality as the three automobiles. All the cosmic triangling of all variety of angles always averages out to 60 degrees. That is the probability of all closed systems of which the Universe is the amorphous largest case. Probability is not linear or planar, but is always following the laws of sphericity or whole systems. Probability is always dependent on critical proximity, omnidirectional, and only dynamically defined, three-way gridding pattern integrity, and with the concomitant topologically constant relative abundance of points, areas, and lines, all governed in an orderly way by low-order prime-number, behavioral uniqueness as disclosed by synergetics."

- Cite SYNERGETICS draft at Sec. 538.14, 26 Sep'73

Probability Model of Three Cars on a Highway: (2)

See Sphericity of Whole Systems, 26 Sep'73
Three-way Great Circling: Three-way Grid, 17 Feb'72

RBF DEFINITIONS

Probability Model of Three Cars on a Highway:

"I am tying up the social experience of three cars meeting on the highway. They make a triangle which is a complementarity of the three other spherical triangles on the Earth's surface. The triangles get narrower and narrower and then reverse themselves. There is a proximity between two of the three. We have topology as a pattern integrity. . . Probability is pure mathematics, just points on curves. . . A social experience of three cars. They make a triangle changing from scalene to equilateral to scalene. The triangles are where the cars don't hit. (These are simply the windows.) But you can't draw less than four triangles. The complementarity of the three triangles makes the spherical tetrahedron-- which makes the three-way grid. . . "

- Cite RBF to EJA, 3200 Idaho, DC, 17 Feb '72

Probability:

See Happening
Navigation vs. Probability
Possible into Probable
Randomness
Nature Modulates Probability
Discrete vs. Probability

Synergetics Dictionary

<p><u>Probability:</u> (2)</p> <p>See Direction, 1938 Life, 16 Aug'50 Reciprocity (2)(3)* Three-way Great Circling: Three-way Grid, 17 Feb'72* Threshold of Life, 6 Jul'62 Omnidirectional Typewriter (1) Equimagnitude Phases, 19 Dec'73 Synergy, 26 May'72 Means, 22 Jun'75 General Systems Theory, (B) Modules: A & B Quanta Modules, 20 Dec'73</p>	<p>RBF DEFINITIONS</p> <p><u>Problem:</u></p> <p>"Problems are metaphysical entropy. Humans are here to function syntropically as solvers of problems as guided by mind-discovered cosmic principles."</p> <p style="text-align: right;">- Citation and context at <u>Man as Local Problem Solver</u> (1), Dec'72</p>
<p>RBF DEFINITIONS</p> <p><u>Problem:</u></p> <p>"Our problems are almost exclusively metaphysical and can only be coped with by scientific competence and intellectual integrity on the part of the discovering humans."</p> <p style="text-align: right;">- Citation & context at <u>Gravity</u> (k), 12 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Problem:</u></p> <p>"Being between: That's what humans always are. That's where the problems start."</p> <p style="text-align: right;">- Citation at <u>Between: VE as Prime Between-ness Model</u>, 7 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Problems:</u></p> <p>"Our fundamental proclivity is to keep intercepting problems. Nothing could be more fallacious than the notion that a normal life is one without problems. Even all human games are ways of initiating disorder to be parried by converting the disorder to order."</p> <p style="text-align: right;">- Cite RBF address to Yale Political Union, New Haven, 9 Dec'73; as rewritten by RBF at 3200 Idaho, Wash DC, 13 Dec'73</p>	<p>RBF DEFINITIONS</p> <p><u>Problems:</u></p> <p>"Inevitable, important local <u>problems</u> develop in maintaining the comprehensive integrity of the omni-regenerative universal design. I think it probable that humans are designed to . . . be aboard planet Earth as the complex local <u>problem</u> processor. . . . Certainly, each of our own lives manifest just such experiencing of 'problems, problems, problems.' I have worked very hard on problems and I find that for every problem I solve I induce twelve more problems or challenges. You can look at problems as unattractive or attractive, but the problem is that we are faced with problems. Nothing can be more descriptive of life than a sequence of problems. We are beautiful problem analyzing, differentiating and sorting faculties. All that goes on in this room between you and me is absolutely weightless. We are sorting out our experiences."</p> <p style="text-align: right;">- Cite Museums Keynote Address Denver, pp. 13-14 from transcript as rewritten by RBF. 2 Jun'71</p>
<p>RBF DEFINITIONS</p> <p><u>Problems:</u></p> <p>"Our fundamental proclivity is to keep intercepting problems. Nothing could be more wrong than the notion that a normal life is one without problems."</p> <p style="text-align: right;">- Cite RBF address to Yale Political Union, New Haven, 9 Dec'73</p>	<p>RBF DEFINITIONS</p> <p><u>Problem:</u></p> <p>". . . The regeneration of the Universe probably depends on these local monitors of very high capability to solve very complex <u>problems</u>. Certainly our lives manifest just problems, problems, problems. Nothing can be more descriptive of life than problems." But we have a beautiful sorting capability."</p> <p style="text-align: right;">- Cite RBF address Am. Assn. of Museums, Denver, 2 June 1971.</p>

Synergetics Dictionary

RBF DEFINITIONS

Problem Solving:

"... An intellectual integrity of Universe evokes its own theoretical evolution of a Universe of ever-multiplying problems and pure principles solutions and eternal regeneration of multiplying problem solving."

- Cite RBF marginalia, 20 Dec, '71 at SYNERGETICS Draft, Sec. 529.07

RBF DEFINITIONS

Problem: Statement of the Problem:

"Our problem is really one of information. We're in this condition where we have to get the information out to all humanity, which in the past was content with following a leader. Some time ago I made the discovery that if I can communicate something to somebody else, write it, put it into print, it goes out of me and I can look at it to be sure I'm not kidding myself. And then suddenly you make the discovery that if you state the problem correctly, the problem is solved. I simply happened to get to that realization a little earlier than others due to my comprehensive training and my thoroughness and the inspiration of knowing that if I could communicate these possibilities, humanity really might make it. I've had a deep feeling about this all along, and it's a very critical matter. Without that information that we need, we do risk a runaway of ignorance, and that's where the great peril lies."

- Cite RBF tape transcript for Barry Farrel Playboy Interview, Feb '72. Above passage deleted. See draft p. 61.

Problem Solving:

(1)

See General Systems Theory
Local Problem Solver
Man as a Function in Universe
Man as Local Problem Solver
Man as Local Universe Technology
Starting with Universe
Mistakes
Trial and Error
Synergetic Advantage: Principle Of

RBF DEFINITIONS

Problem: Statement of the Problem:

"Other men's consciously articulated awareness of the problem, its existence, and the sequitor conclusion that inherent in its comprehensive statement that once properly stated it could even then only by teleologically solved through competent design, and not by political reform, for not until the comprehensive-competent-teleologic designer formulates and calculates the total involvement, differentiation and subsequent integration, and initiates the wheel-starting essential tasks do the minimum physical constituents of the 'reform' exist. Ergo, political reform is only and always accessory after the fact. And the concepts of the ultimate products consequent to our synergetically conceived designing, were all alike nonexistent prior to out personally-unique-experience-pattern induced abstract apprehension, and subsequent systematic design conception of them, and our production of their component subsystem items and their testing and assembly."

- RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 10/54-59

Problem Solving:

(2)

See Artifacts, 10 Aug'70; 17 Sep'74
Dreams, 10 Aug'70
Individual Universes, (2)
Manifests: Eight, 1973
Omnidirectional Typewriter, (1)
Questions: Answering Questions, Sep'73
Rationalization Sequence, (4)
Twelve Universal Degrees of Freedom: General Systems, (II)
Geometry, 14 Nov'73
Part, May'72
Performance; Equation Of, 1938
Electronic Referendum, 9 Jan'75
Humane City, (3)
Nucleus, 13 Nov'75
Nature in a Corner, 12 Nov'75
Dymaxion Artifacts, (2)
Children as Only Pure Scientists, (A)
Child, 1 May'77
Load Distribution, 17 Oct'77

Problem: Statement of the Problem:

(1)

See Question Asking

RBF DEFINITIONS

Problem: Statement of the Problem:

"It is my philosophy that a properly stated problem is a problem solved. The adequate statement must contain an inventory of all the resources available and all the variable parameters uniquely involved. The solutions are inherent in such adequacy of statement."

- Cite SET "Y", p. 14, Aug'72

Problem: Statement of the Problem:

(2)

See Dreams, 10 Aug'70
Formulation, 1963
Sunclipse, 1968
General Systems Theory, (2)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Problems: Ten World-Around Problems That Have to Be Solved By Bloodless Design Science Revolution:</u></p> <p>"(1) Education Revolution, The Highest Priority Of All; (2) Conversion of World Accounting System; (3) Elimination of Property By Making Ownership Onerous; (4) World Democracy By Electronic Referendum; (5) Elimination Of All World Sovereignties; (6) Theoretical Exploration Through World Game; (7) Realization Of Design Science Competence; (8) Recognition of Humanity's Unique Functioning in Universe; (9) Identification of Mathematical Coordinate System of Universe; (10) Philosophical Realization That Physical Is Not Life.</p> <p style="text-align: center;">- Cite WORLD-AROUND PROBLEMS THAT HAVE TO BE SOLVED BY BLOODLESS DESIGN SCIENCE REVOLUTION, NY Times, 29 Jun'72</p>	<p>RBF DEFINITIONS</p> <p><u>Process Relationships:</u></p> <p>"The transition of initial awareness of sensorially experienced physical forms and <u>process relationships</u> through their progressively</p> <p style="text-align: center;">ephemeral → diaphanous → ethereal → brain-to-mind → physical-to-metaphysical →</p> <p>idea trending toward and attaining absolutely weightless conceptual integrity of interangular proportionality... a triangle."</p> <p style="text-align: center;">- Citation & context at <u>Triangla</u>, (1), 28 Jan'69</p>
<p>TEXT CITATIONS</p> <p><u>Problems:</u></p> <p>World-Around Problems that Have to be Solved by Bloodless Design Science Revolution, 29 June 1972</p>	<p><u>Process Relationships:</u></p> <p style="text-align: center;">See Connections & Relatedness Relationship Analysis</p>
<p><u>Problem: Problems:</u> (1)</p> <p>See Finite Solutions Social Problems: Tetrahedral Coordination Of</p>	<p>RBF DEFINITIONS</p> <p><u>Process vs. Thing:</u></p> <p>"Everybody is a process and not a thing."</p> <p style="text-align: center;">- Citation at <u>Everybody</u>, 3 Oct'71</p>
<p><u>Problem: Problems:</u> (2)</p> <p>See Between: VE as Prime Between-ness Model, 7 Nov'72* Consciousness, 12 Sep'71 Electronic Referendum, 29 Jun'72 Eternal Slowdown (2) Fuller, R.B: Crisis of 1927 (a) Gravity (k)* Individual Universes, (1)(2) Mutual Survival Principles, (1)</p>	<p><u>Process vs. Thing:</u> (1)</p> <p style="text-align: center;">See Behaviorist Word vs. Static Word Eventing</p>

Synergetics Dictionary

<p><u>Process vs. Thing:</u> (2)</p> <p>See Individual Universes, (2) Critical Proximity, Jun'71 Environment, 12 May'77</p>	<p>TEXT CITATIONS</p> <p><u>Proclivities: Differentiated vs. Synergetic:</u> Synergetics, 2nd. Ed. - Sec. 201.10</p>
<p><u>Process:</u> (1)</p> <p>See Pattern Processing Machines Process vs. Thing Process Relationships Automation of Metabolic & Regenerative Processes Urban Processes: Inventory Of Metabolic Process</p>	<p><u>Proclivities: Differentiated vs. Synergetic:</u></p> <p>See Absolute Network, 10 Nov'74</p>
<p><u>Process:</u> (2)</p> <p>See Bird's Nest as a Tool, May'67; (A)(C) Everybody, 3 Oct'71 Universe, 1944 Man as an Invention, 1 Apr'49 Geometry, 21 Jan'75 New York, 1970</p>	<p>TEXT CITATIONS</p> <p><u>Proclivities, Phases & Disciplinas: Inventory Of:</u> Synergetics, 2nd. Ed. : Sec. 201.10</p>
<p><u>Proclivities: Basic vs. Secondary:</u> See Anger, (1)-(3) Human Tolerance Limits, (A)-(D)</p>	<p>TEXT CITATIONS</p> <p><u>Proclivities: Inventory Of:</u> Synergetics - Sec. 1007.15 Synergetics - Sec. 905.16 - Sec. 201.10</p>

Synergetics Dictionary

<p><u>Proclivities: Inventory Of:</u> (1)</p> <p>See Absolute Network Behavioral Phases Behavior Potential Energetic Functions Motion Freedom & Degrees of Freedom Structural Functions</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Procreation:</u></p> <p>"If you think about it, it's probably a very difficult design problem to get an organism to want to <u>procreate</u>. Go to the mirror and stick your tongue way out and have a good look at it. If you didn't have one of those and a salesman came to your door and said, 'I'd like to sell you one of these things. You stick it in your mouth and it does you a lot of good,' I doubt that you'd be very likely to buy that tongue. If you were to take a look at your guts, your kidneys, and then had to go to a supermarket and buy a kit to make a baby, I don't think you could put it together at all. If each of us could see all the organic equipment required to regenerate this extraordinary walking coral reef that we really are, I don't think anybody would <u>procreate</u>."</p> <p>"So in order to be able to get us to <u>procreate</u>, nature gave us a beautiful covering which sort of simplifies, at least, all the frightening colors and coils and such. We have a simplified skin stretched over us, and nature has done a whole lot of tricks, trying to make this thing attractive enough so that <u>procreation</u> will actually occur."</p> <p>- Cite Harry Farrell PLAYBOY Interview, [redacted] Transcript, 30 Oct '71</p>
<p><u>Proclivities: Inventory Of:</u> (2)</p> <p>See Avogadro, Jun'66 Chemical Bonds, May'72 Compound, 13 Mar'73 Cosmic Discontinuity & Local Continuity, 15 Jan'74 Einstein: RBF Draft Letter To, (2) Epistemology of Quantum Mechanics, 16 Dec'73 Field of Cosmic Formabilities, 28 Jan'73 Functions, 26 May'72 Isotropic Vector Matrix, Jul'61 Planck's Constant, (B) Radiation, 20 Jun'66 Structure, 16 Dec'73 Vector Equilibrium, (2); Feb'48; 13 Nov'69 Wealth, 28 Jan'75</p>	<p><u>Procreatively Sterile:</u> (1)</p> <p>See Masturbation</p>
<p><u>Proclivity: Proclivities:</u> (1)</p> <p>See Computer: Atomic-proclivity Computer Differentiated Proclivities Energy Proclivity Model Fall-in Proclivity Functions In-ness Proclivity Phase Proclivities: Inventory Of Proclivities, Phases & Disciplines: Inventory Of Synergetic Proclivity</p>	<p><u>Procreatively Sterile:</u> (2)</p> <p>See Abstraction, 24 Feb'72 Parallel: Quasi-parallel Lines, 1938</p>
<p><u>Proclivity: Proclivities:</u> (2)</p> <p>See Functions, 26 May'72 Valving, 13 May'73 Vector Equilibrium, 15 May'73 Invented Periodicities, May'49 Life & Death, (1)(2) Man: Interstellar Transmission of Man, (A) Cube & VE as Wave Propagation Model, 23 Feb'72 Psychiatry, (3)</p>	<p><u>Procreation:</u> (1)</p> <p>See Adam & Eve Automation of Metabolic & Regenerative Processes Baby Button Life's Original Event Singing: Fear & Longing Man: Automated Metabolism of Man Naked Girl on the Bed Gestation Sex Survival Sequence: Love</p>

Synergetics Dictionary

<p><u>Procreation:</u> (2)</p> <p>See Artifacts, 28 Apr'74 Beautiful, 1938 Divide & Conquer Sequence, (2) Promote: I Don't Promote, 2 Jun'74 Short Cuts, 9 May'57 Tactile Sequence, (2)(3) Wealth as "Know-how", (2) Love, 1 Feb'75 Helpless: Humans Born Helpless, 15 May'75 Mistake, 9 Nov'75</p>	<p>RBF DEFINITIONS</p> <p><u>Profess:</u> <u>Profession:</u></p> <p>"By my own rules I may not profess any special preoccupation or capability. I am a random element."</p> <p style="text-align: right;">- Cite EDUCATION AUTOMATION, p.4 22 Apr'61</p>
<p><u>Production:</u> (1)</p> <p>See Economic Accounting System: Human Life-hour Production Nonproduction</p>	<p>RBF DEFINITIONS</p> <p><u>Profession:</u> <u>Professional:</u></p> <p>"... I am neither a neurosurgeon nor a professional of any discipline. . ."</p> <p style="text-align: right;">- Cite BRAIN AND MIND, first verse, 1970</p>
<p><u>Production:</u> (2)</p> <p>See Human Events, Feb'71 Irreversible, 6 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Professors:</u></p> <p>"You can forget the Universe and, like the other professors, you can become completely unnatural masters and doctors of theoretical myopias."</p> <p style="text-align: right;">- Cite NASA Speech, p. 97. Jun'66</p>
<p><u>Profanity:</u></p> <p>See Spit-punctuated Monosyllabic Verbalism</p>	<p><u>Professable:</u> <u>Profession:</u> (1)</p> <p>See Tenure: Academic Tenure Slave Professions: Slave Disciplines</p>

Synergetics Dictionary

<p><u>Professable: Profession:</u> (2)</p> <p>See Artist, 1968 Invention, 9 Feb'64 Prototype, 13 Mar'73 World Game, 12 Jun'69 Word Trends, May'44 Verb: I Seem to Be A Verb, 26 Apr'77</p>	<p><u>Profile of Industrial Revolution:</u></p> <p>See Industrial Revolution: Profile Of</p>
<p>RBF DEFINITIONS</p> <p><u>Profile: There Is No Half-Profile:</u></p> <p>"There is no half-profile of you. All conceptuality is systemic; it has to be finitely closed."</p> <p>- Citation and context at <u>Conceptuality</u>, 5 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Profit:</u></p> <p>"Profit is just taking the input from the many for the advantage of the few."</p> <p>- Citation & context at <u>Industrialization, (A)</u>, 22 Jan'75</p>
<p><u>Profile: There is No Half-profile:</u> (1)</p> <p>See Facial Asymmetry Picasso Duo-face Picture Split Personality</p>	<p><u>Profit: Annual Profit & Failure System:</u></p> <p>See Economic Accounting System: Human Life-hour Production, (1)</p>
<p><u>Profile: There is No Half-profile:</u> (2)</p> <p>See Conceptuality, 5 Nov'73 Design, 23 Jan'72</p>	<p>RBF DEFINITIONS</p> <p><u>Profit: Man-Invented Game of Quick Profit:</u></p> <p>"Most of man's technology is of meager endurance being comprised at the outset of destructive invention, such as that of weaponry, or for something in support of the quick profit, man invented game of selfishly manipulative game-playing and rule inventing for the playing of his only ignorantly-preoccupying value system."</p> <p>- Citation and context at <u>Technology</u>, 13 Mar'73</p>

Synergetics Dictionary

<p><u>Profit: "We Stars Have Got to Make a Profit":</u></p> <p>See Afford, 29 Jun'72</p>	<p><u>Prognostications About Future of Man:</u> (1A)</p> <p>See Age of Cybernetics Destiny of Humanity Evolution: Subconscious Coordinate Functioning Extraterrestrial Humans Future of Synergetics Historical Event Cognition New Universe: Disclosure of in Next Decade Optimism: Reverse Optimism Point of No Return Prospect for Humanity Stillbirth of Humanity Suicide of Humanity Survival Survival Sequence: Love Surprise: The Nonpolitical Surprise Has Already Occurred Tomorrow Womb Population Year 2000 Transnationalism vs. Colonialism</p>
<p><u>Profit: Profitability:</u> (1)</p> <p>See Afford Capitalism Deficit Accounting Economic Accounting System Expense: Without Any Individual Profiting at the Expense of Another Feeding Lots Money-bee Humans Status Quo Money: Making sense vs. Making Money</p>	<p><u>Prognostications About Future of Man:</u> (1B)</p> <p>See Humanity's Final Cosmic Exam Progress Enough to Go Around Fuller, R.B: Ecological Predictions of 1927 Race with Evolution</p>
<p><u>Profit: Profitability:</u> (2)</p> <p>See Immorality, 22 Aug'70 Pollution, 1968 Industrialization, (A) Humane City, (10) Doing What Needs to Be Done, (1) Building Industry, (3)(4)</p>	<p><u>Prognostications About Future Of Man:</u> (2)</p> <p>See Automation of Metabolic & Regenerative Processes, May'65* Child: A Little Child Shall Lead Them, May'65 Communications, 1967 Computer, (B)(6) Earning A Living Sequence, (3) Economic Accounting System, Sep'72 Environment, 15 Feb'66 Gross World Product Sequence, (3)(4) Isotropic Vector Matrix, 6 Nov'72 Naivete, Mar'66 Newspaper, 16 Oct'72 Population Sequence, (1)-(8) Scrap Sorting & Nongering, (2) Spacehip, (2) Success, May'70 Synergetics, 6 Nov'72 News & Evolution, (3)(4) Enough to Go Around, (1)(2) Options, 13 May'77 Womb of Permitted Ignorance, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Prognostication About Future of Man:</u></p> <p>"I don't think we tend to accredit at all the fact that we might go on to have some other form of living in Universe."</p> <p>- For citation and context see <u>Automation of Metabolic and Regenerative Processes, May '65</u></p>	<p><u>Prognostication:</u> (1)</p> <p>See Prediction Synergetic Advantage: Principle Of</p>

Synergetics Dictionary

RBF DEFINITIONS

Progressions:

"In addition to the simple arithmetic, algebraic, and geometrical progressions of the first, second, and third degrees of acceleration, mathematics discloses other series, and super-series, of superficially unpredictable mathematical frequencies because they are composed of complementary and reciprocal numbers whose products alone, though never occurring simultaneously or in whole, are compositely congruent with complex progressions.

"But these complex components occur in discontinuous series, and are inherently self-inexplicable. The complementary functions must therefore impinge upon consciousness only as meaningless. As immediately contemplated upon first experience, they of necessity, alone, constitute seemingly absolute perversity of interference. Synergy-- wholistic behavior unpredicted by parts."

- Citation & context at Periodic Experience, (4)(5), May'49

Progressive Reduction of Residual Error:

See Exactitude, May'72
General Systems Theory, (B)

RBF DEFINITIONS

Progressions:

"... All progressions are from material to abstract..."

- Citation and context at 'Ephemerization,' p.256 '38
NINE CHAINS TO THE MOON

Progression & Regression:

See Radiation-gravitation: Harmonic, 3 Jan'75

Progressive Invention of Universe:

See Sensorial Identification of Reality, (2)

Progressions:

(1)

See Dimensions
Hierarchies
Manifests
Synergy: Degrees Of
Trends: Trending
Powering
Idea Trending
Physical to Metaphysical
Truth as Progressive Diminution of Residual Error

Progressive Order: Law Of:

See Conservation of Finite Universe: Principle Of,
20 Jun'66

Progression: Progressive:

(2)

See Life, May'49
Quantum Mechanics: Grand Strategy, 10 Apr'75
Tunability: Intra & Ultra, 1954

Synergetics Dictionary

<p><u>Prohibitions:</u></p> <p style="text-align: center;">See Society: Control Of, 1938</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (III)</p> <p>"I use three fundamental reference lines instead of two. When only two lines cross, infinity is involved since one or two lines are open-ended and have no finitely contained areas. If three lines overlap one another they make a triangle. Thus, a finite area is inherently contained. I do not have to break open the data transferred from the sphere to the plane by triangles.</p> <p>"There is, however, what we call spherical excess in the topological transformation of the spherical data to the flat surface. Spherical excess is the only source of distortion. . . Spherical excess refers to the amount by which the sum of the spherical triangle's angles exceed 180°. Spherical excess for a large spherical triangle is very much larger than for a small spherical triangle. For instance, on a spherical tetrahedron each of the angles is 120 degrees, so that the total of the three angles of each of the spherical tetrahedron's four triangles is 360 degrees/ 360 degrees minus 180 degrees leaves an excess of 180 degrees. In a spherical octahedron obtained by bisecting the edges of a spherical tetrahedron and interconnecting the three great circles, each of the angles will be 90 degrees, or</p> <p style="text-align: right;">- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, p. 197.</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Projective Transformation:</u></p> <p>RBF does not like above terminology. Approved designation is "Triangular Geodesics Transformational Projection."</p> <p style="text-align: right;">- Cite RBF to EJA, 200 Locust, Phila., 22 Jan'73</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (IV)</p> <p>"A spherical triangle total of 270 degrees, which means an excess of 90 degrees. If the edges are bisected each of the corners will be 72° 36' with a total of 221° 36', so the spherical excess of 221° 36' minus 180° is equal to 40° 36' and is being reduced very rapidly. Smaller and smaller spherical triangles give less and less spherical excess. Therefore, I subtriangulate the total of the Earth's surface in the largest number of identical equi-edged small triangles, i.e., the spherical icosahedron, where the spherical excess is a minimal 36° . . ."</p> <p>"I have found that if I wanted to take off the total world's data in the largest number of identical triangles and have them symmetrical, the triangles have to be equilaterals. The maximum number of equilateral triangles into which we can subdivide a spherical unity is twenty: a spherical icosahedron." You might ask, "Why can't you have more triangles than twenty?" To explain, I shall first take two triangles and put them together. We see that they hinge and just come to be congruent one to the other."</p> <p style="text-align: right;">- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, p. 197.</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (I)</p> <p>"One of the things I've always wanted to be able to do was to see the whole Earth at once with minimum distortion and maximum effectiveness. That brought me to a method of translating spherical data to a flat surface, which was a direct extrapolation of my mathematical investigations. . . Making a world map took me into the high stratosphere of polyhedra. . . If we put information on a sphere, the maximum that can be read is about one-quarter of the sphere. The tangential information cannot be read. Since our real objective is to be able to read all the information of the total sphere, the whole Earth, then possibly a bigger globe would give more data. But if a bigger globe will do, then why not go to the maximum condition and use the Earth itself? Actually, the bigger the globe, the smaller the reader is in relation to it and the greater the reduction in the material that can be read. There are certain optimal distances of readability. . . Rather empirically, a 12- to 16-inch globe held at arm's length is about the best that can be read from a sphere per se."</p> <p style="text-align: right;">- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, pp. 195-196.</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (V)</p> <p>"A two triangle system has neither insiderness nor outsiderness. I want to make a system which subdivides Universe into all the Universe inside the system and all the Universe outside the system. Now, I can take three triangles and I can put them together around one vertex and make the tetrahedron. A round each vertex there are always a minimum of "three triangles. I can insert a fourth triangle around each vertex and get the octahedron. I can next put a fifth triangle around each vertex and get the icosahedron. In this closed system there are 12 vertexes with five equilateral triangles around each vertex." In a system "the largest number of triangles you can possibly have around a vertex is five. I can take that into the planar condition or the spherical, and in the spherical each of the corners will be 72°. Now that I find that I can get the total Earth's surface on to the icosahedron, the edges of the icosahedron's spherical triangles will all be 63° 26'. If possible, one of the things I want is to take the 12 vertexes of the icosahedron and manipulate them in such a way in relation to the sphere of the Earth that the vertexes always fall in the oceans."</p> <p style="text-align: right;">- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, p. 197.</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (II)</p> <p>"How can I get a total surface to give me the best information? In traditional methods of projection such as Mercator, polyconic, or polar-azimuthal, there is only one point, or line, or pair of lines where there is a true reading: that special line along which the conically or cylindrically curved paper is in actual contact with the sphere. From the line of true contact, accuracy diminishes outwardly in projection. The errors increase very rapidly, particularly in the Mercator projection in which the sphere is split open from the great circle of the equator and spread flat so that two points in the middle of Russia are split to the map's ends and seem to be 25,000 miles apart.</p> <p>"I have found then, that instead of trying to use infinitely severed lines with two polar azimuthal projected hemispheres breaking the whole Earth into two separate circular planes, or the polyconic projection with the northern and southern hemispheres projected as fan-shaped planes with their curved edges tangent to one another at only one point, it is possible to avoid introducing infinity within the projected system."</p> <p style="text-align: right;">- RBF, Univ. of Rhode Island, 26 Aug. '66, p. 196.</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (VI)</p> <p>"Going from the spherical to the planar condition with five 60° angles around each vertex means that there are going to be sines opening up to 60°. I would like to have the sine opening in the ocean and not on the land because one of the most unsatisfactory things about looking at the Earth's data on classical map projections is that the continents themselves are always being distorted in an unfair way. The other fellow's continent is always being broken up instead of our own.</p> <p>"Taking all the Earth's data from the spherical icosahedron to the planar icosahedron permits the corners of the large equilateral triangles to be reduced from 72° to 60° so that there remains only a 20° spherical excess. By using an equilateral triangle that is symmetrical with each of the corners having equal subsidence, the amount of contraction becomes invisible and concentric uniform boundary scale is held for the entire length of the triangle edge, and there is no change in this when going from the spherical to the planar condition. . ."</p> <p style="text-align: right;">- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, pp. 197-198.</p>

Synergetics Dictionary

RBF DEFINITIONS

Projective Transformation: (VII)

"There is local contraction within each small triangle of the three-way grid and that contraction is symmetrical. In all the other familiar methods of map projection, projection errors are dismissed outwardly from the point or line of reference and thereby greatly increased. Compare a circle of radius one with a circle of radius two; because the area of a circle of radius two is approximately four times the area of a circle of radius one, when the dimensional variables of a projected surface are outwardly distributed, the proportion of total map area that is in relatively greatest distortion exceeds by the ratio of three to one the relatively least distorted areas. In my system, the spherical surface subsides inwardly by symmetrical contraction and the proportion of the map which is in relatively greatest dimensional distortion is less by a ratio of one to three than its relatively undistorted area. In my map the error is sent inwardly and is at maximum at the center of each small spherical triangle of the three-way grid system." Every triangle is contracted symmetrically at the same rate."

- Cite RBF, Univ. of Rhode Island, 26 Aug. '66. p. 198.

RBF DEFINITIONS

Projective Transformation: (3)

"The Fuller Projection operates in a series of transformation stages. It first subdivides the total world surface into a plurality of great circle bound polygonal zones. Next it transfers the data from the sphere's surface in separate mosaic 'tiles' corresponding to each of the great circle bound polygonal zones of step one. While migrating as a zonal mosaic tile, each tile (independently) transforms internally from compound curvature to flat surface by methods shown" in the projective transformation model. Each tile transforms entirely within the respective polygonally closed uniform symmetrical containers, allowing none of the data to spill outwardly in perverse distortion.

"When all the tiles have transformed independently from spherical to planar, their straight polygonal edges--unaltered in length during the transformed in transit migration--permit re-association in a variety of continuous data mosaics.

"The Fuller projection has the relationship to all other known projection methods that a mechanically fillable and sealable set of flasks bear to hair combs, hair pins, fish bones, and star spurs, as instruments of liquid transfer."

- Cite Undated sheet: Dymaxion Airocean World Fuller Projective-

RBF DEFINITIONS

Projective Transformation: (VIII)

"Cutting out around the edge of the map in the planar condition and bringing the parts back together makes an icosahedron. If the edges of the triangle are six inches, the folded system is the same as a 12-inch diameter globe. Of course, if you make an icosahedron, you will find it faceted into 12 equilateral triangles. If, however, the faceted icosahedron is compared to a 12-inch globe, the efficiencies of conveying information are equal between the two map systems."

- Cite RBF, Univ. of Rhode Island, 26 Aug. '66., p. 198.

RBF DEFINITIONS

Projective Transformation: (4)

"The Fuller Projection not only contains its surface data increments within uniform and linearly unaltered closed great circle arc polygonal peripheries-- all the way from its spherical to its planar positions-- but also uniquely concentrates all of its spherical angle excess. It concentrates the excess into 360 degree symmetry within equilateral polygons. This means that the compound curvature subsides by symmetrical internal concentric contraction into a flattened condition entirely within its neither elongating nor shortening peripheral integrity. The internal subsidence of the Fuller Projection is in contrast to all predecessor projective methods for showing the whole world within one unitary surface. All the predecessors disperse spherical excess by outward 'fanning', i.e., by stretching out to flattened condition."

- Cite Undated Sheet: DYNAMIXION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION

RBF DEFINITIONS

Projective Transformation: (1)

"Since 1917 Mr. Fuller has been evolving his Airocean World Map and new projection method. . . Due to its inherent advantages in respect to astronomical observation, aerial mosaicing, and comprehensive world triangulation by great circle grid the projection comprises a world-around Airocean strip map of approximately invisible dimensional distortion. . . The Dymaxion Airocean World Map and its projective transformation strategy was glimpse-conceived in 1917, but required over a third of a century of development of" synergetics "to bring it to its present condition. . . the projection is contained entirely within a plurality of great-circle bounded triangles-- or quadrangles-- of constant, uniform modular subdivision whose identical length edges. . . permit their hinging into flat mosaic-tiled continuities at the planar phase of the transformation and thereby permit a variety of hinged-open complete flat world mosaics."

- Cite Undated sheet THE DYNAMIXION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION.

RBF DEFINITIONS

Projective Transformation: (5)

The projective transformation "transfers the spherical data to the planar by employing only great circle coordinates, while all other projections employ a progressively complex admixture of great circle and lesser circle coordinates."

In the projective transformation "from spherical to planar condition the radii of the sphere of reference which penetrate perpendicularly each spherical surface coordinate point of the comprehensive great circle grid, separate from one another at their respective internal ends-- and each and all remain constantly perpendicular to the transforming, internally shrinking surfaces throughout the transformation, and their original uniform lengths also continue as 'constant' throughout the transformation."

- Cite Undated Sheet: DYNAMIXION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION

RBF DEFINITIONS

Projective Transformation: (2)

"To provide a continuous one-surface world map-- while peeling off the sections of the globe-- the transformation must be such that the pieces have straight and matching edges when peeled off and flattened out. Unlike any of its cartographic predecessors which present the whole spherical world surface data within a unit flat surface map, the Fuller projection maintains a uniformly modulated and constant length great circle boundary scale in closed-- 360 degree-- equilateral periphery controls."

- Cite Undated sheet: THE DYNAMIXION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION

RBF DEFINITIONS

Projective Transformation: (6)

"Because of the constant perpendicularity of the Fuller Projection's radii to the transforming surface, the Fuller Projection greatly simplifies celestial calculations. All astronomical phenomena always occur in outward perpendicularity-- zenith-- to the Fuller Projection's internal spherical coordinates. On transformation to planar grids the astronomical data always remains in identical perpendicular zenith to the corresponding coordinate positions in the planar phase of the Fuller Transformation.

"Because of this property the Fuller Transformation would be more suitable than any other projection for a comprehensive planar mosaic of a total covering-set of world-around aerial photographs. Aerial photographs are always taken from zenith positions and at a constant altitude, or radius distance from the Earth's spherical surface."

- Cite Undated Sheet: DYNAMIXION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (7)</p> <p>The projective transformation "consists of great circle bounded triangles of any angular magnitude which can transform the comprehensive geographical data of the world from the spherical to the planar by employment of either the spherical tetrahedron, spherical cube, spherical octahedron, or spherical vector equilibrium and its alternate, the icosahedron, or any development of these. . . It is a discovery of synergetics that there are no other spherical triangular grid bases."</p> <p>- Cite Undated Sheet: DYMATION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION</p>	<p>RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (Dymaxion Airocean World Map:)</p> <p>"The projection system of the Dymaxion Airocean World Map divides the sphere into 20 equilateral spherical triangles which are then flattened to form the icosahedron. These 20 triangles are each projected into a flat plane. . . This method results in a map having less visible distortion than any previously known map projection system. . . To flatten the globe it is simply necessary to 'unfold' the icosahedron."</p> <p>- Cite Synergetics Illustration, #119, caption, 1967</p>
<p>RBF DEFINITIONS</p> <p><u>Projective Transformation:</u> (8)</p> <p>"It is a matter of Dymaxion cartographic strategy that: the greater number of great circle polygonal zones employed in the transformation, the less the spherical excess to be subsidiarily concentrated within each zone surface, and therefore the less the residual distortion distributed to each of the planar mosaic aspects of the whole world's reassembled surface when arrayed in one continuous flat 'skin.'"</p> <p>The projective transformation "represents the only method by which the whole world data can be transferred from the spherical to the planar within an all great circle grid triangularly, quadrangularly, multipolygonally or all two or three together."</p> <p>"Because of a hemisphere's polar symmetry to its opposite polar hemisphere the total inventory of great circle grid triangles in the comprehensive world grid is always even in number, therefore adjacent triangles may always be associated in total or partial quadrangular pattern-phases without increase in vertex count."</p> <p>- Cite Undated Sheet: THE DYMATION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION</p>	<p>RBF DEFINITIONS</p> <p><u>Projective Transformation Model:</u> (I)</p> <p>"I am going to give you a mental model of what I did in developing my method of projection. This is really a 'topological transformation' rather than a 'projection' since it isn't a shadowgram. I am going to take a thin tempered steel band and I am going to mark it with sub-modules, with increments like an engineer's scale. If I bend the band, the modules will all stay in their same original uniform lengths. In a bent condition, or in a flat condition the modules will all read the same. Now I am going to punch holes vertically through both the end module marks of the band and I'm going to take two more such bands each marked with the same modules and I am going to overlap their hole-punched ends, and I'm going to put a round rod through the holes. The rods going through each of the corners of the steel band edged triangles make little swivels. The rods go through the bands vertically and perpendicular to the plane of the triangle formed by the steel bands. If I take hold of the bottom ends of two such rods that go through the holes at the end of one of the steel bands and pull them towards each other, I make the steel band bend. Now I take hold of the bottom ends of all three perpendicular steel rods and pull them towards one another."</p> <p>- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, p. 197.</p>
<p>RBF DEFINITIONS</p> <p><u>Projective Transformation: Raleigh Edition:</u> (2)</p> <p>"The map may be cut around its periphery and bent on its main triangular edges and the exterior edges brought together-- closing all exterior sinuses-- thus making a continuous or finite surface and constituting a planar facted icosahedron transformed from the spherical icosahedron. When the surface is thus closed-- proving itself to be a finite continuity-- and the resulting icosahedron is compared to a globe of the world, the relative shapes and area sizes will be found to be entirely faithful to the spherical globe's relative sizes and shapes."</p> <p>- Cite Undated Sheet: THE DYMATION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION</p>	<p>RBF DEFINITIONS</p> <p><u>Projective Transformation Model:</u> (II)</p> <p>"This will make each one of the steel bands bend. As each one of these bent or arched bands also rotates away from the others, each of the corner angles will be opening up and the three swivel end bands form a spherical triangle."</p> <p>"In my projection I've used great circles for the edges of the spherical triangles and marked them with a uniform boundary scale. A set of fundamental perpendiculars to the great circles, as the radii of the sphere, come at even modules onto the great circles. I have interconnected these edge modules of the spherical triangles with the three-way grid. With this three-way grid I could do as I did above with the tempered steel bands and produce a three-way grid of small spherical triangles within the large spherical triangles of the icosahedron. I can put a grommet where each of these steel bands cross and run a rod through perpendicularly which would represent the radius of the Earth going into the center. Imagine the triangle in a flat or planar condition, with a great many of these bristle-like rods going perpendicular to the surface of the triangle and then pulling them all together at their free ends. The triangles of the three-way grid all form spherical triangles."</p> <p>- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, p. 197.</p>
<p>RBF DEFINITIONS</p> <p><u>Projective Transformation: Raleigh Edition:</u> (1)</p> <p>The projective transformation employed "in the Raleigh Edition of the Dymaxion Airocean World is that of the spherical icosahedron, chosen because the latter has the largest number of identical and symmetrical spherical triangles, and therefore the least 'spherical excess' of all the possible symmetrical triangular great circle bounded mathematical cases. The spherical icosahedron was also chosen because its controlling arc boundary of 63 degrees 26 minutes 05.816... seconds was just adequate to the triangular spanning of the maximum continental aspects encountered in the unpeeling of the Earth's data-- within 20 symmetrical great-circle bound control triangles-- spanning those continents in such a manner that all 12 vertexes of the spherical icosahedron grid lay in the open waters. As a result this peeled strip map contains all the world's continental contours. . . with no displeasing distortions of the shapes."</p> <p>- Cite Undated Sheet: THE DYMATION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION</p>	<p>RBF DEFINITIONS</p> <p><u>Projective Transformation Model:</u> (III)</p> <p>"We find that these rods remain perpendicular to the surface of the triangle throughout all of their transformations. It doesn't matter whether the triangle is flat or is spherical or how it is spherical or what the corner angles are. Each one of these rods will be perpendicular to its spherical triangle at its vertex of attachment just as the radii of the Earth are to the great circles. This means that when we take the geometric data of the stars, any star that is in its zenith over the Earth at any given moment will remain in my map in this vertical position over that point on the Earth whether my map is in a planar condition or a spherical condition."</p> <p>- Cite RBF, Univ. of Rhode Island, 26 Aug. '66, p. 197.</p>

Synergetics Dictionary

RBF DEFINITIONS

Projective Transformation Model:

"The" projective "Transformation is contained entirely within a plurality of great-circle bounded triangles-- or quadrangles-- of constant uniform modular subdivision whose identical length edges-- shown as steel bands in the illustrations. . . --permit their hinging into flat mosaic-tiled continuities at the planar phase of the transformation and thereby permit a variety of hinged-open complete flat world mosaics."

- Cite Undated sheet: THE DYNAMION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION.

RBF DEFINITIONS

Promote: Promotion:

"If you promote you cannot invent."

- Cite RBF to EJA & Michael Denny, Nicholas Restaurant, N.Y. City; 7 Oct'76

RBF DEFINITIONS

Projective Transformation Model:

The projective transformation model demonstrates how the "sonal mosaic tiles migrate, how each tile independently transforms internally from compound curvature to flat surface."

- Cite Undated sheet: THE DYNAMION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION.

RBF DEFINITIONS

Promote: I Don't Promote:

"There is a gestation rate and that's why I don't promote. You can't make babies by Madison Avenue. Nature has to have its due course: the chemical process, so much pressure, and so much heat. You can't overdo it or you'll boil the egg. You'll have a hard-boiled egg."

- Cite tape transcript, p.19; RBF to W. Wolf, Gloucester, Mass., 2 Jun'74

Projective Transformation:

See Constant Zenith Projection*
Transformational Projection*
Internal Control of Distortion

(** Preferred terminology)

RBF DEFINITIONS

Promote: [REDACTED] I Don't Promote:

"... The Design Science Institute will keep his books and writings available and will promote such ideas as his geodesic dome." (Press Release, DSI, 29 Jun'72)

RBF wrote marginal instructions to EJA as follows:

"Sonny: it is one of my own strictest disciplines NOT to promote! The Design Science Institute will also avoid all promotion and is committed as am I to giving forth only when asked by others so to do. Please try to have this sentence deleted from your release. Thanks. B. Fuller, Oct. 6, 1972."

- Cite RBF marginalis as above, 6 Oct'72

Project:

Deproject

Promote: I Don't Promote:

(1)

See Anonymity
Fuller, R.B.: His Decision He Must Not be a Persuader,
But a Doer
Fuller, R.B.: Lecture Invitations
New Forms vs. Reforms

Synergetics Dictionary

<p><u>Promote: I Don't, Promote:</u> (2)</p> <p>See Religion, May'65 Robin Hood Sequence (2) World-around Communication Transcends Politics, (2)(3) Evolutionary Checks & Balances, 26 Aug'75 Options; 13 May'77</p>	<p><u>Pronouns: Checklist:</u> (2)</p> <p>See Vector Equilibrium, Oct'75</p>
<p>RBF DEFINITIONS</p> <p><u>Pronouns: I = We = Us:</u> (1)</p> <p>"The pronoun 'I' is simply the observing system's oversimplified I-identification as with the only-threshold-tunable but directionally-identifiable noise, or point-to-able, as-yet-undifferentiable 'pointal' somethingness.</p> <p>"The experience life being most minimally described as awareness, and awareness being dependent on system otherness, unity is at minimum two: 'I' means 'We.' I is only the system symbol of the observer side of the awareness equation.</p> <p>"You (We) become so preoccupied with interrelationship principles as to become unconscious and unaware of any special case aspects of both the observer and originally observed correspondent as to momentarily lose all consciousness of their mutual environment.</p> <p>"You (I) (We) become one with the environment. You and I and the lamppost. I am a system; you are a system. Systems embrace systems. 'System' is interchangeable with and could replace the you-and-I I-identities. We are both subtunable systems of a greater system of systems. Me-Us is a system. I-We are a"</p> <p>- Cite RBF holograph, 3200 Idaho, Wash., DC; 10 Dec'75</p>	<p>RBF DEFINITIONS</p> <p><u>Proofs:</u></p> <p>"Proofs must proceed from the minimum whole system to Universe and the differentiation-out of Universe of the special case conceptual system. Proofs must start from the minimum something which is the minimum structural system. All geometrical and numerical values derive from fractionation of the whole."</p> <p>- Cite SYNERGETICS 2 draft at Sec. 1052,361; RBF rewrite 8 Aug'77</p>
<p>RBF DEFINITIONS</p> <p><u>Pronouns: I = We = Us:</u> (2)</p> <p>"a system. The system insideness may be hungry; the system's external environment may be cold.</p> <p>"The systemic inside-outness-defining considerability, its fourness, and its sixfold interrelationships which provide the awareness of relevance and irrelevance, is always a priori--is always there in every mo-ment."</p> <p>- Cite RBF Holographm 3200 Idaho, Wash., DC; 10 Dec'75</p>	<p>RBF DEFINITIONS</p> <p><u>Proofs:</u></p> <p>"Proofs must proceed from the whole to the particular, starting from the minimum something. All geometrical and numerical values derive from fractionation of the whole."</p> <p>- Citation & context at <u>Mite as Model for Quark</u>, 3 May'77</p>
<p>PRONOUNS: CHECKLIST (1)</p> <p>See Me-even Matrix of You & I We-me Complex It Self Subjective & Objective Individual & Group Principle Objective Intellect Transcendental It You & Me</p>	<p>RBF DEFINITIONS</p> <p><u>Proofs:</u></p> <p>"...The thing about proofs is that I am really operational and for me the test is: if the airplane flies. If it does fly, then that's operational. But the mathematicians... you read about them in Courant and Robbins... they have a different kind of criteria. Even though they know that a certain situation always produces predictable results every time, it's not necessarily proven... The way they might have points on a surface but don't credit the fact that the points are also on the other side of the surface. But you know the way I start out with one point, then two points, then three points, and the insideness and outsideness with four points.... That shows that principles can be realized independent of size."</p> <p>- Cite RBF to EJA, by telephone from Phila. Office; 7 Oct'75</p>

Synergetics Dictionary

RBF DEFINITIONS

Proofs:

"... Any individual has only limited knowledge of what the total Universe frontiers may be. The list embraces what I know to be my own discoveries and I have no knowledge of others having made those discoveries prior to my own. I am claiming nothing. Proofs may have been made by myself and will be made by myself. Proofs have been made by others and will be made by others. Proofs are satisfying. But many mathematical theorems are of great advantage to humanity over a long period of time before their final mathematical proofs are discovered. The whys and wherefores of what is rated as mathematical proof have been evolved by mathematicians; they are formal and esoteric affirmations from one specialist to another."

- Cite RBF to EJA, Washington DC, 20 Dec. '71 incorporated in SYNERGETICS, at Sec. 250.69. [61]

Propaganda:

(1)

See Psychological Warfare

Proof: Proofs:

(1)

See Circumstance-proved
Knowns Harvested From All the Unknowns
Experimental Demonstrability

Propaganda:

(2)

See Design Revolution, 7 Nov'67
Law, May'65
Superstition, circa 1955
Democracy, 10 Sep'75
New York City, (6)

Proof: Proofs:

(2)

See Science: Left Hand & Right Hand, May'65
Synergetic Strategy of Commencing with Totality, 28 May'72
Geometry, 14 Nov'73
Systematic Realization, 20 Dec'74
Minimum Limit Case, 9 Jun'75
Philosophy, 11 Aug'76
Fourth-dimensional Synergetics Mathematics, 14 Dec'76
Multiplication by Division, 20 Jan'77
Mite as Model for Quark, 3 May'77

Propagative Transformation of the Vector Equilibrium:

See Jitterbug

RBF DEFINITIONS

Propaganda:

"All the Western world's free-enterprise-controlled media's propaganda is designed to rationalize selfishness--this is its function in a world where there is supposed to be lethal inadequacy of life support which therefore assumes a survival-only-of-the-fittest raison d'etre."

- Cite RBF to White House Fellows, Watergate Hotel, Wash. DC; 28 Mar'77; as rewritten by RBF 29 Mar'77

Propagation: Propagative:

(1)

See Electromagnetic Wave Propagation
Energetic Functions
Feedback
Propagative Transformation of the Vector Equilibrium
Spherical Propagations
Quantum Propagation
Wave Propagation ~~Inward-outward-Tendency~~
Wave Propagation Model
Wave System Propagations
Nuclear Propagation Rate

Synergetics Dictionary

<p><u>Propagation: Propagative:</u> (2)</p> <p>See Frequency, 22 Jun'72 Isotropic Vector Matrix, 30 Nov'72 Life, May'49 Observing vs. Articulating, Mar'71 Radiation, May'72 Spheric Domains, 6 Nov'72 Vector Equilibrium, 30 Oct'73 Zerophase, (1) Male & Female, 1 Feb'75 Abstraction, 24 Feb'72 Convergence & Divergence, 6 Jun'75 Synergetics, 11 Oct'73 Metaphysical & Physical Tetrahedral Quanta, 25 Mar'71 Energetic Functions, 8 Aug'77</p>	<p>RBF DEFINITIONS</p> <p><u>Property:</u></p> <p>"The Elimination of Property By Making Ownership Onerous: The elimination of property by making ownership onerous is to be accomplished by making man a world citizen, each to enjoy all the treasures of the whole Earth. He can't any more 'take it with him' around the world than he could 'take it with him' in yesterday's concept of 'into the next world.' He 'can't take it with him' and enjoy the new world of Universe citizenship, and its natural emancipation from slavery chained to ponderous thingness."</p> <p>- Cite WORLD-AROUND PROBLEMS THAT HAVE TO BE SOLVED BY BLOODLESS DESIGN SCIENCE REVOLUTION, 29 June 1972</p>
<p>RBF DEFINITIONS</p> <p><u>Propeller:</u></p> <p>"Let me take one propeller blade by itself. I am going to split it longitudinally and get an S curve, one in which the rates are changing and no power in the curve is the same. So it is asymmetrical by itself: it is repeated six times: positive, negative, positive, negative. . . and the six blades come round in dynamic symmetry. The energy forces involved are in beautiful absolute balance. We have energetic balance."</p> <p>- Cite SYNERGETICS text at Sec. 532.23; Dec'71</p>	<p><u>Property: You Can't Take it With You:</u></p> <p>See Transnational Capitalism & Export of Know-how, (1)</p>
<p><u>Propeller:</u> (1)</p> <p>See Diesel Ship at Sea Dynamic Symmetry</p>	<p><u>Property:</u> (1)</p> <p>See False Property Illusion Obsolete: Inventory of Obsolete Concepts Ownership Private Property Thing: Thingness Politics & Property</p>
<p><u>Propeller:</u> (2)</p> <p>See Ecology Sequence, (G) Wave, 11 Jul'62 Wind Power Sequence, (2)</p>	<p><u>Property:</u> (2)</p> <p>See Literacy, 18 Aug'70 Real, 20 Apr'72 Cosmic vs. Terrestrial Accounting, (4) Invention, (a) Dome Over Manhattan, 26 Apr'77</p>

Synergetics Dictionary

Proportion: Proportionality:

See Interangular Proportionality
Interproportional

R&F DEFINITIONS

Prospects for Humanity:

Q. What are your dreams for the future of society?

R&F: "No society: no Me. I am the product of two, to start off with. No otherness: no me. No otherness: no awareness. The individual is here for problem-solving. We will become much more concerned by Universe than by society. Earning a living is really the mischievous nonsense.

"People will be living in the Macro and the micro. You can put all the things back in the museum and live 3,000 years ago. You can go backwards or forwards in time. We will have fellowships just to think, and fishing is a better place to think than a schoolhouse."

RBF to videotaping session Philadelphia, Pa., 1 Feb'75

Prose:

(1)

See Ventilated Prose
Verse vs. Prose

Prospect for Humanity:

See Meek Have Inherited the Earth, (1)(2)
Walls vs. Airspace Technology, (2)
Success, 10 Sep'75

Prose: Prosaic:

(2)

See Threshold of Life, 6 Jul'62

Prospero-proletarian Predilection:

See Computer Asks an Original Question, (3)

RBF DEFINITIONS

Prospect for Humanity:

"Russians, Arabs, Israelis-- wherever you look-- there is a popular resentment of the political. People are ready... Businessmen are not bad, they're just caught in playing the wrong game... Integrity: it's up to each of us in the little things each of us do... if we don't pick up the paper to clean up our own mess. Humanity is at the final exam. Humanity is not marking the papers.... We are prone to think that the Universe is here to please us and the stars are just so much decoration... And there are so many false jobs that do not produce life support. My predictions?... I know the options, but I don't know whether we're going to make it or not."

Protein Shells:

See Tensegrity Nasts: Pentagonal Polarity, 27 Dec'76

- Cite RBF at videotaping session Philadelphia, PA., 2 Feb'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u> (1)</p> <p>"I will give another example Of always and only co-occurring phenomena. Physicists today observe That the <u>proton and neutron</u> Always and only co-occur. While they are not 'mirror' images of one another And have different weights, They are transformable One into the other, And are thus complexedly complementary, As are isosceles and scalene triangles. None of the angles and edges of either need be the same To produce triangles of equal area, And the sums of the three angles of each will always be one hundred and eighty degrees.</p> <p>"The mathematical balancing or complementation Of the <u>proton and neutron</u> are analogously balanced, Each one having two small energy teammates. The <u>proton</u> has its <u>electron</u> and its <u>antineutrino</u>, And the <u>neutron</u> has its <u>positron</u> and its <u>neutrino</u>. And each of these little three-member teams"</p> <p>- Cite BRAIN & MIND, p.134 May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u> (A)</p> <p>"The astrophysicists say that no matter how far things come apart, they never come further apart fundamentally than proton and neutron which always and only coexist. While one is convertible into the other, the masses are not the same. The conversion of one into the other is only by virtue of each having two side energy effects. In other words the proton and the neutron have its two side energy effects. These are like the resultant and the reaction. And in relation to complementarity. . . The Nobel Prize being given 10 years ago to two young men who discovered that the complementarity was not in mirror-image, as it had been assumed up to that time. We had been assuming that all you had to do was to multiply the Universe by two. For some years it was discovered and demonstrated scientifically, physically, that the complementarity was not the mirror-image.</p> <p>"I'd like to give you a way you can understand how the proton and neutron, which do not have the same mass, yet are interchangeable one with the other, are always known to coexist and are complementary to one another: how could they then do this and not be mirror-image?"</p> <p>- Cite RBF at SIMS, U. Mass, Amherst, 22 July '71, pp 20-21</p>
<p>RBF DEFINITIONS</p> <p><u>Proton and neutron:</u> (2)</p> <p>"Constitute what the physicist calls half-spin or a half-quantum. They complement one another And altogether comprise one unit of quantum. We have now discovered experientially An always and only coexisting tension and compression; An always and only coexisting concave and convex; And an always and only coexisting <u>proton and neutron</u>."</p> <p>- Cite BRAIN & MIND, pp.134-135 May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u> (B)</p> <p>"For instance, you could have an isosceles triangle. And you could have a scalene triangle where all three edges are different. So the scalene and isosceles triangle quite clearly are different triangles. Yet the sums of the angles on the scalene and the isosceles are all 180°. And you could have the sums of the lengths of the edges of the scalene and the sums of the lengths of the edges of the isosceles also the same, which is exactly what we do have in the proton's and neutron's side energy effects, where we have the proton with its electron and its antineutrino; and neutron with its positron and its neutrino. Each of these teams is called one-half quantum; or one-half spin in the physics."</p> <p>- Cite RBF at SIMS, U.Mass, Amherst, 22 July '71, p. 21</p>
<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u></p> <p>"The physicist finds That the <u>proton and neutron</u> Not only always and only co-occur, (AND) are interchangeably transformable, But also could not occur independently Any more than a triangle could occur With only two points. . .</p> <p>"We are founded on The orderly base Of the proton-neutron tripartite teams Of six unique energy integrity vectors."</p> <p>- Citation and context at <u>Universe</u>, pp.156-157 May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u></p> <p>"I'm simply giving you complementarity. We find that nature, with proton and neutron always and only coexisting, by virtue of which the astrophysicist of today has to say that there never could have been anything primordial, that is, something before order-- that there was original chaos and disorder, out of which, surprisingly, order developed. I would say very surprisingly, because it is fundamental to anti-entropy that order inherently increases, disorder inherently decreases, and it would be completely counter probability that out of inherent disorder there would develop a beautiful human being or a lily. . . So the astrophysicist discovers that we must always have had proton and neutron, always and only coexisting; that we must always have had order. Man was disorderly in his ignorance. We find that fundamental complementarity. . . to have to have two to explain and complement one another, is not an illogical matter."</p> <p>- Cite RBF at Sims, U. Mass., Amherst, 22 July '71, Talk 12, p. 27</p>
<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u></p> <p>"When you isolate the neutron you are isolating the concave. When you isolate the proton you are isolating the convex."</p> <p>- Citation at <u>Convex and Concave</u> - Cite RBF to SJA, 3200 Identi, Wash-DC, 29 May '72-</p>	<p>RBF DEFINITIONS</p> <p><u>Proton & Neutron:</u></p> <p>"...A basic orderliness of Universe is provided by the always coexisting proton and neutron which, though complexedly intertransformable, are not mirror images of one another, nor are of equal mass or weight."</p> <p>- Citation and context at <u>Chaos</u>, 13 Nov '69</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u></p> <p>"Of all the essential, harmonic, wave-frequency associable phenomena none is more compatible with all other phenomena than are the proton-neutron teams of physical energy. At the next higher level of complexity no phenomena is more universally associable than is the hydrogen atom. No physical complex is more prolifically reproduced in Universe than is the hydrogen atom. But the proton-neutron teams and the hydrogen atoms are individually invisible to the naked eye and are aesthetically appreciated only by the scientists who deal with the invisible ranges of the great electromagnetic spectrum 'reality.' As the essential complexes first become visibly discernible as snowflakes, minuscule flower blossoms, crystals, or any other of the myriads of minutiae, they are spontaneously acclaimed by man as aesthetically pleasing. This aesthetic pleasure includes not only all other visible visible phenomena ranging from small to large, from starfish to celestial star, but also ranging in biochemical, structural, mechanical, and electromagnetic complexity from the simplest algae and radiolaria to the elephant, the giant redwood, and the human being. The spontaneous aesthetic satisfaction does not stop here but goes on to include the products of these living complexes, which in turn includes humanity's invented tools."</p> <p>- Cite GENERALIZED LAWS OF DESIGN, p.3, 22 Apr'68</p>	<p><u>Protoplasm:</u></p> <p>See Spectrum, 15 Oct'72 Viral Steerability: Angle-frequency Design Control, 22 Jul'71 Animate & Inanimate, 11 Dec'75</p>
<p>RBF DEFINITIONS</p> <p><u>Proton and Neutron:</u></p> <p>"The proton group and the neutron group account rationally for all physical structures."</p> <p>- Cite NASA Speech, p. 64, Jun '66</p>	<p>RBF DEFINITIONS</p> <p><u>Prototype:</u></p> <p>"Just as in art, science, and poetry the most lasting is proven to be the most profoundly understanding and yet most simply articulated, so too may the word prototype in the mass reproducible undertakings of humanity in the most recent decades and most recent century and most recent millenium of humans' known presence on Earth, only be given in retrospect to those one amongst thousands of inventions which are in fact so timely and simply appropriate and adequate as to induce mass reproduction and can thus warrant the only-retrospective identity of prototype. Just as myriads profess to be artists, poets, or scientists, yet history fails to confirm their claim, so too the word prototype is prematurely claimed for enterprize initiating designs which fail to be reproduced."</p> <p>- Cite RBF draft Ltr. to Karan Singh; above omitted from passage incorporated in SYNERGETICS, Sec.260, 13 Mar'73.</p>
<p><u>Proton & Neutron:</u> (1)</p> <p>See Dog Pulling on a Belt Nucleon Quantum Universal Integrity: VE & Icosah</p>	<p>TEXT CITATIONS</p> <p><u>Prototype:</u></p> <p>Nine Chapters to the Moon, p. 38ff, 1938 Letter to Karan Singh - 1973</p>
<p><u>Proton & Neutron:</u> (2)</p> <p>See Chaos, 13 Nov'69* Convex & Concave, 29 May'72* Coupler (2) Equilibrium, 25 Feb'69 Icosahedron as Local Shunting Circuit, 22 Jun'72 Integrity, 24 Jan'72 Modules: A & B Quanta Modules, Apr'72 Quantum: Event-paired Quanta, Jul'66 Universe, May'72* Vector: Threeness of the Vector (1)(2) Crystallography, 17 Aug'70 Human Beings & Complex Universe, (2)(3)</p>	<p><u>Prototype:</u> (1)</p> <p>See Aesthetics of Uniformity Development Fuller, R.B: What I Am Trying To Do Perfect Prototype Reduction to Practice Regenerative Design: Law Of Reproducibility: Law Of Research & Development</p>

Synergetics Dictionary

<p><u>Prototyva:</u> (2)</p> <p>See Dwelling Service Industry, (2): (A) Frame of Reference, 4 Oct'72 Omnimedium Transport Sequence, (3) Reproducible, 30 May'72 Dome House Grand Strategy: 1927-1977, (1) Building Industry, (3)</p>	<p>RBF DEFINITIONS</p> <p><u>Proximity & Remoteness:</u></p> <p>"Whereas none of the geodesic lines of Universe touch one another, the lines approach one another, passing successively through regions of most critical <u>proximity</u>, and diverge from one another, passing successively through regions of most innocuous <u>remoteness</u>."</p> <p style="text-align: center;">- Citation at <u>Geodesic Lines</u>, Oct'59</p>
<p><u>Proxemics:</u> (1)</p> <p>See Population Density: Manhattan Cocktail Party Privacy</p>	<p>RBF DEFINITIONS</p> <p><u>Proximity & Remoteness:</u></p> <p>"Where all the local vectors are approximately equal, we have a potentially isotropic local vector equilibrium, but the operative vector complex has the inherent qualities of <u>proximity</u> and <u>remoteness</u> in respect to any locally initiated <u>action</u> ergo a complex of relative velocities of realization lags."</p> <p style="text-align: center;">- Cite COLLIER'S, p. 113, -Oct'59</p> <p style="text-align: center;">Sec. 425.01 + 240.37</p>
<p><u>Proxemics:</u></p> <p>See Community, (2)</p>	<p><u>Proximity & Remoteness:</u> (1)</p> <p>See Convergence & Divergence Cosmic & Local Privacy vs. Community Unsettling vs. Settlements World Pattern vs. Local Pattern</p>
<p><u>Proximity & Neighborliness:</u></p> <p>See Community, (2)</p>	<p><u>Proximity & Remoteness:</u> (2)</p> <p>See Covariation, 14 May'73 Energy, 6 May'48 Geodesic Lines, Oct'59* Local Vector Equilibrium, 2 Nov'73 Triangular-cammed, In-out-and-around Jitterbug Model, 11 Dec'75 Old Man River Project, 20 Sep'76</p>

Synergetics Dictionary

<p><u>Proximity:</u> (1)</p> <p>See Critical Proximity Fall-in, Shunt-out Proximities Interproximity Proximity & Remoteness Venus Proximity</p>	<p>RBF DEFINITIONS</p> <p><u>Psychiatry:</u> (2)</p> <p>"myself and by the age of 32 I had changed my whole life pattern. . . and at that time I reviewed very truthfully my relationships with my family--particularly my mother--in such a way that I would be able to be very fair to her and to bring out whatever the truth really was. And this is a very important part of doing my own thinking. Whether I did or did not follow the practice of psychoanalysis according to the various theories, I did have some kind of an experience all right--enough to have had an experience that made me think about other human beings and their problems. . . and I certainly think that I got myself into that much of a cul de sac in life that I had to start very fresh and do my own thinking.</p> <p>"I had been brought up in an era that was no longer operative, where the older people were utterly convinced that the younger people's thinking was completely unreliable. . . that it was something that did not firm up until they were 30 or so. And all the younger people were continually being told by the [redacted] older people: 'Never mind what you think! Listen, we're trying to teach you.' And we were taught to get over our sensitivity and to give up all the things that seemed"</p> <p>- Cite transcript (pp. 1 & 2) of RBF tape with Dr. Michael Bruwer, Ritz Carlton, Chicago; 20 Feb'77</p>
<p><u>Proximity:</u> (2)</p> <p>See Tensegrity Sphere: Six Pentagons (1)(2)</p>	<p>RBF DEFINITIONS</p> <p><u>Psychiatry:</u> (3)</p> <p>"to be our fundamental faculties and proclivities. . . . And there was a game. . . there was something called life, and that's the way life really is. . . really a game. And, knowing that my father died when I was very young, and my mother--I knew how much she loved me, that she sent me to the kind of school where she thought I would get something excellent in the way of education, but I was continually being told: 'Never mind what you think!' . . . So I simply made up my mind to try to give up and pay no attention to what I think. . . to give up all my sensitivities and put on an act, and I actually got to be very good at it.</p> <p>"I confused my realities. When I was running and high-jumping, and so forth, I was really very true to whatever I am there. I was very true to myself in a ship at sea and I did very well in the Navy, but the naval officer was a game in itself. We had to be an officer. . . and I did very well in the Navy, did very well as a mechanic--because I didn't have to make any money aboard ship. . . I didn't have another game to be superimposed on it."</p> <p>- Cite Transcript (p.2) of RBF tape with Dr. Michael Bruwer, Ritz Carlton, Chicago; 20 Feb'77</p>
<p>RBF DEFINITIONS</p> <p><u>Psychedelic:</u></p> <p>"I can really understand <u>psychedelic</u> experiences where we depress our definitive resolution capabilities which leaves the phenomenon color uncontestedly supreme."</p> <p>- Cite Museums Keynote Address Denver, p. 4. 2 Jun'71</p>	<p>RBF DEFINITIONS</p> <p><u>Psychiatry:</u> (4)</p> <p>"When I got out of the Navy and had to come into the building world, I found that I was interested in putting up good buildings; and I was not interested in making money. I never had the slightest feeling for making money. I was really tremendously surprised and [redacted] actually felt very badly about why people wanted to play games for money with me--and this spoiled the whole thing. The money idea was obnoxious to me really fundamentally. I tried very hard to play the game and I was no good at it. I was in this cul de sac. I had made a mess of it.</p> <p>"A lot of people thought I was very bright with high initiative and all, and they bet on me and so they lost all their money. I was in a real mess. And I had either three to do away with myself, because I had a new child, and this was not just our first child, but a second child. Our first child died before her fourth birthday--and after a five-year hiatus here was this new life entrusted to us--that my wife and I were to have in Chicago. . . our families were in the East far away when we had this new child."</p> <p>- Cite transcript (pp. 2 & 3) of RBF tape with Dr. Michael Bruwer, Ritz Carlton, Chicago; 20 Feb'77</p>
<p>RBF DEFINITIONS</p> <p><u>Psychiatry:</u> (1)</p> <p>"I have your questions here. You asked me first my general impressions, ideas, and experiences in psychiatry. I haven't any personal experience with psychiatry; that is, I have never been to a psychiatrist. I have known a number of psychiatrists, however, and I have talked to them. . . and I have gone back to 50 years ago here in Chicago when a friend of mine was a student of Jung. . . and I have had conversations with people for many years and I have had a number of students at the university who have been going to psychiatrists. And I have always really questioned whether those students who were going to psychiatrists really needed to go to psychiatrists--almost all of them were students of wealthy families and were having troubles with their families and maybe that was the thing to do. I had a tendency to feel that these students depended too much on the psychiatrist. They were just making another parent and continuing with whatever the problems were and they were just not trying to figure things out on their own.</p> <p>"I have been told by my friends--and particularly by my friend of 50 years ago, Dr. Douglas [redacted] the man who was a student of Jung. . . he said that I had self-analyzed"</p> <p>- Cite transcript p.1 of RBF tape with Dr. Michael Bruwer, Ritz Carlton, Chicago; 20 Feb'77</p>	<p>RBF DEFINITIONS</p> <p><u>Psychiatry:</u> (5)</p> <p>"And so I really had to. . . saying I'm not going to pay any attention to the game. . . and had to actually do my own thinking.</p> <p>"So I tried to understand again how and what human beings are, and how we happen to be in our Universe, and above all learn how to use all the faculties and senses we are given as part of our regular design--a fundamentally important design. That is really all I have to say about my general impressions and experiences with psychiatry--and my relationships to psychiatry--and I have now lived 50 years with this new way of employing my faculties."</p> <p>- Cite transcript (p.5) of RBF tape with Dr. Michael Bruwer, Ritz Carlton, Chicago; 20 Feb'77</p>

Synergetics Dictionary

<p><u>Psychiatry: Psychoanalysis:</u> (1)</p> <p>See Schizophrenia</p>	<p><u>Psychology:</u> (1)</p> <p>See Behavioral Science Mob Psychology Operant Psychology Reflexes Deja Vu Human Tolerance Limits Motive: Motivation Determinism Inferiority Complex Conditioned Reflex Mentality Fortress Mentality Mind Yesterday's Private Castle Mentality Behavior & Environment Feeling Good Mental Health</p>
<p><u>Psychiatry: Psychoanalysis:</u> (2)</p> <p>See Dwelling Service Industry, (6) Responsibility, Dec'69 Self-discipline, May'72 Anger, (1)-(3) Fuller, R.B: Moratorium on Speech, (1)-(3) Six Motion Freedoms & Degrees of Freedom, (5)(6)</p>	<p><u>Psychology: Psychologists:</u> (2)</p> <p>See Consciousness, 14 Feb'72 Metaphysics, Jun'66 Synergetics, 15 Jul'73* Design Science, 22 Apr'67 Anger, (1)-(3)</p>
<p><u>Psycho-guerilla Warfare:</u> (1)</p> <p>See Narcotics as a Political Strategy</p>	<p style="text-align: center;">PSYCHOLOGICAL GEOMETRY (1A)</p> <p>See Awareness Balls Coming Together Conceptuality as Polyhedral Ethical Physics Ego Geometry of Thinking Identity Individuality Individual: Theory of the Individual Interference as a Social Model I Loss: Discovery Through Loss Matrix of You & I Otherness Me Middle Observer & Observed Me the Observer Madonna Theme Individual Universes</p>
<p><u>Psycho-guerilla Warfare:</u> (2)</p> <p>See China (A) Womb Population, (3) Politics & Property, 6 Jul'76</p>	<p><u>Psychological Geometry:</u> (1B)</p> <p>See Precession: Analogy of Precession and Social Behavior Personality Prime Otherness Self Subjective & Objective Social Problems: Tetrahedral Coordination Of Self-now Self & Otherness Swallow the Otherness Tetrahedral Dynamics Thinking: Analogy of Sphere Layers We-Me Awareness Unselfishness You You & Me You & Me Daddy Teleology Me call Pronouns: I = We = Us</p>

Synergetics Dictionary

<p><u>Psychological Geometry:</u> (10)</p> <p>You & I as Pattern Integrityes Pronouns Complex It Individual & Group Principle Split Personality Metaphysical & Physical</p>	<p>RBF DEFINITIONS</p> <p><u>Psychology:</u> "No consciousness: no psychologist."</p> <p style="text-align: right;">- Cite RBF marginalis at Eccles, 'Facing Reality, ' p. 3., 14 Feb '72</p>
<p><u>Psychological Geometry:</u> (2)</p> <p>See Individual, Jun'66 Environment: A Priori Environment, May'72 Remember, 20 Feb'72 Evolution, 22 Apr'71 Free Will, 20 Dec'73 In, Out & Around, 17 May'77</p>	<p><u>Public Lands:</u> See Squatters, (2)</p>
<p><u>Psychological Warfare:</u></p> <p>See Narcotics as Political Strategy Mob Psychology Propaganda</p>	<p><u>Public Opinion Polls:</u> (1)</p> <p>See Electronic Voting</p>
<p>RBF DEFINITIONS</p> <p><u>Psychology:</u> ". . . I find I don't use the word '<u>psychological</u>'."</p> <p style="text-align: right;">■ Citation and context at <u>Synergetics</u>, 15 Jul'73</p>	<p><u>Public Opinion Polls:</u> (2)</p> <p>See World Game, 4 Mar'69</p>

Synergetics Dictionary

RBF DEFINITIONS

Public Relations:

"You need public relations because the new dome you are building is on a technological frontier but not out of this world."

- Cite RBF at Penn Bell videotaping, Philadelphia, 28 Jan'75

Publishing:

(1)

See Books
Idea Stealing
Energetic-synergetic Geometry: Original Publication
In 1944
Fuller, R.B: On Galley Proofs
Fuller, R.B: Unpublished Mathematical Discoveries
Writing

Public Relations:

See Corporation, (2)
Robin Hood Sequence, (2)
Politicians & Defense Budgets, 20 Sep'76

Publishing:

(2)

See Anonymity, 19 Dec'71
Boole, 1970
Problem: Statement Of, Feb'72
Question Answering, Sep'73

RBF DEFINITIONS

Publishing:

"The printing machine belongs to humanity. There is something mysterious in the system of how things get into print-- and once they do then you no longer have the same responsibility."

- Cite RBF at Penn Bell videotaping, Philadelphia, 30 Jan'75

Puerto Ricans Moving into New York:

See City as Center of Abstract Intercourse (2)

RBF DEFINITIONS

Publish:

"Finally after about five years I published this list [of environmental hazards] in an engineering magazine and once it was published it got out of me. I have found that it is good to get things published and forget about them."

- Cite OREGON Lecture #2 - p. 64, 2 Jul'62

Pugh, Anthony:

See Four-triangular Circuits Tensegrity, 6 Apr'77

Synergetics Dictionary

RBF DEFINITIONS

Pull:

"Precession is the pull."

- Citation and context at Intereffects, 25 Sep'73

Pullout:

See Error: Pullout from Error

RBF DEFINITIONS

Pull:

"A chord has pull: we would probably not think about the connections unless there was some pull between them. The function of the chords is to relate. The event is the vertex. The reaction is the chord, the pulling away."

- Citation and context at Chord, 20 Feb'73

Pull:

(1)

See Airplane Flight as Lift
 Bottom: Pulling the Bottom Up
 Directional Field Pulls
 Low Pressure vs. Positives
 Push-pull
 Push-pull: Push Wave & Pull Wave
 Wind Sucking Sequence
 Dog Pulling on a Belt

RBF DEFINITIONS

Pull:

"The beginning of awareness of intellect is otherness, the mass attraction of another with a pull which relates it to all our system."

- Citation and context at Eternal Instantaneity, 22 Jun'72

Pull:

(2)

See Chord, 20 Feb'73*
 Eternal Instantaneity, 22 Jun'72*
 Intereffects, 25 Sep'73*
 Rate, 9 Nov'72
 Rowing Needles (1)(2)
 Orbit, 20 Jan'75
 Weather as Exchange of Highs & Lows, (1)
 Wind Stress & Houses, (7)
 Integrity, 2 Nov'73
 Gravity, 11 Feb'76

RBF DEFINITIONS

Pull:

"In all our experiences there are relatively few principles that are operative in nature; as for instance we had the first instance when we tried to pull something as a child. We tried to pull paper apart, pull books apart, and then we began to try to pull sheets apart and we tried pulling things apart. Then we get onto a boat and someone says 'Hold on to that rope' and you find you are pulling very hard. They say pull this way and then that way-- one is called a sheet and one a halyard and so forth. You have this experience on a special boat and are very excited and for many years you will always think about the 'Primrose' and your fun sailing the 'Primrose' on this special day. You gradually get into other boats and you find there are the same kind of things to be pulled. And you find there is a general kind of thing to be pulled in contradistinction to things that are pushed. This is what we call a generalization. We are beginning to discover patterns that persist, principles that are operative independent of whether the rope was white, or dirty, or yellow, whether it was plastic or whatever it was, you still pulled it."

- Cite Oregon Lecture #2, p. 55. 2 Jul'62

Pulmotor:

See Scenery: Rearrange the Scenery, (2)

Synergetics Dictionary

<p><u>Pulsars:</u> (1)</p> <p style="margin-left: 40px;">See Black Hole Omnilibrium</p>	<p>RBF DEFINITIONS</p> <p><u>Pulsation:</u></p> <p>"One of the things we have to make clear for society is the dilemma of the Max-Planck-descended scientists, the way they do their problems, you can have either a wave or a particle, but not both simultaneously. Heisenberg has the same fault. They make the error of having a wave as a continuity, as a picture-- not as a <u>pulsating frequency</u>. A planar reflex causes them to think of continuous waves."</p> <p style="margin-left: 40px;">Cite RBF to EJA, Somerset Club, Boston, 22 April 1971</p> <p style="margin-left: 40px;">- Citation at <u>Wave vs. Particle</u>, 22 Apr'71</p>
<p><u>Pulsar:</u> (2)</p> <p style="margin-left: 40px;">See Omniequilibrium, (2)</p>	<p>RBF DEFINITIONS</p> <p><u>Pulsation:</u> [REDACTED]</p> <p>"What appears to be congruence will require <u>pulsation</u>, <u>synchronized pulsation</u> of two separate entities."</p> <p style="margin-left: 40px;">Cite RBF to EJA, 3200 Idaho, Washington DC, 25 Jan '72</p> <p style="margin-left: 40px;">- Citation & context at <u>Congruence</u>, 25 Jan'72</p>
<p>RBF DEFINITIONS</p> <p><u>Pulsation:</u></p> <p>"The inward-outward expandibility is the basis of convergence-divergence and radiation-gravitation <u>pulsation</u>-- which seems furthest from man's awareness. This is what science has discovered: a world of waves in which waves are interpenetrated by waves in frequency modulation. There is a systemic interrelationship of basic fourness always accompanied by a sixness of alternatives or freedoms."</p> <p style="margin-left: 40px;">- Cite RBF to EJA, 3200 Idaho, incorporated in SYNERGETICS draft at Sec. 411, 36, 9 Nov'72 [35]</p>	<p><u>Pulsating Controls:</u></p> <p style="margin-left: 40px;">See Cyclic Bundling of Experiences, May'49</p>
<p>RBF DEFINITIONS</p> <p><u>Pulsation:</u></p> <p>"Pulsation, the vector equilibrium is the nearest thing we will ever know to [REDACTED] eternity and God: the zerophase of conceptual integrity inherent in the positive and negative asymmetries which propagate the problems of the consciousness. . . ."</p> <p style="margin-left: 40px;">- Citation & context at <u>Experience</u>, 12 Sep'71</p> <p style="margin-left: 40px;">Cite RBF to EJA, Beverly Hotel, 12 Sept. 1971</p>	<p><u>Pulsation:</u> <u>Pulsativeness:</u> (1)</p> <p style="margin-left: 40px;">See Asymmetric Pulsation Discontinuity Feedback: Self-accelerating Feedback Interpulsativeness Inward & Outwardness Nuclear & Nebular Zonal Waves Omnipulsative: Omninterpulsative Oscillation & Pulsation Resonance Wave System Propagations Wow Pulse Pattern Pulse: Pulsive: Pulsivity In, Out & Around Experiences Expanding & Contracting</p>

Synergetics Dictionary

Pulsation: Pulsativeness:

(2) A

See Calculus, Jul'71
 Complementary, May'72
 Congruence, 25 Jan'72*
 Distributive, 23 Sep'73
 Experience, 12 Sep'71*
 Orbital Feedbacks, 10 Sep'74
 Order & Disorder, May'72
 Physical Reality, 4 Nov'73
 Radial-circumferential, Apr'72; 9 Jan'74
 Radiation: Speed Of (D)
 Star Tetrahedron, 8 Oct'71
 Wave, 22 Apr'71*
 Wave vs. Particle, 22 Apr'71*
 Zerophase (1)
 Vector Equilibrium, 10 Nov'74;
 Intuition, 1 Feb'75
 Omniequilibrium, (1)(2)
 Otherness Restraints & Elliptical Orbits, (2)
 Verse vs. Prose, 11 Dec'75
 Nuclear Pattern of Growth & Decay, 8 Dec'75

RBF DEFINITIONS

Pulse Pattern:

"... Talking about edges of the three frequency vector equilibrium where there are 92 balls on the surface. Now there would be then a frequency of $\#$ three, but there are four balls to an edge going point-to-point, with three spaces in between them. An edge of four balls could either belong to the adjacent square or it could belong to the triangle. It can't belong to them exclusively: it is like our bonding where we get common edges. When I began to take the sequence of the $\#$ wave pattern I found them running through the innards of always eight of the zero nine. I found some of them are characterized by not only that one that 's plus one, plus two, plus three, plus four, minus, plus four, plus three--- what am I saying? Minus one, minus two, minus three, minus four, plus four, plus three, plus two, plus one."

- Cite RBF to EJA. Tape transcript. Chez Wolf. 18 June 1971. pp. 36-37.

Pulsation: Pulsativeness:

(2B)

See Three: Number Function of Three in a Four-axial System, 24 Jan'76

RBF DEFINITIONS

Pulse Pattern:

"The great circles of the vector equilibrium. . . There is one that goes through six vertexes: it has the most possible connections. Six great circles are only going through two vertexes. . . So you've got a very even amount of minus one, minus one, plus two. This is a sequence that occurs time and again. Which is, I have a ball . . . and this is no, no, yes, yes, no, no-- this is nestability of the ball in the center. It is the same as that yes, no, no, yes or yes, no, no, or minus one, minus one, plus two. It is that kind of a sequence. . . Then it goes on again yes, yes, no, yes, yes, no. Or it goes always yes, yes, yes, yes, yes, yes. Or yes, yes, no, yes, yes, no. Or it goes yes, no, yes, no, yes, no. Or it goes yes, yes, yes, yes. There are three ways it can behave. . . You hemispheres are the opposite of the same so it goes yes, yes, no or no, no, yes. . . Or it could go yes, no, yes, no, yes, no. Or it goes yes, yes, yes. These are all the combinations you can get. . ."

- Cite tape transcript RBF to EJA and BO'R, Chicago, Blackstone Hotel, 1 June 1971. pp. 14-15.

RBF DEFINITIONS

Pulse Pattern:

"Beginningless and endless Scenario Universe
 With its vast frequency ranges
 Of omni-interpulsative
 Yes-no, give-and-take
 Radial expansions and circumferential contractions.

p Citation at Scenario Universe, Jan'72
 - CITE EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH, Jan '72.

RBF DEFINITIONS

Pulse Pattern:

"But the six is really the beautiful connector on the vector equilibrium side and it is the one that goes through all the six vertexes. It has the most possible connections.

"... It's a kind of double pulsation. . . It's only going to send energy when it's going through a vertex. So it does this twice in a cycle. Its energy increments between the two going: yes, yes, no; yes, yes, no; so they add up to a pulse. It goes yes, yes, no; boom, no, no; boom, no, no."

- Cite tape transcript RBF to DK and BO'R, 2 May 1971, pp. 8-9.

RBF DEFINITIONS

Pulse Pattern:

"How brilliant and conceptually advanced
 Were the Phoenicians' high seas predecessors,
 The Polynesians,
 For the latter had long centuries earlier
 Discovered the binary system of mathematics
 Whose 'congruence in modulo two'
 Provided unambiguous,
 Yes - no; go - no go
 Cybernetic controls
 Of the electronic circuitry
 For the modern computer
 As it had for millenniums earlier
 Functioned most efficiently
 In storing and retrieving
 All the special-case data
 In the brains of the Polynesians
 By their chanted programming
 And their persistent retention
 Of the specific but no longer comprehended
 Sound pattern words and sequences
 Taught by their successive
 Go - no go, male-female pairs of ancestors."

- Cite Numerology draft August 1971, p.22.

RBF DEFINITIONS

Pulse Pattern:

"... Those have the extraordinary quality of going through a pumping business... 54° 44'; 56° 44'; 70° 32'. . . I use 60° as normal instead of 90°, so 54° 44' is 6° 16'; 5° and 16'. There's 10° and 32'. This is plus two and this is minus one, minus one, plus two, if 5° 16' is unity. . ."

"54° 44' and it leaves you 5° 16'; two times 5° 16' is 10° 32', so it's Minus One Minus One, Plus Two, Minus One, Minus One, Plus Two. . . As it revolves these are where 60° is again our vector equilibrium so you've got the very even amount of Minus One, Minus One, Plus Two. This is a sequence which occurs time and again. . . I have a ball nest in the center. This is no, no, yes; or yes, no, no. . . Then it goes again: yes, yes, no; yes, yes, no, always. This is a basic nuclear arrangement. So you want to get a telegraph system that is going to flash with nuclei and it's going to go yes, yes, no; yes, yes, no. That's what you're getting on the six great circles."

- Cite tape transcript RBF to DK and BO'R - 2 May, pp. 6-7.
 171

Synergetics Dictionary

RBF DEFINITIONS

Pulse Pattern:

"It is fascinating to learn that, with the development of the computer, nature uses a Yes-No or binary system. This is the basis of waves. Consequently the polynesians have been using the most advanced techniques during the period that we have presumed them to be inferior because they only counted to two."

- Cite NAGA TO THE INVISIBLE SEA, p. 6. 1970

Pulse Pattern:

(2)

See Awareness, Feb'50
 Foldability of Great Circles: Spherical Vector Equilibrium, 11 Oct'62
 Integer, 15 Oct'72
 Nucleus, 18 Feb'73
 Scenario Universe, Jan'72*

RBF DEFINITIONS

Pulse Pattern:

"We come into some very interesting conditions of the tetrahedron where we find that a strip of paper, ~~remember~~ remember that we are exploring ways in which nature with a given frequency will do certain things. Remember also precession. We find resultant of forces are not at 180° and therefore there is a tendency to go off angularly. Therefore a zig-zag like this of identical length members becomes a very fundamental precessional consequence of a high frequency event. . . . A continuous strip like this when folded down, down, up, down, down, up, down, down, up, would fold back on itself and form the tetrahedron and octahedron. . . . and the octet trues and fill all space."

- Cite Orgson Lecture #8, p. 300, 12 Jul'62

Pulsivity of Realizations:

See Vector Equilibrium, 30 Oct'73

RBF DEFINITIONS

Pulse Pattern:

"In the sixth frequency there is a ball again. So if you go on layer after layer you will find that it reads: nucleus, no nucleus, no nucleus, nucleus, no nucleus, no nucleus, nucleus, no nucleus, no nucleus. In other words it is yes, no, no, yes, no, no. It is a very different kind of pattern from yes, no, yes, no . . . or yes, yes, yes, or no, no, no. . . . When I folded the piece of paper into a strip and said it was precessing, I said: hill, hill, valley, hill, valley. It is this kind of one. That is, a nucleus set of events could give you a yes, yes, no which would be the same as hill, hill, valley-- so it was a permitted kind of folding in a nuclear set of fundamental prime set of interactions."

Cite Oregon Lecture #8, p. 305, 12 Jul'62

Pulse: Pulsive: Pulsivity:

(1)

See Heartbeat
 Pulsation: Pulsativeness
 Oscillation
 Oscillation & Pulsation
 Palpitate
 Pulse Pattern
~~Pulsation~~

Pulse Pattern:

(1)

See Binary
 Bits: Hitting
 Diesel Ship at Sea
 Dot-dash-dot-dash
 Go-no-go
 Yes-no-no
 Yes-no-yes-no
 Now-you-see-it-now-you-don't

Pulse: Pulsive: Pulsivity:

(2)

See Experience, 12 Sep'71*
 Life, May'69
 Regenerative Design: Law Of, (2)
 Sphere, 31 May'71
 Time, 6 Mar'73; 27 Dec'73
 Universal Integrity: Principle Of, Dec'72
 Vector Equilibrium, 30 Oct'73
 Weather, Feb'73
 Critical Proximity, May'71
 Frequency Islands of Perception, 13 Nov'75
 Time is Only Now, 19 Jul'76
 Orbital Feedback Circuitry vs. Critical Path,
 9 Sep'74

Synergetics Dictionary

Pumping Model:

See Jitterbug

Punishment:

See Design Revolution: Pulling the Bottom Up, (8)(9)
Human Tolerance Limits, (1): (B)

Pump: Pumpable:

(1)

See Angle: Pumping Fraction Factors
Hydraulics
Pulsation: Pulsative

Purchasing:

See Mobile Rentability vs. Immobile Purchasing

Pump: Pumpable:

(2)

See Trees, (3)

'Pure' as an Invented Word:

See Line: Imaginary Straight Line, 22 Apr'71

Punched Cards:

See File Cards with Triangular Array of Holes

RBF DEFINITIONS

Pure Principle:

"What I am saying is that we have only eternity and integrity. Unity is plural in pure principle. The awareness we speak of as life is inherently immortal and equi-eternal."

- Citation & context at Awareness, 10 Feb'73
- circa SYNERGETICS draft at New York, 1009 3d, 10 Feb'73.

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Pure Principle:</u></p> <p>"There is nothing that the tough man can get hold of. That is really what happened during World War I and society paid no attention to it. We went off the invisible and it had been discovered by the people who deal with the invisible that there are no hard core things. If you say that the thing goes off with an awful bang, it is just like I said to you that the water in a wave isn't going from here to there. Yet it is possible for the porpoise to go from here to there surfboarding along with gravity pulling him down forwardly in angles, but the water isn't going from here to there. (There is some top water that gets blown slowly from east to west, but I'm not talking about that.) The porpoise is moving at a very great velocity, and there is no wave of water going there. It is moving in <u>pure principle</u> so it is possible for us to realize that what we call physically pure principle of that bang, because that porpoise can bang up on the beach pretty hard. What he is dealing in is weightless."</p> <p>- Cite Oregon Lecture #4, pp. 123-124. 6 Jul'62</p>	<p><u>Pure:</u> (1)</p> <p>See Inventions vs. Pure Science Events Science: Pure & Applied Science</p>
<p><u>Pure Principle:</u> (1)</p> <p>See Generalized Principle Perfect Prototype Principle</p>	<p><u>Pure:</u> (2)</p> <p>See Communication & Culture, 1 Feb'75 Male & Female, 21 Jan'75</p>
<p><u>Pure Principle:</u> (2)</p> <p>See Absolute Integrity, 4 Nov'73 Awareness, 10 Feb'73* Epistemology of Quantum Mechanics, 16 Dec'73 Event, 29 May'72 Particle (2) Radiolaria (1)(2) Surfing: Surfboarding, 5 Jul'62 Tetrahedron, 20 Feb'73 Understanding, 4 Oct'72 Womb of Permitted Ignorance, 13 Dec'73 Wave Pattern of a Stone Dropped in Liquid, (1) Invisible Tetrahedron, (1)(2) Atom, 8 Sep'75 Cyclic Experience, 1961 Geodesic Domes, 24 Jan'58</p>	<p><u>Purge:</u> <u>Purging:</u></p> <p>See Self-purging</p>
<p><u>Pure Science Events:</u></p> <p>See Inventions vs. Pure Science Events</p>	<p><u>Purines:</u></p> <p>See Hex-pent Structure of Purines</p>

Synergetics Dictionary

<p><u>Purpose:</u></p> <p>See Ends Design Meaning Teleology</p>	<p><u>Push vs. Attraction:</u> (2)</p> <p>See Hammering Sheet Metal, (2)</p>
<p><u>Purposeless:</u></p> <p>See Culture, 11 Aug'76</p>	<p><u>Push Button & Dial Systems:</u> (2)</p> <p>See Industrial Principle, 1 Jun'49</p>
<p>RBF DEFINITIONS</p> <p><u>Push:</u></p> <p>"...I had kept pushing things, trying them out. And it always seemed to come to a dead end..."</p> <p style="text-align: right;">- Citation and context at <u>Fuller, R.B.:</u> <u>Crisis of 1927</u> (A) Feb'72</p>	<p>RBF DEFINITIONS</p> <p><u>Pushive:</u></p> <p>"Radiation is pushive, ergo tends to increase in curvature.... The pushive tends to arcs of ever lesser radius (microwaves are the very essence of this)..."</p> <p style="text-align: right;">- Citation and context at <u>Curvature</u>, 23 Sep'73</p>
<p><u>Push vs. Attraction:</u> (1)</p> <p>See Tensive vs. Pushive</p>	<p>RBF DEFINITIONS</p> <p><u>Pushive:</u></p> <p>"Explosions are <u>pushive</u> and evolute and involute as do rubber toruses."</p> <p style="text-align: right;">- Cite RBF caption for Synergetics Illustration #07: <u>Beverly Hotel, New York, 24 April 1971.</u></p> <p style="text-align: right;">- Citation at <u>Explosions</u>, 24 Apr'71</p>

Synergetics Dictionary

<p><u>Pushive:</u></p> <p>See Tensive vs. Pushive</p>	<p>RBF DEFINITIONS</p> <p><u>Push-Pull:</u></p> <p>"My philosophy also takes heed of the approximately unlimited ratio of length to girth of tensional controls which always tend to <u>pull true</u>, versus the very limited length to girth ratio of <u>pushing</u> devices which, when pushed, tend to bend and break."</p> <p style="text-align: right;">- Citation and context at <u>Ruddering Sequence</u> (5), 1963</p>
<p>RBF DEFINITIONS</p> <p><u>Push-pull:</u></p> <p>/ In reviewing with EJA Athena V. Lord's manuscript of PILOT FOR SPACESHIP EARTH, RBF came across a description of conventional stone structures held together by compression . . . "where the top stones are pushing down on the ones beneath."/</p> <p>RBF: "Nothing could be more erroneous erroneous. How could a top stone push? What would it have to push against? . . . What happens is that gravity pulls the top stone--and all the others--against each other."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash, DC.; 28 Mar'77</p>	<p><u>Push-pull Limits:</u></p> <p style="text-align: center;">See Ignorance, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Push-Pull:</u></p> <p>"The shift between spheres and spaces is accomplished precessionally. You introduce just one energy action-- push or pull-- into the field and its inertia provides the reaction to your push or pull; and the resultant propagates the sphere-to-space, space-to-sphere, transformation whose comprehensive synergetic effect in time propagates an omnidirectional wave. Dropping a stone in the water discloses a planar pattern of precessional wave regeneration. The curves are seen generating and regenerating and are not instantaneous."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1032.24, 22 Feb'73 [20]</p>	<p>RBF DEFINITIONS</p> <p><u>Push-pull Members:</u></p> <p>"Minimum structural stability requires six struts, each of which is a push-pull member. Push-pull structural members embody in one superficially solid system both the axial-linear tension and compression functions.</p> <p>"Tensegrity differentiates out these axial-linears into separately cofunctioning compression vectors and tension tensors. As in many instances of synergetic behavior, these differentiations are sometimes subtle. For instance, there is a subtle difference between Eulerian topology, which is polyhedrally superficial, and synergetic topology, which is nuclear and identifies spheres with vertexes, solids with faces, and struts with edges. The subtlety lies in the topological differentiation of the relative abundance of these three fundamental aspects whereby people do not look at the four closest-packed spheres forming a tetrahedron in the same way that they look at a seemingly solid stone tetrahedron, particularly when they do not accredit Earth with providing three of the struts invisibly cohering the base ends of the camera tripod."</p> <p>(Sec. 722)</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec.s 722.01 & 722.02; 28 Oct'72</p>
<p>RBF DEFINITIONS</p> <p><u>Push-Pull:</u></p> <p>"The twelve degrees of freedom are also then identified as the <u>push-pull</u> directions of the tetrahedron's six edges."</p> <p style="text-align: right;">- Cite RBF to Prof. Theodors Caplow, 18 Feb. '66. - Citation & context at <u>Twelve Universal Degrees of Freedom</u>, 18 Feb'66</p>	<p><u>Push-pull Members:</u></p> <p style="text-align: center;">See Structure, 22 Jul'71</p>

Synergetics Dictionary

Push-pull: Push Phase vs. Pull Phase:

See Visible Light vs. Electricity, 1946

Push-pull: Push & Pull:

(2)

See Necklace (1)(2)
 Polar Vertices, 19 Feb'72
 Rudderling Sequence (5)*
 String, 14 Feb'74
 Tensegrity, 20 Oct'72
 Tensegrity Sphere, 19 Dec'73
 Tetrahedron, 18 Feb'66
 Vector Equilibrium
 Structure, 22 Jul'71, 13 Nov'69; (I)
 Building, 10 Sep'74
 Hammering Sheet Metal, (2)
 Male & Female, 1 Feb'75
 Economics, 1 Feb'75
 Omnimedium Transport Sequence, (3)
 Invisible * Negative, 28 May'75
 Mind Stress & Houses, (10)(11)
 Basic Event, Dec'71
 Triangle, Nov'71
 Window, 22 Nov'77

Push-pull Stabilization:

See Tensegrity Geodesic Grid: Three-way Grid, 10 Oct'63

Push:

(1)

See Pushive
 Push-pull

RBF DEFINITIONS

Push-Pull: Push Wave & Pull Wave:

"The push wave is high frequency.
 The pull wave is low frequency.
 The vector equilibrium consists not of curved lines but
 of wave lines."

- Cite RBF to EJA, Bear Island, 25 August '71.

Push:

(2)

See Curvature, 23 Sep'73
 Explosions, 24 Apr'71
 Flight, 1971
 Evolution, 22 Jun'75

Push-pull:

(1)

See Energetic Functions
 Inventory of Push-pull Alternations
 Intereffects
 Oscillation
 Structural Functions
 Tidal
 Push vs. Attraction
 Tension & Compression

RBF DEFINITIONS

Puzzle of Washington Crossing the Delaware:

(1)

"I am holistic and I really don't want to be limited. It's like a bunch of picture puzzles that we used to have with a picture on the box of what you were making. But let's just suppose we had no picture on the box, and we had ten puzzles in different transparent plastic bags, and we mixed them all up each of the puzzles with the other. puzzles. I think we could, you and I, sort of intuit which kinds of pieces must be with one puzzle and which kinds of pieces with another and eventually we could at least get them all in the right bags again so they could be worked out.

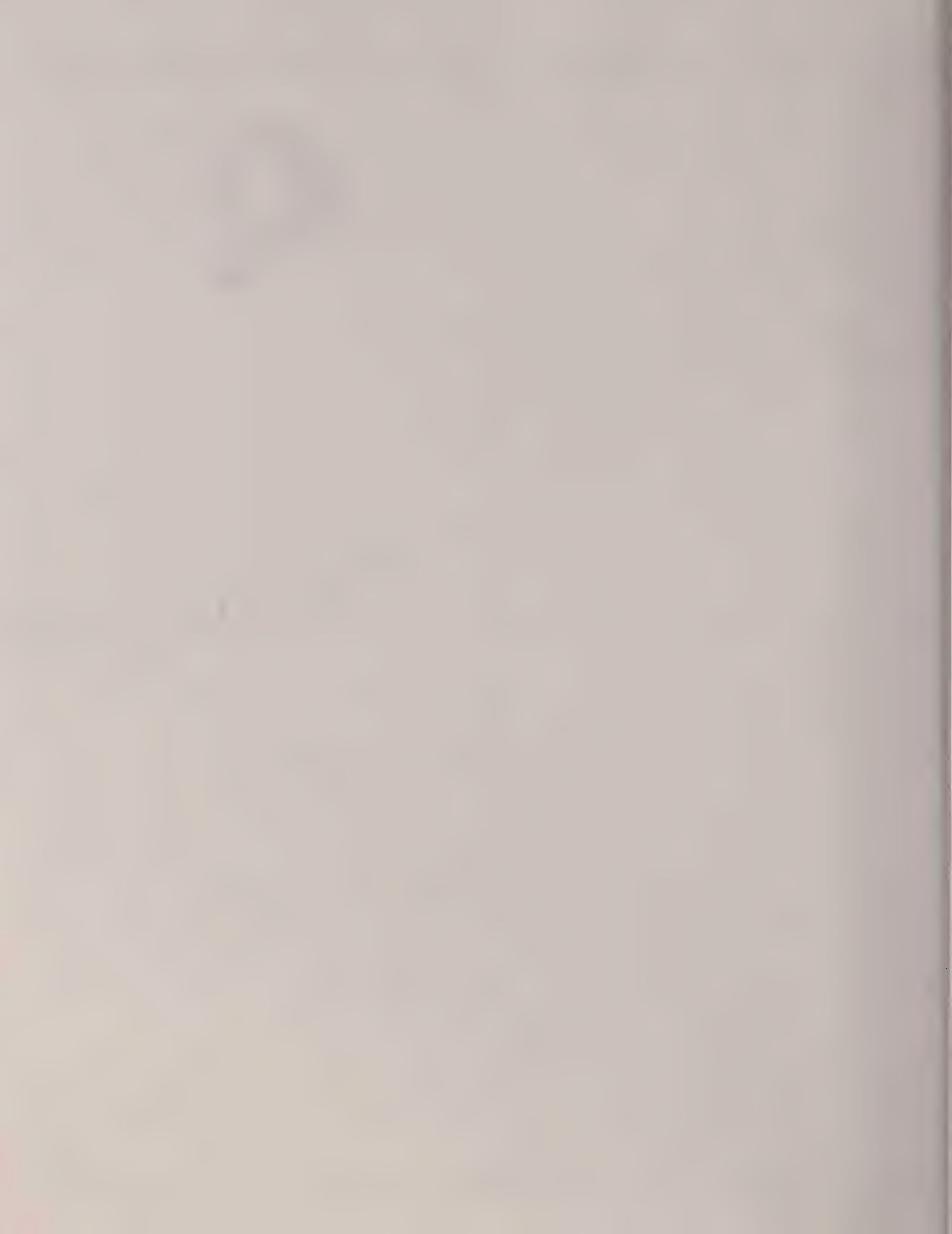
"That's what it's been like here working these days. Like we had a picture puzzle of George Washington Crossing the Delaware. We'd have one little piece that looked like some ice and we'd have another little piece that looked like George's hat. And we're really just throwing in the tiles and that's what I'm doing giving a lecture, when the kids are all following it and you really can go very fast while you're talking about George Washington's hat and then you're talking about the ice around the boat. All that you really have to say and all that you have time for in the lecture is just to say HAT or just to"

- Citation and context at Cosmic Fish Sequence (4), 16 Oct'72

Synergetics Dictionary

<p><u>Pyramid Mystery Cults:</u> See Octahedron: Eighth-octahedra, (4)</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Pythagoras:</u> (1)</p> <p>"We come then to Greece and the earliest of the going from just geometry into numbers and arithmetic and we get to our friend Pythagoras. Pythagoras was a very unknown kind of a character, he's quite a mystical one; he's almost like one of the prophets. The Pythagoreans kept this secret. Pythagoras taught us many things about the second powers of numbers. He was the first to discover the arithmetical second powering and third powering. All the integration of the arithmetic with the geometry comes from Pythagoras.</p> <p>"And we have Pythagoras... having experimentally tried twanging a string, what you might call a stringed instrument and finding that when it had a flat at half the length of the frame string it brought about a change in notes which we today would call on the [?] scale, exactly one octave. This is a Pythagorean discovery; and a man who was terribly interested in fundamental rates of change of number, by various operations of the numbers, one with the other, and all the powerings.</p> <p>"We have him also then thirthing the end of the string and discovering that this took the tone what we call 'down,'"</p> <p>- Cite tape transcript, RBF to EJA, Chez Wolf, 18 Jun'71</p>
<p><u>Pyramid:</u> (1)</p> <p>See Octahedron: Half Octahedron Tetrahedron: Quarter Tetrahedron</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Pythagoras:</u> (2)</p> <p>"either down or up, what we call a fifth, and what we then have is the keys of the sharps or the flats, these are the fifths up and down, the sharps being a fifth up and the flat being a fifth down; five notes in the scale-- so that we have very interesting prime numbers halving the number two and the thirthing bringing about fifths. This would certainly indicate quite clearly a fundamental in our relationship between wave frequencies and number behaviors of octaves. And inasmuch as I'm talking about physics and the waves of the periodic table... its unique frequencies would interact... and what the permutations would be mathematically and I found this highly suggestive that the octave with its characteristically flat resonance really governing the interactions of frequencies. The resonances are the key to much of modern physical exploration. And I think that the very fact that the Pythagoreans were particularly secret is of importance."</p> <p>- Cite RBF to EJA, tape transcript, Chez Wolf, 18 Jun'71</p>
<p><u>Pyramid:</u> (2)</p> <p>See Cube: Diagonal Of, 10 Jul'62 Harmonics, (1)-(4) Octahedron as Photosynthesis Model, (B)(C) Octahedron: Eighth-octahedra, (1)(4)</p>	<p><u>Pythagoras: Pythagorean Theorem:</u> (1)</p> <p>See Control Line of Nature Hypotenuse Cube: Diagonal of Cube as Control Length Tensed String</p>
<p><u>Pyramidines:</u> See Hex-pent Structure of Purines, 15 Dec'76</p>	<p><u>Pythagoras: Pythagorean Theorem:</u> (2)</p> <p>Cube: Diagonal of Cube as Wave Propagation Model, 22 Jun'72 Prime Vector, 20 Jul'74; (2) Radiation-gravitation: Harmonics, 3 Jan'75 Harmonics, (1) Mites & Quarks as Basic Notes, (2)</p>

	Q



Synergetics Dictionary

Quadrangle: Quadrangular:

See Triangular Accounting vs. Quadrangular Accounting

Qualitative:

See Quantitative vs. Qualitative

Quadrant:

See Spherical Quadrant Phases
XYZ Quadrant at Center of Octahedron

HBF DEFINITIONS

Quantize:

"The A and B modules quantize our total experience."

* Cite RBF in Synergetics draft 740.1, 14 Sept. 1971.
Re-editing of Oregon Lecture #8, p. 285.

Quadrivalent:

(1)

See Omnicongruence.
Self-congruence Packing
Chemical Bonds: Quadruple Bond

Quantized Models:

See Synergetics vs. Model (D)

Quadrivalent:

(2)

See Octahedron, 10 Dec'75
Quanta Loss by Congruence, (1)(2)
Four Intergearred Mobility Freedoms, 2 Nov'73

Quantitative vs. Qualitative:

See Synergetic vs. Model (A)

Synergetics Dictionary

<p>Quantitative: Quantation: Quantized: (1)</p> <p style="text-align: center;">See Conceptual vs. Quantitative Accounting Measurement Tetrahedron</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p>Quantum Sequence: (3)</p> <p>"geometry and their clock working together.</p> <p>"Even the centimeter-gram-second (C.G.S.) system had not temperature in their accounting except as a superscript. C.G.S.³ - for temperature... The human proclivity for "building blocks" enhanced their proclivity for cubes and cubic accounting. The stacking of regular tetrahedra leave 7⁰ 20' gaps which seemed to inhibit their allspace-filling function.</p> <p>"So I saw that the vector is a specific angular direction in respect to an axis of observation. The vector is beautiful and unique because its discrete length is a product of mass and velocity. All the qualities of physical reality are present: the mass is in the discrete length and the time is in the velocity. Vectors do not go to infinity. Here is the basis for a generalized Avogadro system as it occurred to me 60 years ago.</p> <p>"The crystals may be probably unique to our planet; they might be incandescent at a different distance from the Sun... So the peas and toothpicks of kindergarten gave me the first model for closest packing."</p> <p>- Cite RBF to World Game Workshop, Rainey Auditorium, U. Penn., 23 Jun'75</p>
<p>Quantitative: Quantation: Quantized: (2)</p> <p style="text-align: center;">See Information, 1967 Synergetic Hierarchy, 13 Nov'69 Unit, 1960 Energy Involvement of 92 Elements, (2) Critical Proximity, May'71 Epistemological Accounting, Nov'71 Modules: A & B Quantá Modules, 20 Dec'73 Energetic Information, 20 Dec'74 Potential vs. Primitive, 12 May'77</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p>Quantum Sequence: (4)</p> <p>"You can get 20 tetrahedra around one point omnidirectionally. ... Frequency does not begin until you have modular subdivision. String polyhedra are like the necklace models. The cube, strung through vertexal connections, will not stand up. Only the tetra hedra, octahedra and icosahedron will stand up as string-connected polyhedra with string joints.</p> <p>"Octahedron: The XYZ quadrant at the center of the octahedron complements the tetrahedron. We may disconnect alternate triangles of the surface of the octahedron and pull eight of them out for the eight-octahedra to make a cube on the octa faces. Thus 1 tetra = 1/8 octa (i.e. 4 x the eight eighth-octahedra on the corners.) Ergo, cube = 3.</p> <p>"Two spheres in Universe → mass attraction → vector equilibrium → nuclear assembly. Nuclear assembly starts with an inherent volume of 20, which is the minimum model of nucleation.</p> <p>"How much do I know? How do I know anything? Our firsthand knowledge of minimum limits is better than all the physics in the textbooks."</p> <p>* Cite RBF to World Game Workshop, Rainey Auditorium, U. Penn., 23 Jun'75</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p>Quantum Sequence: (1)</p> <p>"Quantitriangulation → structural system → one unit of quantum → Lavoisier thought of the nothingness (air) under the bell jar as a plurality of somethingnesses (elements). Under these circumstances you did not have to wait long for the inevitable development of the steam engine.</p> <p>"Then, invisible electromagnetics → no models. Black body radiation involves fourth-power rates of change. Therefore, they said, nature is not using models; she is just using mathematics. The scientists were flying blind on instruments; they said there was no point in trying to look out of the windows; there is nothing to see.</p> <p>"Design science employs the method of accounting employed by nature... Suppose you need six hours to solve your problem. The XYZ coordinates only provide a four-hour clock, a positive-negative, positive-negative, 90-degree clock; perpendicularity gives you only four hours. But since you need six hours you have to resort to mathematics in which you can borrow from yesterday's or from tomorrow's clock... But with the 60-degree hexagon you have an integral six-hour clock."</p> <p>- Cite RBF to World Game Workshop, Rainey Auditorium, U. Penn., 23 Jun'75</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p>Quantum Sequence: (5)</p> <p>"Then we have the total topological inventory of 30 minimum components. Plus two additional components in the poles of the axis of spinability: 32... and the ultimate 33rd is the rest of Universe.</p> <p>"Octahedron: So we have the octahedron in the middle. (Between the tetra and icosah.) It is also the second power of the only even prime number: 2² = 4. The octahedron is the most common form of energy associated as matter. We may consider the octahedron as a water-filled tube, pulling on a water-filled tube. The pulling will make it bulge in the middle. As we pull the gravitational embracement causes a precessional rearrangement of the vector edge whereby one tetrahedron drops out. One quantum has dropped out but, topologically, it is still an octahedron:</p> <p style="text-align: center;">6V + 8F = 12 + 2 (Three face-bonded tetra) or (octahedron) 6V + 8F = 12 + 2, topologically there is no difference. This is the quantum leap, the quantum jump. With interference it precesses from matter to radiation; and then back again into matter. This is the lever that will bring science into further consideration of synergetics."</p> <p>- Cite RBF to World Game Workshop, Rainey Auditorium, U. Penn., 23 Jun'75</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p>Quantum Sequence: (2)</p> <p>"Scientists deal only in linear acceleration reduced to 90-degree grids. They have no model for angular acceleration. The circumferential and chordal measurements are always in terms of irrational hypotenuses. In the XYZ coordinate system the parallels never converge and the cube has no inherent nucleus: eight cubes around a common center. But the symmetrical expansion of radiation is a divergent phenomenon. Thus we see how man entered the world of nature through the attic window.</p> <p>"Design science and our very way of thinking deals in terms of limit cases. We have the tetrahedron with three triangles around each vertex; the octahedron with four triangles around each vertex; and the icosahedron with five triangles around each vertex. The limit cases of a system are three (tetra) and five (icosa). A perpendicular bisector of each of the icosahedron's 20 triangles (from each of the three edges) describe 60 right triangles; actually 120 similar triangles. But in their spherical conformation the 120 spherical right triangles are not identical. There are 60 positive and 60 negative because of the convexity and concavity of spherical projection. The Babylonians were very close but they were unable to get their"</p> <p>- Cite RBF to World Game Workshop, Rainey Aud. U. Penn., 23 June'75</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p>Quantum:</p> <p>"Quantum as prime-structural-system volume is eternally generalized, ergo transcends any particulate, special-case, physical-energy quantation. Generalized quanta are finitely independent because their prime volumetric-domain-defining lines do not intertouch."</p> <p>- Citation & context at Domain & Quantum, 17 Feb'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Quantum:

"Happenability has the vector equilibrium as its minimum model, ergo the Universe, experience, can't be one quantum."

- Cite RBF to EJJ, Bear Island, 25 August 1971.
- Citation and context at Happenability, 25 Aug'71

RBF DEFINITIONS

Quantum [redacted]:

"The tetrahedron is a vectorial model of one quantum of energy."

- Cite NEHRU SPEECH, p. 14, 13 Nov'69

RBF DEFINITIONS

Quantum:

"One quantum . . . turns out to be also the minimum structural system of Universe."

- Cite RBF at SIMS, U. Mass, Amherst, 22 July '71, p.22

RBF DEFINITIONS

Quantum [redacted]:

"One quantum = one tetrahedron
 "One-half quantum = One-half tetrahedron = One triangle =
 = One event."

- Cite P. Pearce Inventory of Concepts, June 1967

RBF DEFINITIONS

Quantum [redacted]:

"At the end of a piece of rope we make a metaphysical disconnect and a new set of observations are inaugurated, each consisting of finite quanta integral ingredients such as the time quality of all finite-energy quanta."

- Cite RBF margin note of Infinity entry from HOW LITTLE, Confirmed and expanded Beverly Hotel, W.F., 19 June 1971.
- Citation at Metaphysical Disconnect, 19 Jun'71

RBF DEFINITIONS

Quantum [redacted]:

"An association of positive and negative half quantum units identifies the tetrahedron as one quantum unit."
 (See Illustration #4.)

- * Cite SYNERGETICS ILLUSTRATION, caption #4, 1967

RBF DEFINITIONS

Quantum:

"Quantum implies particularity."

- For citation and context see Module, 1 Jun '71

RBF DEFINITIONS

Quantum [redacted]:

"The right and left helixes formed of two triangles' respective sets of three edges each constitute the vectorial modelling in conceptual array of the positive and negative "half spins" or "half Quanta" corresponding respectively to the proton set and the neutron set consisting of neutron and [positron ?] and neutrino on the left hand and the proton, electron, and antineutrino on the right hand. Together these six make one quantum unit- which is identified as the tetrahedron."

- Cite DOXIADIS, pp. 312, 313, 20 Jun'66

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Quantum</u> _____:</p> <p>"... The number of all the lines, which is to say the number of all the vectors in the universe, is always a number which is divisible by six. There are no exceptions. Now these six vectors are the six edges of the tetrahedron, which is the basic quantum unit, and consist as we have seen of two sets of three vectors each, each of which sets of three comprises one event, each event consisting always of action, reaction, and resultant."</p> <p style="text-align: right;">- Cite CARSON'S DRAFT IV-17- NASA Speech, p. 63. Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum: Event-paired Quanta:</u></p> <p>"As vectors, the proton and neutron-- being energy events-- both have reaction and resultant vectors which, due to precession, are never 180° angular diversions of the actions. Each set of three vectors looks like a Z. Both the proton's vector group, with its electron and antineutrino, and the neutron's group, with its positron and neutrino, are each called one-half Planck's constant; or one-half spin; or one-half of an energy quantum.</p> <p>"When we bring together these two sets of three vectors each, they integrate as six vectors and make one unit of quantum and coincidentally also make one tetrahedron (of six vector edges). The tetrahedron is veritably the conceptual unit of one energy quantum."</p> <p style="text-align: right;">- Cite NEHRU SPEECH, p.23, 13 Nov'69</p>
<p>RBF DEFINITIONS</p> <p><u>Quantum</u> _____:</p> <p>"The tetrahedron with three positive edges and three negative edges consists of two half quanta. These add to exactly one <u>quantum unit</u>. The tetrahedral quantum unit constitutes the basic structural system of universe. It is transformable, but its topological and quantum identity persists in whole units throughout all experiments with physical universe. It is the only polyhedron that can be turned inside-out and vice versa by one energy event."</p> <p style="text-align: right;">- Cite NASA Speech, p. 56, Jun'66</p> <p>- Citation _____ at <u>Tetrahedron</u>, Jun'66</p>	<p>RBF DEFINITIONS</p> <p>_____ <u>Quantum: Event-Paired Quanta.</u></p> <p>"The discovery of that a structural system may be described as the sum of its surface angles in increments of 720° . . . bears out. . . that the tetrahedron is the basic quantum unit. It also demonstrates the fundamental twoness of ^{its} energy quantum's proton-neutron. It also provides the experimental basis of the Theory of Functions in which a function can only and always coexist with another function as demonstrated by experimentally in all systems as the inside-outside, convex-concave, tension-compression couples. All the foregoing brings us to the recognition of why the proton <u>group</u> and neutron <u>group</u> account rationally for all physical structures."</p> <p style="text-align: right;">- Cite CARSON'S DRAFT IV-17-1 - Cite NASA speech, pp. 63-64. Jul'66</p>
<p><u>Quantum Accounting:</u></p> <p>See Parallax, 23 Sep'73</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum: Event-paired Quanta:</u></p> <p>". . . All patterns, for instance, numbers or phonetic letters, consist of physical ingredients and physical experience recalls. The physical ingredients consist inherently of <u>event-paired quanta</u> and the latter's six-vectored, positive and negative, actions, reactions and resultants . . . "</p> <p style="text-align: right;">- Citation & context at <u>Number</u>, Jun'66</p> <p style="text-align: right;">- Citation at <u>Recursion</u>, Jun'66</p> <p style="text-align: right;">- Cite NASA Speech, p. 58. Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Quantum: Event-Paired Quanta:</u></p> <p>"The six edges of the tetrahedron consist of <u>two sets</u> of three vectors each corresponding to the three-vector teams of the proton and neutron, respectively, each of which three-vector teams are identified by nuclear physics as</p> <p style="padding-left: 40px;">one-half quantum, or one-half Planck's constant, or one-half spin,</p> <p>with always and only co-occurring proton and neutron's combined two sets of three-vector teams together constituting one unit of quantum of energy, which in turn is vectorially identifiable as one tetrahedron, which in turn is identifiable as the minimum structural system of Universe."</p> <p style="text-align: right;">- Cite SYNERGETICS, "Corollaries," Sec. 240.65. 1971</p>	<p><u>Quantum: Event-paired Quanta:</u> (1)</p> <p>See Action Action-reaction-resultant Happening Patterns Minimum System: Minimum Structural System Proton & Neutron Reaction Resultant Three-vector Teams Z Cobras</p>

Synergetics Dictionary

Quantum: Event-paired Quanta: (2)

See Cube: Diagonal Of, (1)

Quantum Jump: Quantum Leap: (1)

See Octahedron as Conservation & Annihilation Model

Quantum Hierarchy:

See Topological & Quantum Hierarchies

Quantum Jump: Quantum Leap: (2)

See Basic Triangle: Basic Equilibrium 48 LCD Triangle, 16 Dec'73
 Octahedron as Annihilation Model, 30 Dec'73
 Octahedron as Conservation & Annihilation Model, 23 Jun'75
 Geometrical Function of Nine, (6)

RBF DEFINITIONS

Quantum Jump:

"The doubling of the vectors is where the quantum comes in: Nothing is lost!"

"It all occurs between the Duo-Tet Cube of 3 (tetra = 1 1/2 and space = 1 1/2) and the biggest nucleated cube of 24. The six edges of the quantum loss can appear in the VE to stabilize it as an icosa. The quantum reappears as edges rather than volume...."

- Citation & context at Quantum Mechanics: Minimum Geometrical Fourness, (3); 26 Aug'76

RBF DEFINITIONS

Quanta Loss by Congruence: (1)

"Euler's Uncored Polyhedra Formula: $V + F = E + 2$

Vector Equilibrium $12 + 14 = 24 + 2$

Octahedron $6 + 8 = 12 + 2$

Tetrahedron $4 + 4 = 6 + 2$

"Though the tetrahedron superficially seems to have only six vector edges, it has in fact 24. The tetrahedron is quadrivalent, meaning that four positive and four negative tetrahedra are congruent."

- Cite RBF/JRMarquette poster "Deceptiveness of Topology," Phila, PA; circa 15 Dec'76 (Incorporated in SYNERGETICS 2 draft at Sec. 1033.51, 6 May'77)

TEXT CITATIONS

Quantum Jump: Quantum Leap:

Goldyllocks, p.D1, 27 May'75

- 539.09
- 905.51
- 982.71
- 982.73
- 985.07
- 1032.11

1013.60;-
1013.64

RBF DEFINITIONS

Quanta Loss By Congruence: (2)

"In exploring the intertransformability of the primitive hierarchy of structuring-as-you-go, omnitriangularly oriented evolution and the interbonding of its evolving structural components, we soon discover that the universal interjointing of systems and their foldability permit the angularly hinged convergence into congruence of vectors, faces, and vertices, (see VE Jitterbug) each of whose multicongruences appear only as one edge, or one vertex, or one face aspects, wherefore topological accounting as presently practiced accounts each of these multicongruent topological aspects as consisting of only one of such aspects."

"Only synergetics accounts for all the congruent (doubled, tripled, fourfolded) tonological aspects' presences by always accounting for the initial inventory of the comprehensive rhombic dodecahedron's tetravolumed 48-ness and the vector equilibrium's inherent tetravolume 20-ness, together with their respective initial or primitive inventories of vertices, faces, and edge lines, which are always present in all stages of the 48 → 1 convergence transformation, though often imperceptibly so."

- Cite RBF/JHMarquette poster "Deceptiveness of Topology," Phila, PA; circa 15 Dec'76 See SYNERGETICS 2 at 1033.52+.53

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Quanta Loss by Congruence:</u> (3)</p> <p>"With recognition of the foregoing topological deceptiveness and always keeping account of the primitive total inventory of such aspects, we find it possible to conceptually demonstrate and prove not only the validity of Boltzman's concepts, but of all quantum phenomena, and thereby to conceptually inter-link synergetics' mathematical accounting with the operational data of physics and chemistry and their complex associabilities manifest as geology, biology, et al."</p> <p>- Cite RBF/JRMarquette poster "Deceptiveness of Topology," Phila, PA; circa 15 Dec'76 - Incorporated in SYNERGETICS 2 draft at Sec. 1031,54</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum Mechanics: Grand Strategy:</u></p> <p>"The grand strategy of quantum mechanics may be described as progressive, numerically rational fractionating of the limit of total energy involved in eternally regenerative Universe."</p> <p>- Cite SYNERGETICS, 2nd. Ed., at Sec. 937.11, 10 Apr'75</p>
<p>RBF DEFINITIONS</p> <p><u>Quantum: Paired-event Quanta:</u></p> <p>"The recallable ingredients of experience consist inherently of paired-event quanta of six-vectored, positive and negative, actions, reactions, and resultants."</p> <p style="text-align: center;">N.B.: RBF corrections to SYNERGETICS galley at Sec. 505.12 suggest his preference for above term as replacement for <u>Event-paired Quanta.</u></p> <p>- Citation and context at <u>Happening Pattern</u>, 6 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum Mechanics: Grand Strategy:</u></p> <p>"... Fractionating the whole: that is quantum strategy. Everything should be neutral until muted."</p> <p>- Citation & context at <u>Harmonica</u>, (1), 1 Feb'75</p>
<p>RBF DEFINITIONS</p> <p><u>Quantum Mechanics:</u></p> <p>"I saw that the whole complex of everyday reality which compounded to constitute the 'environment' continuity was altogether identifiable as pure <u>quantum mechanics</u>. It could therefore be treated with rigorously as a design science."</p> <p>- Cite NASA Speech, p. 36, Jun'66 - Citation & context at <u>Environmental Events Hierarchy</u> (4), Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum Mechanics: Grand Strategy:</u></p> <p>"The quantum mechanics of Universe reveals that the big ones are the least frequent. This is the hierarchy of environmental events. Tornados vs. Mosquitoes. There is an hourglass pattern. And there are specific designing criteria. I wouldn't know how to make a house nova-proof. I don't have to try. This is quantum mechanics."</p> <p>- Cite RBF at Penn Bell videotaping, Philadelphia, 30 Jan'75</p>
<p>RBF DEFINITIONS</p> <p><u>Quantum Mechanics:</u></p> <p>"As a consequence of discovering that the 'environment' could be effectively analyzed by <u>quantum mechanics</u>, it then became clear that what men had been designating as 'typhoons' or 'dew' fell into a table of abstract numbers elegantly arrangeable in an order of energy magnitudes,"</p> <p>- Cite NASA Speech, p. 36, Jun'66 - Citation & context at <u>Environmental Events Hierarchy</u> (5), Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum Mechanics: Grand Strategy:</u></p> <p>"Dealing always in terms of a finite Universe or totality of behavior, we are able to work from the generalized whole to the particular or special-case manifestation of the generalized accounting. This is the basis of the grand philosophical strategy of <u>quantum mechanics</u>."</p> <p>- Cite NASA Speech, pp. 29-30, Jun'66 <u>UNIVERSE - SEC. 305.827</u></p>

Synergetics Dictionary

RBF DEFINITIONS

Quantum Mechanics: Grand Strategy:

"My working assumption that unity was plural and at minimum two actually changed the grand strategy in quantum wave mechanics."

- Citation & context at Unity Is Plural, 6 Jul'62

RBF DEFINITIONS

Quantum Mechanics: Minimum Geometrical Fourness: (3)

"extraction of the polar twoness and without synergetics' analysis which demonstrates the doubling of the vectors. The doubling of the vectors is where the quantum comes in: Nothing is lost!

"It all occurs between the Duo-Tet Cube of 3 (tetra = 1½ and space = 1½) and the biggest nucleated cube of 24. The six edges of the quantum loss can appear in the VE to stabilize it as an icosahedron. The quantum reappears as edges rather than volume. The hierarchy is topological. Even the rhombic dodecahedron has to be omnitriangulated to become stabilized. Each of its diamond faces has to be"

- Cite RBF to EJA, by telephone from Sunset, ME: 26 Aug'76

Quantum Mechanics: Grand Strategy:

See Harmonics, (1)*
 Unity Is Plural, 6 Jul'62*
 Considerable Set, 1959
 Generalization & Special Case, Nov'71

RBF DEFINITIONS

Quantum Mechanics: Minimum Geometrical Fourness: (4)

connected (along the short fold) . . . and you will find that it takes two quanta to do that.

"The 1, 2, 3, and 5 sequence : these are the three-event vectors that also show up in the vector model of the magic numbers (Sec. 995.)"

- Cite RBF to EJA, by telephone from Sunset, ME; 26 Aug'76

RBF DEFINITIONS

Quantum Mechanics: Minimum Geometrical Fourness: (1)

"You can take stones and break them into smaller stones and they will always remain polyhedra--no matter how small. It is like piezo-crystals. You can break down stones → into crystals → into atoms → into minimum set. There is the inevitable minimum set = crystal = tetra. Electromagnetics--like ultrasonics--has a minimum geometrical fourness: What is a chord? What is a quark? well, there are a minimum of four frequencies. The crystals are four-dimensional. Time → spectrum."

- Cite RBF to EJA, from Deer Isle, Sunset, ME; 26 Aug'76

Quantum Mechanics: Minimum Geometrical Fourness:

See Polyhedra, 18 Jul'76
 Tetrahedron as Microsystem, 12 May'77

RBF DEFINITIONS

Quantum Mechanics: Minimum Geometrical Fourness: (2)

"The cosmic hierarchy shows that the rhombic dodecahedron, rather than the vector equilibrium, is the largest in the hierarchy and is also allspace-filling. The successive polyhedra result from further closest packing in which every closest packed sphere has its passive complement. The spheres transform into spaces and the spaces into spheres (as shown in Sec. 1032.)

"This explains why the physicists did not understand Boltzmann's law and how they didn't employ the powerful tool of Euler's topology. They would not have seen the connection with Euler's constant relative abundance without my"

- Cite RBF to EJA, telephone from Sunset, ME; 26 Aug'76

Quantum Mechanics: (1)

See Epistemology of Quantum Mechanics
 Quantum & Wave
 Half Spin
 Chain Reaction
 Quark
 Superatomics
 Transuranium Elements
 Electron

Synergetics Dictionary

<p><u>Quantum Mechanics:</u> (2)</p> <p>See Considerable Set, 1959 Environmental Events Hierarchy (4)*; (5)* Minimum Set, 18 Nov'72 Multiplication By Division, 24 Sep'73; 20 Jan'77 Octantation, May'73 Spin, Dec'71 Subfrequency (1) Synergetics, (p.101) Jun'66 Unity is Plural, 6 Jun'62 Wholes & Parts, 10 Dec'73 Mine, 16 May'75 Tetrahedron: Mine Schematic Aspects, 30 Aug'75 Environment, 29 Mar'77 Human Beings & Complex Universe, (4)</p>	<p><u>Quantum Values:</u> (2)</p> <p>See Universal Integrity: Manifest Ratios & Potential Ratios, 1 Apr'72</p>
<p><u>Quantum Propagation:</u></p> <p>See Frequency, 22 Jun'72</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum Wave Phenomena Sequence:</u> (1)</p> <p>"We say that Universe is design and that design is governed exclusively by frequency and angular modulations, wherefore the 'angle' and 'frequency' must be discretely equatable with quantum mechanics which deals always synergetically with the totality of Universe's finite energy.</p> <p>"The relative acutenesses and the relative obtusenesses of the angle and frequency modulating must relate discretely to the relative mass experienciabilities of Universe.</p> <p>"Quantum wave phenomena's omni-wholeness of required a priori accountability and persistent consideration is always systematically conceivable as a sphere and may be geodesically fractionated into great-circle-plane subsets for circular plane geometry considerability. Quantum waves always complete their cycles (circles). The circle can be divided into any number of arc increments as with the teeth of a circular gear-- many little teeth or a few big teeth. In quantum wave phenomena we may have a few big, or many small, differentiated events, but they will always add to the same whole."</p> <p>- Cite SYNERGETICS draft at Secs. 539.01-.03, 23 Sep'73</p>
<p><u>Quantum Theory:</u></p> <p>See Neutral Axis, 1 Jan'75 Uncertainty Principle, May'67</p>	<p>RBF DEFINITIONS</p> <p><u>Quantum Wave Phenomena Sequence:</u> (2)</p> <p>"The rate of angular change in a big wave is very much slower than the rate of angular change in a small wave, even though they look superficially to be the same forms-- as do two circles of different size appear to be the same form. The difference in the wave that is big and the wave that is small, is always in relation to the dimensioning of the observer's own integral system and determines the discrete difference, (i.e., the 'relativity' of the wave angle.</p> <p>"What is 'the most economical relationship' or 'leap' between the last occurred event and the next occurring event? It is the chord (identifiable only by central angle) and the rate of the central-angle reorientation-aiming most economically toward that event, which is the angular (momentum) energy change involved in the angular and frequency modulation of all design of all pattern integrity of Universe."</p> <p>- Cite SYNERGETICS draft at Secs. 539.04 + .05, 23 Sep'73</p>
<p><u>Quanta Values:</u> (1)</p> <p>See Energy Quanta Values</p>	<p><u>Quantum & Wave:</u></p> <p>See Divide & Conquer Sequence, (1) Environment Controls, (1) Environment Events Hierarchy, 1954 Physics, 28 Jun'72 Periodic Table: Harmonics of 18, 22 May'75 Synergetics, Nov'71 Environment, 29 Mar'77</p>

Synergetics Dictionary

<p><u>Quantum:</u> (1)</p> <p>A Quanta Module B Quanta Module T Quanta Module See Control Quantum Discontinuity Energy Quanta Package Proton & Neutron Relative Quanta Ratios Structural Quanta Teleologic Quanta Series Vector: Threeness of the Vector Wave Quantum Wave Quantum & Indig Bow Ties Wave vs. Particle Z Cobras Volumetric Quantum Photon-quantum Domain & Quantum Invisible Quantum Metaphysical & Physical Tetrahedral Quanta Fourth Quantum Basic Event Structural Quanta vs. Volumetric Quanta</p>	<p style="text-align: center;">TEXT CITATIONS</p> <p><u>Quark:</u></p> <p>(For RBF discussion of <u>quark</u> in synergetics see Ltr. to Dr. Robt. W. Horne, pp. 3 - 6, 14 Feb '66.)</p> <p>Sec. 260,12 (2nd. Ed.)</p> <p>s260,12 s1052,32 s1052,343 s1052,357</p>
<p><u>Quantum:</u> (2)</p> <p>See Angular Topology: Principle Of, 14 Feb'66 Finite, 14 Feb'66 Finite Furniture, 11 Feb'71 Gravity (2) Happenability, 25 Aug'71* Isotropic Vector Matrix, 13 Nov'69 Metaphysical Disconnect, 19 Jun'71* Minimum Set, 18 Nov'73 Neutral Angle, 16 Dec'73 Omnifinite, 11 Feb'71 Pi, Nov'71 Powering (B) Module, 1 Jun'71 Seven Axes of Symmetry, 13 May'73 Tetrahedron, 20 Jun'66; (2); 5 Mar'73; Jun'66* Universe, 25 Aug'71 System & Structure, 16 Aug'70 VE & Icosa, 10 Apr'75 Invisible Tetrahedron, (1)</p>	<p><u>Quark:</u> (1)</p> <p>See Mite as Model for the Quark Half Spin Quantum Mechanics Mites & Quarks as Basic Notes Strange Particles</p>
<p><u>Quantum:</u> (3)</p> <p>See Quantum Accounting Quantum: Event-paired Quanta Quantum Hierarchies Quantum Jump Quantum: Paired-event Quanta Quantum Mechanics Quantum Mechanics: Grand Strategy Quantum Propagation Quantum Theory Quantum Values Quantum & Wave Mechanics Quantum Wave Quantum Wave Phenomena Sequence Quanta Loss by Congruence</p>	<p><u>Quark:</u> (2)</p> <p>See Angular Topology: Principle Of, 14 Feb'66 Invisibility of Macro- and Macro- Resolutions, (2) Microsystems, 22 Mar'76 Quantum Mechanics: Minimum Geometrical Fourness, (1) Tetrahedron as Microsystem, 12 May'77</p>
<p>RBF DEFINITIONS</p> <p><u>Quarks:</u></p> <p>Q. "The high-energy particle physicists have their devices ever seeking the final smallest particle. Will the quarks become quarklets? Are the quarks a by-product of the devices used to seek them, or are they a priori?"</p> <p>RBF: "Yesterday I gave you the A and B Quanta Modules... and a tensed string as a system with mathematical properties. Thus the Mites identify with quarks.</p> <p>"Being tetrahedra, it is no trouble to halve the mites into lower and lower altitude scale tetrahedra... the infinite spinnability of the quarter tetrahedra. There is <u>no limit</u>; but they may arrive at incredibly small volume.... These may well show up as quarklets."</p> <p>- Cite RBF to World Game Workshop'77; Phila., PA; 22 Jun'77</p>	<p>RBF DEFINITIONS</p> <p><u>Quarry: Quarrying:</u></p> <p>". . . By progressively eliminating the degrees of absurdity and working back to the not too absurd . . . he is liable to be able at least to learn the <u>quarry</u>, where his quarry is in a small area. What we call <u>quarrying</u> is objective. These are hunting terms."</p> <p style="text-align: center;">0</p> <p>- Cite tape transcript RBF to BJA and BO'R, Chicago, 1 June 1971.</p> <p>- Citation and context at <u>Reductio ad Absurdum</u>, 1 Jun'71</p>

Synergetics Dictionary

<p><u>Quarry: Quarrying:</u> (1)</p> <p>See Boole Irrelevancies: Dismissal Of Reductio ad Absurdum Twenty Questions</p>	<p><u>Queen Mary: (Steamship):</u></p> <p>See Continuous Man, (1) Industry, 1963 Ruddering Sequence, (2) Tools: Craft & Industrial, 1970; 5 May'67 Trim Tab, Feb'72 Dome over Manhattan, 28 Jan'75 Geoscope, 29 Jan'75 North-south Mobility of World Man, (1)</p>
<p><u>Quarry: Quarrying:</u> (2)</p> <p>See Reductio ad Absurdum, 1 Jun'71*; Nov'71</p>	<p>RBF DEFINITIONS</p> <p><u>Questions: Answering Questions:</u></p> <p>Q. Do you wish to continue this communications mode?</p> <p>A. "I do not wish anything. I am grateful for 'what happens.' I am committed to problem solving by positive competent participation in the inexorable physical evolution's transformative stratagems. I am 78. My mail is prodigious. I cannot answer each letter. Therefore, I write books of answers to most pressing questions. Have published 12 books. If you read them all you would not have had to ask the questions that you did for most of them are answered as best I know how in those books. Please do not think that I consider myself an authority. I have been asking myself questions for my whole lifetime and, a half-century ago, challenged myself to find my own answers by experimnt or in the books instead of asking live questions of others. This did not preclude listening to others when they spoke voluntarily to me. I decid^ed to commit my answers to paper so that I could check myself at a later date; in order by trial and error to learn how to think more adequately and incisively. I am glad that you have written to me and above all that you as a young human are interested in such important questions-- at least to me they are important."</p> <p>- Cite RBF Ltr. replying to one from James Coley, Sep'73</p>
<p><u>Quarterback:</u></p> <p>See Ignorance as Quarterback</p>	<p><u>Question Answering:</u></p> <p>See Self-querying</p>
<p><u>Quarterback: We Applaud the Quarterback and Not the Lineman:</u> (2)</p> <p>See America, 22 Jul'71 Organic Model, Oct'66</p>	<p>RBF DEFINITIONS</p> <p><u>Question Asking:</u></p> <p>"Many years ago I developed a system of question asking in which I ruled that I must always answer the questions from experience. My answers must not be based on hearsays, beliefs, axioms, or seeming self-evidence."</p> <p>- Citation and context at <u>Science</u>, Jun'66</p>

Synergetics Dictionary

RBF DEFINITIONS

Question-asking Possibility:

"There is a question-asking possibility that metaphysical omniscience may be transcendental in its velocity to that of omnipotence, i.e., the definitive physical speed of energy as radiation."

- Cite OMNIDIRECTIONAL HALO, p. 163, as rewritten by RBF in Washington DC, 21 Dec. 1971.

* Citation at Metaphysical and Physical, 21 Dec'71

Question: Largest Askable & Answerable Question:

See Universe, (A); Oct'66

RBF DEFINITIONS

Question-asking Possibility:

"There is a question-asking-possibility that omniscience may be transcendental in velocity to the definitive physical speed of energy omnipotence."

- Cite Omnidirectional Halo, p. 163, 1960.

- Citation at Omniscience Transcendent of Omnipotence, 1960

Question: Most Comprehensive:

See Universe, (1)

Question Asking:

(1)

See Problem: Statement of the Problem
Self-querying
Why For? & How Come?

RBF DEFINITIONS

Question: Original Question:

"... Here then is an original question: born through occurrence of unexpected interference in experimental interpatternings. Original questions of computers or humans probably are, always, products of unexpected interferences. . . "

- Citation and context at Computer (D), 10 Dec'64

Question Asking:

(2)

See Computer, 1960
Conscious & Subconscious, Jun'66
Experience, Jun'66
Formulations, 1963
Metaphysical & Physical, 21 Dec'71*
Omniscience Transcendent of Omnipotence, 1960*
Science, Jun'66*

RBF DEFINITIONS

Question: Original Question:

"The scientist-philosophers of computer integration say that because the asking of original questions is a consequence of interferences, and because interferences are products of time sequences, it follows that original questions are both functions and products of time. There must be a great number of moves and a vast number of computer components before enough time can elapse to develop new types of secondary or tertiary interferences, which in turn may from time to time provoke original questions."

- Citation and context at Computer Asks an Original Question (4) (5), 29 Aug'64

Synergetics Dictionary

<p><u>Question: Original Question:</u> (1)</p> <p style="text-align: center;">See Computer Asks an Original Question Starting with Universe</p>	<p><u>Question:</u> (1)</p> <p style="text-align: center;">See Answer: Answerable Answer: Unit Answer Forty Questions Self-querying Strategic Questions: Inventory Of Twenty Questions Light Side vs. Serious Side of any Question Unanswerable Why: The Unanswerable Why Forgotten Questions</p>
<p><u>Question: Original Question:</u> (2)</p> <p style="text-align: center;">See Computer (D)* Cybernetics, May'65 Interferenca, May'65</p>	<p><u>Question: Questions:</u> (2)</p> <p style="text-align: center;">See Children as Only Pure Scientists, (1)(2) Experience, Oct'66 Sculpture as Single Frame, 22 Jul'71 Survival, 1938 Thinking, 6 Nov'73 Wealth as Know-how, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Question Period:</u></p> <p>"Q. Mr. Fuller, will you be available for a question period after the lecture?</p> <p>"A. Sure we can have a question period. Each young person after the lecture can ask himself his own good questions and come up with his own answers."</p> <p style="text-align: center;">- Cite RBF on Telephone to Dr. Edwin Elkin, Wash. DC, 16 Oct'72</p>	<p><u>Question:</u> (3)</p> <p style="text-align: center;">See Question Asking Question: Answering Questions Question-asking Possibility Question: Largest Askable & Largest Answerable Question: Most Comprehensive Question: Original Question Question Period Question: Each Next Good Question Question: Old Question Question: The Question to Survive</p>
<p><u>Question: Each Next Good Question:</u></p> <p style="text-align: center;">See Future of Synergetics, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Quick and the Dead: Song Of:</u></p> <p style="text-align: center;">"Song of the Dead and the Quick-- Newton was a noun And Einstein is a verb, Einstein's norm makes Newton's norm, INSTANT UNIVERSE, Absurd."</p> <p style="text-align: center;">- Cite HOW LITTLE I KNOW, p.34, Oct'66</p>

Synergetics Dictionary

Quick & the Dead:

(1)

See Animate & Inanimate

Quick: Quickness:

(2)

See Locomotion: Radius of Man's Locomtion, 1 Apr'49

Quick & the Dead:

(2)

See All-acceleration Universe (2)
Instant Universe, vs. All-motion Universe, 22 Apr'61
New York City (10)

Quick Death:

See Death: Slow Death by Slums vs. War as Quick Death

Quick: Quickness:

(1)

See Intellect & Quickness
Reflex

	R

Synergetics Dictionary

RBF DEFINITIONS

Race:

"There is no race other than the human race.

"Those who look superficially different
Are the consequence only
Of millenniums of isolation, attrition inbreeding
And inbreeding of the survival types
Under unique environmental conditions.

"If, in fact, there were different races
No political contriving
Could close the psychological gap.

"But in fact
There is only one race."

- Cite EVOLUTIONARY 1972-1975 SPACE VEHICLE Earth,
Jan. '72, p.14

RBF DEFINITIONS

Race:

(4)

"was not genetic, but the consequence of undernourishment:
i.e., the non-chemically-interbalanced and chemically deficient
diet during gestation or the first year of post-wombland
life, which resulted from the meat-eating nobility's monopoly
of the animal flesh resources and the animals' multi-herb
diet."

- Cite Fragment on RACE, 7 Aug'70

RBF DEFINITIONS

Race:

(1)

"University stir-ups, also greatly heightened by the cold-
war-stimulated awareness of a century of nonfulfilment of
the U.S.A. war for the emancipation of Blacks, and the
economic and cultural bans which prolong the racist discrimi-
nations against nonwhites... with Blacks skillfully persuaded
into activism..."

"I well remember the sense of exultant camaraderie which I
experienced in 1907 when entering 'Upper School' at Milton
Academy. I discovered that the big boys were derisively
displeased with the headmaster and, in learning that he was
to resign, went into a townwide riot of joy. How I whooped
and danced and ran with the others, knowing absolutely nothing
of the merits or demerits of the case against the maligned
and dishonored 'Head.' This gives me insights into the mass
actions of today's students.

"The latter have much more cause for fundamental skepticism,
scorn, displeasure, and action against the establishment in
general because their elders are asleep at the switch of
history's express trains, and because the so-called educational
system is failing to give them powerful insights about what"

- Cite Fragment on RACE, 7 Aug'70

Race with Evolution:

See Synergetics, 21 Jun'71

RBF DEFINITIONS

Race:

(2)

"they need to know and do regarding their elders' dereliction.

"There is no social class distinction, no genetic difference:
only history-long brain damaging by undernourishment between
conception and one-year old. There is no race differentiation,
only a bleach-out of hibernating skin-covered, sub-freezing
dwelling zones: Swarthy pink; Sailor mew; Crossbreed-- and go
into the north to remain as Esklops. Finns and Scandinavian
blondes-- millenniums of tribally inbred long arctic night
hibernaters. Man, born naked prior to invention of clothes,
stayed in temperate zones where his nakedness was tolerable;
but going from Polynesia westward across the Indian Ocean into
arid Africa, he became greatly blackened on his topsides, but
his hands and feet bottoms and fingernail-shielded skin stayed
'white man's' pale pink. White's are bleached out colored
people who are the normal people. The undernourished cereal-
roots- nuts- and bread-eating poor, constituting 99.9 percent
of history-long humanity, thought to be not only illiterate,
but incapable of becoming literate, due to an assumed innate
'dumbness' of the masses. Nobility was assumed, by self and
commoners, to be a kind of god-contrived, different genetic
breed; ergo it was required that the king's sons, daughters,"

- Cite Fragment on RACE, 7 Aug'70

Race:

See Crossbreeding World Man
No Race: No Class
World Man
Nation
Ethnic

RBF DEFINITIONS

Race:

(3)

"nephews, and nieces marry only sons and daughters of royal
or noble stock, whether they be friend or foe.

"Karl Marx assumed the scientific validity of both Malthus
and Darwin with their combined 'fundamental inadequacy of
popular life support' and 'survival only of the fittest.'
He assumed that the working masses were the fittest because,
though dumb, they instinctively understood how to cultivate
agriculture, husband animals, and work the craft tools.
Wherefore the great pirates, the nobility, and the bourgeoisie
who serviced the nobility, were parasites and must perish.
Marx also assumed that the genetic difference between the
nobility and the masses was valid; ergo his fundamental
class warfare inherent in the economic inadequacy to support
both. He also assumed the necessity of downgrading standards
in order to stretch support systems to serve all; and he
assumed minority-party rule by dogmatic adherence to nonindivid-
ualistic code, and annihilation of the treacherous 'other class.'

"For only the last ten years of human history, since 1960,
have we known beyond scientific doubt that the 'mass dumbness'

- Cite Fragment on RACE, 7 Aug'70

Racing:

See Sailboats, Aug'72

Synergetics Dictionary

<p><u>Radar Reflector:</u> See Octahedron: Eighth-octahedra, (2)-(4)</p>	<p>RBF DEFINITIONS</p> <p><u>Radial-Circumferential:</u> "We have demonstrated circumferential complementarity, and circumferential twoness of systems such as the Northern and Southern Hemispheres of our Earth. There is also inward and outward complementarity, inward and outward twoness. As a consequence there are also circumferential oscillations and inward and outward pulsations."</p> <p style="text-align: right;">[10]</p> <p>- Cite SYNERGETICS draft at Sec. 1051.01, Apr'72</p>
<p><u>Radar: Raderscope:</u> See Twenty-foot Earth Globe & 200-foot Celestial Spheres, (1) Lasso, 1946 Octahedron: Eighth-octahedra, (2)-(4)</p>	<p>RBF DEFINITIONS</p> <p><u>Radial-Circumferential:</u> Expansion is radial and contraction is circumferential. (Adapted)</p> <p>- Citation at <u>Expansion & Contraction</u>, Jan'72</p> <p>- Cite EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH, Jan. '72, p. 3.</p>
<p>RBF DEFINITIONS</p> <p><u>Radial:</u> "The time dimension being the radial dimension..."</p> <p>- Citation & context at <u>Dimension</u>, 16 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Radial-Circumferential:</u> "We have demonstrated circumferential complementarity, the circumferential twoness of systems such as the Northern and Southern Hemispheres of our Earth. There is also inward and outward complementarity, inward and outward twoness. As a consequence there are also circumferential oscillations and inward and outward pulsations."</p> <p>- Cite Synergetics, Draft, Sec. 824, August 1971.</p>
<p>RBF DEFINITIONS</p> <p><u>Radial-circumferential:</u> "Complementarity of Circumferential Oscillations and Inward and Outward Pulsations: We have demonstrated circumferential complementarity, the circumferential twoness of systems such as the northern and southern hemispheres of our Earth. There is also concave inward and convex outward complementarity, inward and outward twoness. As a consequence, there are also circumferential skew oscillations and inward and outward pulsations."</p> <p>- Cite RBF rewrite of SYNERGETICS galley at Sec. 1051.10, 9 Jan'74</p>	<p>RBF DEFINITIONS</p> <p><u>Radial-circumferential:</u> "... Circumferential micro- or macro- being finite, and radial being infinite."</p> <p>- Citation and context at <u>Macro-Micro</u>, 1955</p>

Synergetics Dictionary

Radial-circumferential Accelerations:

See Gravitational System Zone, 14 Jan'55

RBF DEFINITIONS

Radial-Circumferential Modularity:

"The linear measurements represent the radial going-away accelerations or resultants of earlier or more remote events as well as of secondary restraints. The rigid rectilinear angularity of the 90° central angle IZ mensuration instituted by the Greeks made impossible any unit language of direct circumferential or peripheral coordination between angular and linear phenomena. As a consequence, only the radial and linear measurements have been available to physics. For this reason physics has been unable to make simultaneous identification of both wave and particle aspects of energy events."

- Cite SYNERGETICS at Sec. 826.04, Sept'72

RBF DEFINITIONS

Radial-Circumferential Coordination:

"The coordinate systems of synergetics are omnidirectionally regenerative by both lines and planes parallel to the original converging set. The omnidirectional regeneration of synergetic coordination may always be expressed in always balanced equivalence terms either of radial or circumferential frequency increments."

[50]
- Cite SYNERGETICS draft at Sec. 962.94, 17 Nov'72

RBF DEFINITIONS

Radial-Circumferential Modular Growth:

In Synergetics there is a total "correspondence of radial wave modular growth with circumferential modular frequency growth of the totally involved vectorial geometry." This means that "angular and linear accelerations are identical."

- Cite Ltr. to Prof. Von Hochstetter, p.4 and footnote, 28 Oct'64

Radial-circumferential Coordination:

See Analytical Geometry, 7 Oct'71
Life & Death, 26 Jan'76

Radial-circumferential Modular Growth:

(1)

See Frequency Modulation
Modular Subdivision

RBF DEFINITIONS

Radial-Circumferential Modularity:

"Had the Greeks originally employed a universal model of x-dimensional reality as their first tool upon and within which they could further inscribe and measure with their divider, scribe, and straightedge, they would have been able to arrive at unity of circumferential as well as radial modularity. This would have been very convenient to modern physics because all the accelerations of all the constantly transforming physical events of Universe are distinguished by two fundamentally different forms of acceleration, the angular and linear accelerations."

- Cite SYNERGETICS at Sec. 826.01, Sept'72

Radial-circumferential Modular Growth:

(2)

See Frequency, Jun'71

Synergetics Dictionary

<p><u>Radial-circumferential:</u> (1)</p> <p>See Boundary Layer Circumferential Finite vs. Radial Infinite In, Out & Around Inward & Outwardness Nuclear & Nebular Zonal Waves Radial & Orbital Spherical Barrel: Radial Compression vs. Circumferential Tension Spherical Field Inwardness vs. Omnidirectional Frequency & Wave</p>	<p>RBF DEFINITIONS</p> <p><u>Radial Depth:</u></p> <p>"Operationally omnitriangulated polyhedra may only be realized systematically, i.e., with special case dimensionality or special case radial depth of insiderness. Dimensionality = radial depth = frequency. Radial depth is expressed in frequency of omnidirectional wave propagations per unit of time."</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed., at Sec. 1071,23, 20 Dec'74</p>
<p><u>Radial-circumferential:</u> (2A) ■</p> <p>See Acceleration: Angular & Linear, 18 Oct'64 Cosmic Discontinuity & Local Continuity, 15 Jan'74 Electric Motor, 25 Jan'72 Expansion & Contraction, Jan'72* Fourth Dimension, 1965 Frequency, 15 Oct'72 Gears: Spherical Gears, May'72 Gravity, 18 Oct'72 Integrity of Universe, 23 Sep'73; 30 Oct'73 Jitterbug, 11 Oct'71 Macro-micro, 1955* Powering: Second Powering, 28 Oct'73 Scenario: Universe, Jan'72 Shunting: Relative Motion Patterns, 1955 Sixty Degreeeness, 1965; 18 Jun'71 Synergetics, 14 May'73; 14 Jan'55</p>	<p><u>Radial Depth:</u> (1)</p> <p style="text-align: center;">See Dimensionality = Radial Depth = Frequency</p>
<p><u>Radial-circumferential:</u> (2B)</p> <p>See Tension & Compression, 1944 Vector Equilibrium, 4 Nov'73 Zoneness: System Zoneness, 8 Jan'55 Peripheral, Sep'72 Verticial Topology, Aug'71 Evaginating, 22 Jun'75 Gravity: Speed Of, 21 Oct'72</p>	<p><u>Radial Depth:</u> (2)</p> <p style="text-align: center;">See Structure, 26 Dec'74</p>
<p><u>Radial Compression vs. Circumferential Tension:</u></p> <p>See Spherical Barrel: Radial Compression vs. Circumferential Tension</p>	<p>RBF DEFINITIONS</p> <p><u>Radial Line:</u></p> <p>"The particular line of geometrical reference humans picked happened not to be the line of most interattractive integrity. It was neither the radial line of radiation nor the radial line of gravity of spherical Earth...."</p> <p style="text-align: right;">- Citation & context at <u>Starting With Parts: The Nonradial Line</u>, 29 Dec'73</p>

Synergetics Dictionary

<p><u>Radial Symmetries:</u> <u>Radially Symmetric:</u></p> <p>See Mites Make All Regular Polyhedra, 27 May'72 Physics & Chemistry: Difference Between, 22 Jun'72*</p>	<p><u>Radial Waves:</u> (1)</p> <p>See Nuclear & Nebular Zonal Waves</p>
<p><u>Radial Unity:</u> (1)</p> <p>See Prime Vector Unit Radius: Unit Vector Radius</p>	<p><u>Radial Waves:</u> (2)</p> <p>See Gears, (p.89) May'72</p>
<p><u>Radial Unity:</u> (2)</p> <p>See Rhombic Dodecahedron, 13 Apr'77</p>	<p><u>Radial:</u> (1)</p> <p>See Nonradial Omnidirectional Radial-circumferential Radius Rain as Radial Omnidirectional: Physical Existence Environment Surrounds Zenith Constancy of Radial Coordination</p>
<p><u>Radial Wave Modular Growth:</u></p> <p>See Vector Equilibrium: Field of Energy, (C)(D) Einstein Equation: $E = Mc^2$, 1959</p>	<p><u>Radial:</u> (2)</p> <p>See Dimension, 16 Nov'72* Einstein: General Theory & Special Theory, 4 Mar'73 Hexagonal Vector Patter, 8 May'72 Omnidirectional, 1954 Omnidirectionality, 17 Feb'73 Sweepout, May'72</p>

Synergetics Dictionary

<p><u>Radial:</u> (3)</p> <p>See Radial-circumferential Radial-circumferential Accelerations Radial-circumferential Coordination Radial-circumferential Modularity Radial-circumferential Modular Growth Radial Line Radial Line as Tetra Edge Radial & Orbital Radial Reach Radial Set Radial Symmetries Radial Waves Radial Unity</p>	<p><u>Radiant:</u> (1)</p> <p>See Omnidiriant Potential vs. Radiant Latent vs. Radiant Convergent vs. Radiant</p>
<p><u>Radian:</u></p> <p>See Pi, 8 Feb'73 Hexagon, Nov'71</p>	<p><u>Radiant:</u> (2)</p> <p>See Convergence, 16 Nov'72 Earth, Jun'66 Geodesic Dome, 12 Mar'74 Frequency, 22 Jun'72 Hexagonal Vector Pattern, 8 May'72 Isotropic Vector Matrix, 30 Nov'72 Radiation-gravitation, 12 Jun'74 Spherical Interstices, 18 Nov'72 Halo, 1938 Nucleus, 13 Nov'75</p>
<p><u>Radiantly Alternate Vertices:</u></p> <p>See Isotropic Vector Matrix, 30 Nov'72 Rhombic Dodecahedron, 30 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation:</u></p> <p>"Radiation is special case, systematically centered, and discontinuously islanded...."</p> <p>"Electromagnetic radiation is distributive and entropic; its frequency magnitudes represent multiplication by division."</p> <p style="text-align: right;">- Citation & context at <u>Radiation-gravitation</u>, 11 Feb'76</p>
<p>RBF DEFINITIONS</p> <p><u>Radiant Valvability of IVM-defined Wavelength:</u></p> <p>"We can resonate the vector equilibrium in many ways. An isotropic vector matrix may be both radiantly generated and regenerated from any vector-centered fix origin in Universe such that any one of its vertexes will be congruent with any other radiantly reachable center fix in Universe; i.e., it can communicate with any other noninterfered-with point in Universe. The combined reachability range is determined by the omnidirectional velocity of all radiation, c within the available investable time."</p> <p style="text-align: center;">[4b]</p> <p>- Cite SYNERGETICS draft at Sec. 426.44, 30 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation:</u></p> <p>"The symmetrical expansion of radiation is a divergent phenomenon."</p> <p style="text-align: right;">- Citation & context at <u>Quantum Sequence</u>, (2), 23 Jun'75</p>

Synergetics Dictionary

RBF DEFINITIONS

Radiation:

"Radiation distributes energy systems outwardly in omnidiametric directions. Radiation fractionates whole systems into multidiametrically dispatched separate packages of the whole. The packaging of spherical unity is accomplished by radii-defined, central-angle partitioning of the spherical whole into a plurality of frequency-determined, simplest, central divisioning, thus producing a plurality of three-sided cornucopias formed inherently at minimum limit of volumetric accommodation by any three immediately adjacent central angles of any sphere of any omnitriangulated polyhedron. The threefold central-angle vertex surroundment constitutes the inner vertex definition of a radially amplified tetrahedral pack of energy; while the three inner faces of the package are defined by the interior radial planes (there is a great-circle plane common to any two radii) of the sphere of omnidiametric distribution; and the fourth, or outermost, face is the spherical triangle surface of the tetrahedron which always occurs at the radial distance outwardly traveled from the original source at the speed of radiation, symbolized as lower-case g ."

- Cite SYNERGETICS draft at Sec. 541.01, 23 Sep'73

RBF DEFINITIONS

Radiation:

"It is also characteristic of these waves
And of all radiation
That when the wave propagation
Is beamingly aimed
Perpendicularly outward from Earth's surface
They experience little or no interferences,
Once outside our atmo-, strato, and ionospheres,
Other than by collision with meteorites
And other celestially traveling objects.

"There seems to be no impedance
And no inherent limitation to the distance
Which such electromagnetic wave signals can go
Once outside the Earth mantles.
As far as we know,
The waves can go on forever in Universe--
Unless they hit some object,
And when they hit an object they lose some energy
Then bounce away
And keep going
In a new direction."

- Cite BHAIN & MIND, pp.158-159 May '72

RBF DEFINITIONS

Radiation:

"Radiation is pushive, ergo tends to increase in curvature...
Radiation tends to increase in its overall curvature
(as in the 'bent space' of Einstein). The pushive tends to arcs of ever lesser radius (microwaves are the very essence of this)..."

- Citation and context at Curvature, 23 Sep'73

RBF DEFINITIONS

Radiation:

"The star tetrahedron's entropy may be the basis of irreversible radiation. . .

- Cite CHIRONICS Draft "Ambitrahedron," 8 Oct. '71, p. 8.
- Citation & context at Star Tetrahedron, 8 Oct'71

RBF DEFINITIONS

Radiation:

"Euler deals with the physical Universe as radiation, or it 'coming apart' phase."

- Cite SYNERGETICS draft at Sec. 1054.12, 6 Mar'73

RBF DEFINITIONS

Radiation:

"Radiation is physical, entropic, incoherent, propelling, disassociative, pushing."

- Cite DOXIADIS, p. 310, 20 Jun'66

RBF DEFINITIONS

Radiation:

"When adequate acceleration
Is imparted to micro aggregations
Of atoms
Sufficient for them to escape
The critical limits
Of both mass attraction
And precession intereffects
Then radiation
At 186,000 m.p.s.
Of the separate energy quanta
Ensues
Which phenomena we speak of as fission
Or fusion
And the generalized behavioral law
(Governing fission or fusion)
And radiation in general
Is that cited by Einstein
Of $E = mc^2$."

RBF SAYS THESE
LINES SHOULD
BE RESTORED

- Cite INIUTION ~~pp.37-38~~ pp.37-38 May '72

RBF DEFINITIONS

Radiation:

"Wave magnitude and frequency are experimentally interlocked as co-functions and both are experimentally gear locked with energy quanta."

- Citation at Frequency, Jun'66

- Cite NASA Speech, p. 100, Jun'66

Synergetics Dictionary

RBF DEFINITIONS

Radiation:

"... c^2 (radiation) means; All the Universe's nonselfinterfering complexes having eccentrically interprocessing, omnidirectionally diffusing patterns resulting in comprehensively degenerative negative limits of dissociabilities as negative (inside-out) de-structures."

- Cite INTRO. to OMNIDIRECTIONAL HALO, p.126, 1959

RBF DEFINITIONS

Radiational Constant:

"... The gravitational constant... is always... more powerful in syntropically cohering the Universe than is the radiational constant of 6.6666665 in entropically disintegrating the Universe by explosion."

- Citation and context at Universal Integrity: Principle Of, 8 May '72

RBF DEFINITIONS

Radiation:

"Radiation is generalized compression..."

- Citation and context at Generalization: Second Degree, 1959

Radiational Constant:

(1)

See Gravitational Constant
Newton vs. Einstein
Universal Integrity: Principle Of
Congruence of Gravitational & Radiational Constants

RBF DEFINITIONS

Radiation Sequence:

(1)

"And we've got no help at all from the stars because they're all areas where the Universe is increasingly disorderly, giving off enormous amounts of radiation in strange kinds of Sun rays, and so forth-- great Sun spots, which we begin to find have some regularity. But you and I didn't know that regularity before because, in a sense, it was so infrequent-- whatever it might be. We didn't have observation to know there were Sun spots up to yesterday."

"Then all the physical is the visible, astronomical world where we use the optical telescope to give us the information. Optical means we're using that disorderly radiation to identify the positioning of the stars. . . . So, looking around for some phase of Universe where energies are contracting and becoming increasingly orderly, we find the only example that we really know much about is our own Earth. We do know that in the last International Geophysical Year that we're collecting somewhere around 100 tons of stardust daily. And we're finding our radiation from all the stars, the cosmic radiation-- and primarily from the Sun-- is not just bouncing off our Earth at all, but being impounded as energy. The radiation to start off with is in the Van Allen belts."

- Cite RBF to World Game, Jun-Jul'69

Radiational Constant:

(2)

See Icosahedron as Electron Model, 7 Mar'73

RBF DEFINITIONS

Radiation Sequence:

(2)

"Then the atmosphere bends that radiation very readily so that it gives us the red-yellow-orange-green-blue-violet colors themselves. Then when the radiation gets to the water-- three-quarters of the Earth being covered with water-- you see how much it is bent simply by putting a pole into the water and looking at the bending of it. . . . There's bending, bending, bending until finally the radiation is so bent it gets now impounded horizontally into the surface of the water around our Earth, and we get these horizontal moving streams such as the Gulf Stream, the great warmth. We have then the enormous impounding of the energy of the Sun in just the heating of the atmosphere, bringing about all our storms, the various low pressures and high pressures depending the heating is being impounded by large moisture concentrations or low."

"And so this enormous energy is being collected here, and this radiation then is atomizing the ocean, and then it gets dropped back again, pulled back by gravity as rain. And we find then vegetation operating; vegetation on the dry land and algae in the sea, impounding the energy of the Sun by photosynthesis."

- Cite Rbf to World Game, Jun-Jul'69

RBF DEFINITIONS

Radiation vs. Crystal Model:

"... In addition to its heat-transmitting properties, the radiation is also a yes-no, frequency programmed, information carrier-- which precessionally transforms the three tetrahedral quanta of radiation into the four-quanta octahedral crystals in the atomic formation of the hydrocarbon molecules."

- Citation & context at Radiation as Information-carrier, 9 Jun'75

Synergetics Dictionary

<p><u>Radiation vs, Crystal Model:</u></p> <p>See Information Transmitting & Nontransmitting Model</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation:</u></p> <p>"Electromagnetic radiant energy is entropic; gravitational energy is syntropic."</p> <p style="text-align: right;">- Citation & context at <u>Gravity</u> (d), 12 Jun'74</p>
<p><u>Radiation as Entropy:</u></p> <p>See Instant Universe, (1)(2) Celestial Radiation Accumulators, 28 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation:</u></p> <p>"Radiation is disintegrative; gravity is integrative."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 541.05, 23 Sep'73</p>
<p>RBF DEFINITIONS</p> <p><u>Radiation-gravitation:</u></p> <p>"Radiation is special case, systematically centered, and discontinuously islanded. Gravity is continuous tension omni-inter-between all systems. Because gravitational intertensional intensivity varies as the second power of the arithmetical interdistancing variations, whose unique variations are locally periodic, it manifests periodic intensities of tidal pulls, but the overall tensional integrity is constant independent of local intensity variabilities.</p> <p>"Electromagnetic radiation is distributive and entropic; its frequency magnitudes represent multiplication by division. Gravity is nondivisive and syntropic; its conservation is accomplished by holistic embracement of variable intensities. Gravity is integral. Holistic gravity has no frequency."</p> <p style="text-align: right;">- Citation & context at <u>Islanded Radiation & Tensional Constancy</u>, 11 Feb'76</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation:</u></p> <p>"Radiation has shadow while gravitation does not."</p> <p style="text-align: right;">- Citation and context at <u>Fuller, R.B.: Meeting with Fernandez-Moran</u> (2), 5 Apr'73</p>
<p>RBF DEFINITIONS</p> <p><u>Radiation-gravitation:</u></p> <p>"All bodies of Universe interaffect all other bodies in varying degrees; and all the intergravitational effects are precessionally angular modulations and all the interradiation effects are frequency modulations."</p> <p style="text-align: right;">(For earlier version of above see <u>Precession</u>, Oct'66)</p> <p style="text-align: right;">- Cite SYNERGETICS 2nd. Ed. draft at Sec. 533.07, 15 Nov'74</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation:</u></p> <p>"The generalizations are of the mind and are omnibracing and omnipremitive. Like the rays of the Sun radiations are radii and are focusable. Gravity cannot be focused; it is circumferentially embracing. Radiation has shadows; gravity has none. Radiation produces the phenomenon known to Einstein as the bending of space, the gravitational field."</p> <p style="text-align: right;">[97]</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1009.90, 8 Mar'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Radiation-Gravitation:

"Physics hasn't really associated radiation with (+) and gravitation with (-), but that's what they are."

- Cite RBF to EJA, 3200 Idaho, Washington DC, 25 Jan '72
- Citation and Plus and Minus, 25 Jan '72

RBF DEFINITIONS

Radiation-Gravitation:

". . . I give you then a tetrahedron which has an external and an internal: a terminal condition . . . You get to the outside and you turn yourself inside out, and come the other way. This is why radiation then does not go off into a higher velocity. Radiation gets to a maximum and then turns itself inwardly again-- it becomes gravity. Then gravity comes to its maximum concentration and turns itself and goes outwardly-- becomes radiation."

- Cite RBF Tape to EJA + BOIR, Bickelone, Chicago, 31 May 1971, Pp. 17-18.
- Citation and context at Zero, 31 May '71

RBF DEFINITIONS

Radiation-Gravitation:

"Gravity is circumferential. All the superficial surface angles are the gravity. Central Angles are the radiation."

- * Cite RBF to EAJ, 3200 Idaho, Washington DC, 21 Dec. '71.

RBF DEFINITIONS

Radiation-Gravitation:

"radiation can be focused; explosions can be linear. Gravity cannot be focused; it is circumferential contraction."

- Cite RBF to EJA, Sarasota, Florida, 7 February 1971

RBF DEFINITIONS

Radiation-Gravitation:

"The differences between the central angles and surface angles' functionings are identifiable with radiational and gravitational functionings. Radiation identifies with central angles. Radiation is outwardly focusable."

- Citation & context at Gravity, Aug '71
- Cite Synergetics draft, Sec. 870, August 1971.

RBF DEFINITIONS

Radiation-Gravitation:

". . . All bodies of Universe are affecting the other bodies in varying degrees and all the intergravitational effects are precessional angular modulations, and all the interradiation effects are frequency modulations."

- Cite HOW I FEEL I KNOW, p. 73, Oct '66.
- Citation & context at Precession, Oct '66

RBF DEFINITIONS

Radiation-Gravitation:

"The coming apart phase of critical proximity is radiation. The coming together and holding together phase is emphasized in our ken as gravity."

- Cite RBF insert to SYNERGETICS (Conceptuality, Critical Proximity), Chicago, 1 June 1971

RBF DEFINITIONS

Radiation-Gravitation:

"... Gravity is swifter than radiation, therefore, Universe collects its masses in ever tighter concentrations."

- Citation and context at Point: Outbound Point, circa 1948

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation Sequence:</u> (1)</p> <p>"The complementarity of the great regenerative pattern is geometrically omnimanifest as gravity and radiation. The radiation radiates inrays, or lines, of spherical, energy-source radii. These may be cross-sectionally conceptualized as the radially packed staves of a wooden barrel that try to escape outwardly from the barrel's center. Gravity, however, like the steel bands encircling the barrel's girth, operates embracingly. The individual barrel staves, like the radii, try to go out, to disintegrate, but the finitely closed, circumferential gravity hoops operate integratively, embracingly. The 92-million miles distant Sun's rays impinge approximately in parallel on only one hemisphere of the Earth at a time, while gravity embraces our entire planet, all cosmic systems from all around being equally effective, for instance, on the shadow hemisphere of Earth. Gravity has no shadow. Gravity is uninterferable; radiation is interferable. Gravity is omnidirectional, mass interattraction, which, as Newton discovered, is directly interproportional relative to the respective mass involved, and varies as the second power relative to the interproximities of the respective bodies considered: Halving the distance between any two will fourfold their interaction."</p> <p>- Cite "No Title," (Part II), WORLD Mag., p.39, 5 Jun'73</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation-gravitation: Harmonics:</u></p> <p>"The second-power rate of interattractiveness gain occurring with each halving of the intervening distance of two heavenly bodies recalls Pythagoras's whole, rational number, harmonic octave integrity progression (or regression) occurring with each halving of the length of the tensed cord (with thirding resulting in sharpening or flattening key progressions); wherefore gravitational-radiational second-power, spherical surface rate of gain in respect to radial linear rate of identification of omnidirectionally propagated sound waves at a gain of the second power of the linear. This gravitational omnisurface-embracement mathematics apprehending coincides with harmonic resonances:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"></td> <td style="width: 45%;">Arithemtical rate of symmetrical system's radius</td> <td style="width: 40%;"></td> </tr> <tr> <td>E = Mass</td> <td>linear radial shortening with system contraction</td> <td>Newton's gravitation</td> </tr> <tr> <td>E = Mass</td> <td>linear radial lengthening with system expansion</td> <td>Einstein's radiation</td> </tr> </table> <p>- Cite SYNERGETICS, 2nd. Ed. at Sec. 1052.68, 3 Jan'75</p>		Arithemtical rate of symmetrical system's radius		E = Mass	linear radial shortening with system contraction	Newton's gravitation	E = Mass	linear radial lengthening with system expansion	Einstein's radiation
	Arithemtical rate of symmetrical system's radius									
E = Mass	linear radial shortening with system contraction	Newton's gravitation								
E = Mass	linear radial lengthening with system expansion	Einstein's radiation								
<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation Sequence:</u> (2)</p> <p>"All the Universe is in motion, and all the effect of bodies in motion on other bodies in motion are what we call 'precessional.' Precession and mass-attractive gravity convert centrifugal into orbital motion. And precession always affects the motion of other bodies in directions other than 180 degrees, not toward or away from one another but at approximately 90 degrees to the line between the most powerfully interprecessing of the bodies. Holding a string in your hand, which, like mass attraction, is fastened to a weighty object on the other end, you precess this into orbit around you by axial rotation of your body. Thus the precessional effect of the axially rotating Earth on the Moon is to make the lesser mass go into orbit around the greater.</p> <p>"Mass attraction and precession cooperate synergetically to affect all of the Universe: 99,9999 percent of all entities of the Universe are in orbit around some other spinning entity, macro- or micro- cosmic in scale. And once in a while some of the entities accelerate so congruently close to one another that their inter-mass-attraction renders the precessional effect negligible, and the lesser body falls into the greater."</p> <p>- Cite "No Title," (Part II), WORLD Mag., p.39, 5 Jun'73</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation Model:</u></p> <p>"The radial arrangement of unit tetrahedral volumes around an absolute radiation center (the vector equilibrium) constitutes a prime radiation-gravitational energy proclivity model with a containment value of 20 tetrahedra (where cube is 3 and tetrahedron 1)."</p> <p>- Cite SYNERGETICS TEXT AT SEC. 223.73, 26 Sep'73</p>									
<p>RBF DEFINITIONS</p> <p><u>Radiation-Gravitation Sequence:</u> (3)</p> <p>"You and I are going around the Sun at 60,000 mph. So too is the Earth. We are so close to our Earth that gravity makes us 'fall in' in orbiting company. Little children find gravity forever pulling them in toward the Earth's center; although they know nothing about gravity they feel it pulling them to the floor. All of the Earth's biological organisms respond so powerfully in a linear manner to the gravitational effect that it is much like the organisms being linearly programmed to a specialized behavioral program. Thus we fail to realize that gravity really works as circumferential embracement. We find everything operating at 90 degrees tangent while humanity fools itself into thinking that it accelerated the object in a 180-degree direction. Because of this, humanity has come to think illogically in 180-degree, straight-line, ways. The fact is that entities are always traveling away at 90 degrees from the direction at which we are aiming.</p> <p>"All the cosmic generalized principles are omnembracing-always-true. Truth, like gravity, is nonlinear; it is omnembracing. And of all the creatures on our planet, only humans have demonstrated the ability to discover such truth."</p> <p>- Cite "No Title," (Part II), WORLD Mag., p.39, 5 Jun'73</p>	<p><u>Radiation Gravitation Model:</u> (1)</p> <p>See Octahedron as Photosynthesis Model Jitterbug Model</p>									
<p>RBF DEFINITIONS</p> <p><u>Radiation-gravitation: Angular Functions:</u></p> <p>"The differences between the central angles' and surface angles' functionings are identifiable with radiational and gravitational functionings. Radiation identifies with central angles. Radiation is outwardly divergent. Gravity identifies with the three surface angles' convergent closure into the surface triangle's finite perimeter. Gravity is omnembracing and is not focusable. Gravity is Universe-conservingly effective in its circumferential coherence."</p> <p>- Cite RBF rewrite of SYNERGETICS galley at Sec. 1051.40, 9 Jan'74</p>	<p><u>Radiation-gravitation Model:</u> (2)</p> <p>See Jitterbug, 11 Oct'71 Vector Equilibrium, 15 May'73</p>									

Synergetics Dictionary

Radiational ≠ Gravitational:

See Radiation-gravitation, circa 1948
 Boltzmann Sequence, (3)
 Universal Integrity: Principle Of, 8 May'72; 24 Mar'71;
 13 Nov'69

Radiation-gravitation:

(2C)

See Structure, Nov'71
 Synergetic Hierarchies, (C)
 Synergetics, 14 May'73
 Syntropy & Time, 14 May'75
 Two Kinds of Twoness, (B)
 Vector Equilibrium, 3 Jan'75

Radiation-gravitation:

(1)

See Eccentric-concentric
 Energetic Functions
 Intereffects
 Radial-circumferential
 Universal Integrity
 Electromagnetic Membrane
 Coming Apart & Holding Together
 Balance of Universe

Radiation-gravitation:

(3)

See Radiation-gravitation: Angular Functions
 Radiation-gravitation Model

Radiation-gravitation:

(2A)

See Dow Ties, 6 Oct'72
 Building Industry, (11)
 Coherence, 11 Feb'73
 Convergence & Divergence, 6 Jun'75; 1 May'77
 Cosmic Limit Point, 3 Nov'73
 Cosmic Vacuum Cleaner, 16 May'75
 Dimensionality, (1)
 Fourth-dimensional Synergetics Mathematics, 14 Dec'76
 Gravity, (d)*; 6 Apr'75
 Gravity: Speed Of, 21 Oct'72
 Growthability, 6 Mar'73
 Interference, 5 Jun'73
 Interrelationship Twoness, 27 Dec'74
 Islanded Radiation & Tensional Constancy, 11 Feb'76*
 Isotropic Vector Matrix, 16 Nov'72

RBF DEFINITIONS

Radiation as Information-carrier:

"What has not been understood thus far by human scientists regarding the transmittal of energy from the Sun to support biological life on planet Earth as accomplished through the photosynthesis of Sun radiation to produce hydrocarbon molecules by terrestrial vegetation and algae, is that in addition to its heat-transmitting properties, the radiation is also a yes-no, frequency-programmed, information carrier-- which precessionally transforms the three tetrahedral quanta of radiation into the four-quanta octahedral crystals in the atomic formation of the hydrocarbon molecules. Photosynthesis is meaningful communication whereby metaphysical rules the physical (Like the Federal Reserve Bank) by issuing or withdrawing complex coding-identified 'quanta' currency from the overall, cosmic, transforming and transaction system's accounting."

- Citation & context at Man: Interstellar tRansmission of Man,
 (B)(C), 9 Jun'75

Radiation-gravitation:

(2B)

See Limit Point, 9 Jun'72
 Love, 23 Oct'77
 Metaphysical & Physical, 19 May'75
 Nuclear Pattern of Growth & Decay, 8 Dec'75
 Nucleus, 13 Nov'75
 Octahedron as Photosynthesis Model, (A)-(E); 11 Dec'75
 Plus & Minus, 25 Jan'72*
 Point: Outbound Point, 1948*
 Powering: Fourth Powering, 15 Oct'72; 9 Sep'75
 Precession, (a)(b); Oct'66*
 Pulsation, 9 Nov'72
 Rain, 11 Feb'76
 Series vs. Parallel Circuitry, 11 Dec'75
 Star Tetrahedron, 8 Oct'71
 Structural Sequence, (B)
 Star Tetrahedron & Vector Equilibrium, 9 Nov'73

Radiation as Information-carrier:

See Electromagnetically Transmittable Logistics
 Cosmic Transmission
 Transmission

Synergetics Dictionary

<p><u>Radiational Mensurability:</u></p> <p>See Vector Equilibrium, (2)</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u></p> <p>"The speed of light, at the limit case, becomes the time. The speed of radiation is the limit case, but it is the initial limit. It always comes back to itself."</p> <p style="text-align: right;">- Cite RBF to EJA, Beverly Hotel, NY, 22 Jun'72</p>
<p><u>Radiation: Minimum Increment Of:</u> (1)</p> <p>See Photon</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u></p> <p>"The speeds of all the known different phases of measured radiation are apparently identical despite vast differences in wavelength and frequency. Einstein's adoption of electromagnetic radiation expansion-- omnidirectionally in vacuo-- as normal speed suggests a top speed of omnidirectional entropic disorder increase accommodation at which radiant speed reaches its highest velocity. This highest velocity is reached when the last of the eternally regenerative Universe cyclic frequencies of multi-billions of years have been accumulated, all of which complex of nonsimultaneous transforming multivarietied frequency synchronizations is complementarily balanced to equate as zero by the sum totality of locally converging orderly and synchronously concentrating energy phases of scenario Universe's eternally pulsative, and only sum totally synchronous, disintegrative, divergent, omnidirectionally exporting and only sum totally synchronous, integrative, convergent and discretely directional individual importings."</p> <p style="text-align: right;">- Cite RBF in response to a request to repeat his "brief sentence" on the sphere as a meeting of convergences. See SYNERGETICS, "Scenario Universe," Sec. 325., and "Tension and Compression," Sec. 614.08. Oct'71</p>
<p><u>Radiation: Minimum Increment of Radiation:</u> (2)</p> <p>See Unit Radius, 17 Jan'74</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u></p> <p>"The speed of light had been measured linearly in a tube-- this is the speed of light in any one direction from its source. But radiation is called radiation because it goes in all directions from its source unless reflectively beamed. When we double the linear dimensions of any object-- the surface of the symmetrically amplified system grows as the second power of the linear. Science had to choose the lower-case letter <u>g</u> to represent the speed of the radiation linearly, to arrive at the rate at which it grew in an omnidirectional spherical way-- the rate at which the surface of the omnidirectional radius increases as g^2, the second power of the radius-- or linear speed: <u>g</u>."</p> <p style="text-align: right;">- Cite RBF to EJA, Sarasota, Florida, 7 Feb '71</p>
<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u></p> <p>"Wavelength times frequency is the speed of all radiation. If the frequency of the vector equilibrium is four, its vector-radius, or basic wavelength = 186,000/4 miles reachable within one second = 46,500 reach-miles. Electromagnetically speaking the unarticulated vector equilibrium's vector length is always 186, 282,396 miles."</p> <p>(For later version & context of above, see Vector Equilibrium: Unarticulated VE, 2 Nov'73)</p> <p style="text-align: right;">[44]</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 426.45, 30 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u> (A)</p> <p>"There are no instant lines-- Reaching instantly to eternity; For the concepts Of instantaneity, simultaneity, and eternity Were annulled by the discovery That light and all radiation Have an approximately discrete speed Of seven hundred million miles an hour, which, of course, is too fast for man's Perceptive detection, But accounts lucidly For humanity's assuming erroneously That his sight experience Is instantaneous. Prior to the Michelson-Morley experiments-- Throughout all past history-- On every clear night Man could seemingly witness for himself The 'instantly eternal' stars.</p> <p>"However, with the measurement of light's And of other"</p> <p style="text-align: right;">- Cite GENERALIZED PRINCIPLE, p.5, 28 Jan'69</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u> (B)</p> <p>"Electromagnetic radiations' speed We learned that it took Eight minutes for light To reach us from the Sun And two and one-half years From the next nearest star, And an astronomical variety of other Greater and different time lags For light to reach us From each of the other Myriads of stars.</p> <p>"These time lags were far different From instantaneous and simultaneous. And experiments made evident That such light sources Are always exhausting <u>Their</u> local energy concentrations, Wherefore they cannot be eternal.</p> <p>"Prior to that measurement The illusion of instantaneity Induced false concepts - Cite GENERALIZED PRINCIPLES, p.5, 28 Jan'68</p>	<p><u>Radiation: Speed Of:</u> (1)</p> <p>See Absolute Velocity Light: Speed Of Radiant Availability Relativity: Special Theory Spherical Wave Terminal Limit Velocity Shunting: Relative Motion Patterns Top Speed: Top Velocity</p>
<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u> (C)</p> <p>"Which man formalized into statements And labeled as axioms Holding them to be self-evident and a priori, Ergo fundamental, characteristics of nature Reduced to their respective simplest degrees.</p> <p>"Typical of such Axiomatic illusions Were the concepts Of solids, continuums, at rest, Surfaces, and straight lines. That reach instantly to infinity; All of which concepts are contradicted By experimental physics Which has found only Discontinuity and Nonsimultaneity As, for instance, is witnessable In the discontinuity of the stars In the Milky Way, And is instrumentally discoverable In the remoteness of electrons"</p> <p>- Cite GENERALIZED PRINCIPLES, pp.5-6, 28 Jan'69</p>	<p><u>Radiation: Speed Of:</u> (2)</p> <p>See Central Angle, 23 Sep'73 Conscious World, 1938 Engineering, 13 Nov'69 Intellect, 27 May'72 Light, 22 Nov'73 Limit Reach, 17 Jan'74 Nuclear Sphere, 16 Dec'73 Omnidirectional, 1965 Time, 30 Nov'72; 22 Jun'72 Unit Magnitude, 13 May'73 Visual Symphony (1)(2) New York City (10) Eyes, 1964</p>
<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u> (D)</p> <p>"From their nuclear protons Which remoteness is equal To the star spacing In relation to their respective Relative activity diameters.</p> <p>"We have learned experimentally That lines are always energy events And because of their ever variant Complex of other energy events Of the total environment There are always a myriad Of precessionally steering effects Which result in curvilinear Orbits, rotations, pulsations, Implosions, explosions, and torations.</p> <p>"Lines are finitely developed events. And their durations Are always relative To some cyclic experience in time.</p> <p>"Size and time are synonymous." - Cite GENERALIZED PRINCIPLES, p.6, 28 Jan'69</p>	<p><u>Radiation:</u> (1)</p> <p>T Quanta Module Einstein Equation: $E = Mc^2$ See Biosphere Black Body Broadcast Center of Radiation Exporting Impoundment Interradiation Intellect vs. Radiation Matter vs. Radiation Omnidirectional Photon Photosynthesis Radiation-gravitation Ecology Sequence Energy-as-radiation Concentration vs. Radiation Visible Light vs. Electricity Electromagnetic-photosynthetic Programming Coming Apart Phase Islanded Radiation Celestial Radiation Accumulators</p>
<p>RBF DEFINITIONS</p> <p><u>Radiation: Speed Of:</u></p> <p>"... $C^2 / \text{radiation}$ equals all the eccentrically disassociative individual patternings of all energy (C being the radial or linear speed of radiant energy, which is approximately 186,000 mps)."</p> <p>Cite INTRODUCTION TO OMNIDIRECTIONAL HALO, P.124, 1959</p>	<p><u>Radiation:</u> (2)</p> <p>See Chemical Phenomenon, May'72 Colloidal Chemistry, 1938 Curvature: 23 Sep'73* Energy, 1960; Apr'68; Jun'66; 18 Mar'65 Frequency, Jun'66 Generalization: Second Degree, 1959* Package, 23 Sep'73 Point: Outbound Point, circa 1948; 23 Sep'73 Star; Dec'72 Star Tetrahedron, 8 Oct'71* Stardust, (2) Tetrahedron, 23 Sep'73 Wind Power Sequence (L); (C) Quantum Sequence, (2)* Visual, 22 Feb'77</p>

Synergetics Dictionary

<p><u>Radiation:</u> (3)</p> <p>See Radiational Constant Radiation as Entropy Radiation-gravitation Radiation-gravitation Model Radiational Mensurability Radiation: Minimum Increment of Radiation Radiation: Speed Of Radiation as Information-carrier Radiation vs. Crystal Model</p>	<p><u>Radio Set is Not the Music:</u> (2)</p> <p>See Invisible Architecture, (C)</p>
<p><u>Radical:</u></p> <p>See Assumptions, 1946</p>	<p>RBF DEFINITIONS</p> <p><u>Radio Tuning Crystal:</u> "The first radio tuning crystal must have been a rhombic dodecahedron."</p> <p style="text-align: right;">- Citation and context at <u>Rhombic Dodecahedron</u>, 30 Nov'72</p>
<p><u>Radio Ham Language:</u></p> <p>See World-around Language, (1)</p>	<p><u>Radio: Radio Waves:</u> (1)</p> <p>See Ball at the Center Broadcast Invisible Operation of Thousands of Radio Programs Tunability</p>
<p><u>Radio Set is Not the Music:</u> (1)</p> <p>See Telephone is Not the Information</p>	<p><u>Radio: Radio Waves:</u> (2)</p> <p>See All-acceleration Universe, 20 Jun'66 Ball at the Center, 9 Mar'73 Visual Symphony, (1) Seeing vs. Hearing, 22 Jan'75 Individuality & Degrees of Freedom, (3) Lasso, 1946</p>

Synergetics Dictionary

<p><u>Radioactivity:</u> (1)</p> <p>See Stars: Implosive Forces Of Superatomics Strange Particles</p>	<p><u>Radiolaria:</u></p> <p>See Invention, 3 Oct'72; Dec'61</p>
<p><u>Radioactivity:</u> (2)</p> <p>See Now, 14 Feb'72</p>	<p><u>Radionics:</u></p> <p>See Universal Vertex Center Model, 29 Apr'43</p>
<p>RBF DEFINITIONS</p> <p><u>Radiolaria:</u> (1)</p> <p>"The micro animal structures, the radiolaria, if you study them, will always show that they are based on either the tetrahedron, the octahedron, or the icosahedron. This picture (R-4-1) was drawn by English scientists almost a century ago as they looked through a microscope at these micro-sea structures.</p> <p>"Today I have given you some fundamental structural principles and subsequently shown you their use by nature. I didn't, however, start by studying these structures of nature seeking to understand their logic. The picture of the radiolaria has been available for 100 years, but I didn't happen to see it until after I had produced the geodesic structures from the mathematical sequence of developments which I reviewed with you earlier. In other words I did not copy nature's structural patterns. I did not make arbitrary arrangements for superficial reasons. What really interests me therefore in all these recent geodesic tensegrity findings in nature is that they apparently confirm that I have found the coordinate mathematical system employed in nature's structuring. I began to explore structure and develop it in pure mathematical principle out of which the patterns emerged in pure"</p> <p><small>Cite MEXICO '63, pp. 58-59, 10 Oct '63 SYNERGETICS - SEC 203.09</small></p>	<p>RBF DEFINITIONS</p> <p><u>Radius:</u></p> <p>"It is very easy to be greatly misled when you see two spheres in tangency. There is only one line between the two. This is where you see that unity is two because the line breaks itself into <u>radii</u> of the two spheres."</p> <p><small>- Cite RBF tape-Blackstone Hotel, Chicago, 31 May 1971, p. 17 - - Citation and context at <u>Tangency</u>, 31 May '71</small></p>
<p>RBF DEFINITIONS</p> <p><u>Radiolaria:</u> (2)</p> <p>"principle. I then realized those developed structural principles as physical forms, and in due course applied them to practical tasks. The reappearance of these structures as recent scientists' findings at various levels of inquiry are pure coincidence-- but excitingly validating coincidence."</p> <p><small>- Cite MEXICO '63, p. 59, 10 Oct '63 SYNERGETICS - SEC. 203.09</small></p>	<p>RBF DEFINITIONS</p> <p><u>Radius:</u></p> <p>"As a chord turns into an arc the radius contracts."</p> <p><small>- For citation and context see <u>Vector Equilibrium: Spheres and Spaces</u>, 31 May '71</small></p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Radius:</u></p> <p>"Omniconvergent is the opposite of <u>radius</u>."</p> <p style="text-align: right;">- Cite RBF to WJA Sarasota, Florida 7 February 1971</p> <p>- Citation at <u>Omniconvergent</u>, 7 Feb'71</p>	<p style="text-align: right;"><u>Radius:</u> (2)</p> <p>See Frequency, 11 Jul'62* Geometry of Vectors, Aug'71 Omniconvergent, 7 Feb'71* Powering: One Dimension, 15 Oct'72 Radiation, 8 Mar'73 Rotate, 6 May'48 Tangency, 31 May'71* Tension & Compression, Jun'67* Vector Equilibrium: Spheres & Spaces, 31 May'71*</p>
<p>RBF DEFINITIONS</p> <p><u>Radius:</u></p> <p>"Tension tends towards arcs of increasing radius; compression tends towards arcs of decreasing radius."</p> <p style="text-align: right;">- Cite P. PEARCE, Inventory of Concepts, June 1967</p> <p>- Citation at <u>Tension & Compression</u>, Jun'67</p>	<p style="text-align: right;">RBF DEFINITIONS (A)</p> <p><u>Radome Sequence:</u></p> <p>"This is one of the geodesic radomes tested for the Arctic. They are made out of polyester fiberglass and the diamond-shaped, paneled pieces are made with bolt holes in their adjacent flanges. All the mathematics must be done very accurately to permit these pieces to be interchangeably bolted together. We hold our spherical trigonometry calculations to an accuracy of 1/1000 of a second of circular arc. The geodesic radome structures go up in an average of 14 hours each in the Arctic.</p> <p>"Our Air Force Radomes were installed in the Arctic mostly by Eskimos and others who had never seen them before. The mass production technology made assembly possible at an average rate of 14 hours each. One of these radomes was lent by the U.S. Air Force to the Museum of Modern Art in New York City for an exhibition of my work in 1959-1960. It took regular building trades skilled labor one month to assemble the dome in New York City.</p> <p>"American labor fought a great and worthy battle to win the working man's share of the synergetic productivity of industry. Labor's battle proved doubly worthwhile because it inadvertently brought about mass consumption. Without mass consumption you cannot maintain mass production. You cannot have the mass" - Cite RBF photo caption, Fig. 177, dome photos, about 1960.</p>
<p>RBF DEFINITIONS</p> <p><u>Radius:</u></p> <p>In closest packing of sphere "we discover that the number of balls in any one layer, we could call it frequency or <u>radius</u>, because we have found that they are the same words."</p> <p style="text-align: right;">- Citation at <u>Frequency</u>, 11 Jul'62 - Cite OREGON Lecture #7, p. 239, 11 Jul'62</p>	<p style="text-align: right;">RBF DEFINITIONS (B)</p> <p><u>Radome Sequence:</u></p> <p>"production of industrialization without an original investment of vast capital effort of work and that original capital came first and long ago from serfdom or outright slavery. In order to bring industrialization to benefit comprehensively emancipated man, you must have mass purchasing power, which in due course will underwrite automation, which in turn will eventually produce so much wealth as to be able to free man's time for further education and research to increase the wealth long generated by unimpeded automation. American labor will not yield that unimpedement until it is clearly demonstrated that all men will prosper directly by doing so. American labor <u>did</u> bring about the vast purchasing power in industry, but in so doing it established all kinds of rules which inadvertently protected the obsolete inefficiencies of building.</p> <p>"When the kind of structure which goes up in the Arctic in 14 hours takes a month in New York City, clearly there has been an inordinate shunting of social wealth in a direction in which legitimate value was not added to the product. This is an indirect, illogical, and therefore indefensible way of distributing wealth for it hides the new advantages and therefore retards the growth of those advantages as wealth generators of the"</p> <p>- Cite RBF photo caption, Fig. 177, dome photos, about 1960.</p>
<p><u>Radius:</u> (1)</p> <p>See Edge vs. Radius Frequency = Radius Line Between Two Sphere Centers Local Radius Omniradial Radial Unit Radius</p>	<p style="text-align: right;">RBF DEFINITIONS (C)</p> <p><u>Radome Sequence:</u></p> <p>"commonwealth. We must be very careful in judging the new, high production technology structural experiments so as not to have our fundamental tactical information distorted by ill conceived labor tactics. We have very real social problems which must be solved by realistic acceptance of the facts rather than deferred from realistic consideration of the inherent new wealth-generating advantages by hiding the new technical advances under the wing of individually conceived palliatives which are operated by old rules that do not permit the real advantages to be recognized by the labor movement's management. We are going to have to bring industrial mass purchasing ability to all of humanity. But first we are going to have to get labor rates evened up all around the world in order to have every man's raw time worth as much as any other man's time when translated into purchasing power per kilowatts or pounds of specific metal goods. Next we are going to let automation take over after we find ways to pay everyone dividends from its wealth making to keep up purchasing power at a maximum and thereby to regenerate the industrial evolution advance."</p> <p>- Cite RBF photo caption, Fig. 177, dome photos, about 1960.</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Radome Sequence:</u> (1)</p> <p>"A radome unit provides means for automatically excluding the weather. It must admit the widest electronic wave frequency spectrum. It requires greatest strength with minimum structure and minimum site assembly operations.</p> <p>"Omni-triangulation is implicit for structural stability. Omni-orientation of all forms of structure is at most symmetrical equivalence of interdistancing.</p> <p>"Light (as a typical wave frequency group) obstruction is greatest where structural components converge (grid photostats show this as stars at convergent points). A multi-axial or dynamical system cannot have only two triangles around one vertex. It can have three, four, or five equilateral triangles, but cannot have six or more equilateral triangles in a finite system.</p> <p>"Touch = tex of ver-tex, i.e., converging toward touchability, meaning a frequency-complex clustering whose frequencies interfere, or tune in, with the frequency array of the molecular complex of the atoms altogether constituting the Galaxy of"</p> <p>- Cite typescript "Definitions by RBF," Pp.1A,2a,1, 29 Dec'58</p>	<p>RBF DEFINITIONS</p> <p><u>Radome Sequence:</u> (5)</p> <p>"Radomes provide means for automatically excluding weather and including local warmth and dryness. They should admit the widest possible spectrum of electronic wave frequencies.</p> <p>"Omni-triangulation is implicit in the requirement for greatest strength with minimum structure. Omni-orientation of focal points of structure is at the most symmetrical equivalence of interdistancing. The structure's vectorial components converge at the vertexes, i.e. points, of the system. The triangular relationship of all points of any system show a constant relative abundance in which, of the total number of points, two are recognized as the poles of the system.</p> <p>"The principle of constant relative abundance of topological features of all omni-triangulated systems, provides:</p> <p style="margin-left: 40px;">$N - 2$ = number of nonpolar vertexes;</p> <p style="margin-left: 40px;">$(N - 2)2$ = number of triangular faces</p> <p style="margin-left: 40px;">$N - 2$ = number of diamond faces</p> <p style="margin-left: 40px;">$(N - 2)3$ = number of edges, i.e., compressional or tensional vectors</p> <p>- Cite typescript "Definitions of RBF," Pp.2A,3, 29 Dec'58</p>
<p>RBF DEFINITIONS</p> <p><u>Radome Sequence:</u> (2)</p> <p>"frequencies of our life cell tissues or Milky Way nebulae of locally regenerative frequency, locally recurrent through self-interference patterning.</p> <p>"Mass is a word of inherently synergetic connotation. It is a behaviorist word popularly mistaken and used as a static word. Mass recognizes an inherent plurality of unique consequences resultant upon any infra- or ultra-sensorial recognizable, i.e., timable, collection of regenerative systems of precessionally self-associative energy-vector events. All the atoms and stars, as well as all the macro-remote astronomical cluster nebulae and remote micro-molecules, are such unique synergetically regenerative, infra-ultra-sensorial, unique multi-atomic mass clusters.</p> <p>"A system is a man-thinkable, tune-in-able constellation of generalized experience event cluster foci. Energy-cluster foci are starts, or topological ver-vertexes, which are only the as-yet-nonanalyzed group phenomenon whose energetic point centers of event clustering locals are as yet too remote for the present observer's position. Systems are star inter-relationship considerations which logically continue to return upon themselves due to the related preoccupying importance of"</p> <p>- Cite typescript "Definitions by RBF," p.1, 29 Dec'58</p>	<p>RBF DEFINITIONS</p> <p><u>Radome Sequence:</u> (6)</p> <p>"Whereas compressional functions of structures are inherently the most dense and obstructive of electric wave trapping, convergence should be kept at a minimum with the vector edges leaving the maximum number of holes. Triangles are minimum holes. We can however have triangular interconnected hex-pent holes. The frequency of triangular relationships of approximately symmetrical point systems may be elected over a wide range. Therefore we choose a layout of triangles which will provide maximum weather exclusion and nondeterioration of structures and optimum installability. This calls for low frequency tensile integrity and islanded compression with booms which are optimum to site handling gear, in respect to which pneumatic lozenges can be omni-interconnected and applied into a unitary double skin.</p> <p style="text-align: center;">.</p> <p>"Whenever or wherever compressional functions (or vectors) of structures are inherently most dense and compounding self-impending (sic) at second power, or relative proximities in respect to local electromagnetic wave frequency, the geodesic"</p> <p>- Cite typescript "Definitions of RBF," Pp. 2A,3A,3, + 4, 29 Dec'68</p>
<p>RBF DEFINITIONS</p> <p><u>Radome Sequence:</u> (3)</p> <p>"locally dominant event frequency proximities which altogether function as a fundamental, i.e., simplest or most unique, geometrical set which inherently subdivides the total Universe. The cell-time-man-experienced events fall into two main and clearly distinguishable classes:</p> <p style="margin-left: 20px;">(1) All those relatively too large or macrocosmic events of Universe which must clearly occur outside the presently thought-considered tunable range capabilities and are therefore outside the timable system set; and</p> <p style="margin-left: 20px;">(2) All those relatively too small, negligible, microcosmic clan which occur inherently within and infra to the tunable frequency and relative size ranging of the considered set.</p> <p>"We may define structure as a local and finite system of energy events of physical Universe consisting of a patterning of interaimed or intervactorially frequency-synchronized, associative and disassociative interferences omni-precessionally resulting as a pattern-regenerative constellation of system-inward-angled vectors, in dynamically symmetrical, precessional constellar equilibrium."</p> <p>- Cite Typescript "Definitions of RBF," p.2, 29 Dec'58</p>	<p>RBF DEFINITIONS</p> <p><u>Radome Sequence:</u> (7)</p> <p>"frequency design traffic should keep compressional componentation and its interconvergence at minimum, i.e., in edge or vector function leaving a maximum pattern of holes (i.e. hex-pent triangular faces). . . ."</p> <p>- Cite typescript "Definitions of RBF," p.4, 29 Dec'58</p>
<p>RBF DEFINITIONS</p> <p><u>Radome Sequence:</u> (4)</p> <p>"The energy proximity economy of ideal structuring as vectorially interaimed and synchronized energy, ergo energy-balanced interference patterns, comprise system complexes whose discrete angle and frequency modulations are, in turn, tunably controllable by man to provide a local energy-environment controll means for interference. Shunting of the known, relatively-important-to-man patterning and random local event program and angle patterning of Universe into orderly, man-preferred, locally regenerative program and angle patterns: this is local energetic environment controlling by anticipatory design science.</p> <p>"Energy events of structure is a local and finite system of regenerative Universe consisting of a constellar patterning of interaimed and frequency synchronized, associative and dis-associative interferences resulting as a net set of inwardly angled, precessionally interaligned, vectorial resultants. Resultants of vectorial interaimed events must be to provide a local control of discrete frequency and angle modulation to control local energy-- to be known as local energetic environment controls, i.e. radomes.</p> <p>- Cite typescript "Definitions of RBF," Pp.2-3, 29 Dec'58</p>	<p>RBF DEFINITIONS</p> <p><u>Radome:</u></p> <p>See Dome entries DEW Line Radomes</p>

Synergetics Dictionary

<p>RBF DEFINITIONS (A)</p> <p><u>Railroad Tracks: Great Circle Energy Tracks on the Surface of A Sphere:</u></p> <p>"Now I have found that nature insists on doing things most economically. We find that energy insists on following the convex surface. It has to follow the great circles. We find the 25 great circles of symmetry of the VE have a very interesting characteristic: every one of them goes through the 12 vertexes. The 12 vertexes are made out of spheres in closest packing, packed 12-around-one. These are the points of tangency of spheres in closest packing. We have here 25 railroad tracks by which energy can go from here to here anywhere in the Universe in the shortest possible way and it is the only way it will go. These are the only possible transfers from here to there. So then if you want to go from here to there in the Universe, you have to follow these surfaces and you have to go through these contact points. So these 25 great circles represent a very special set of events because some of them, for instance the four great circles go through six vertexes; three great circles only go through four vertexes, etc.; they have different opportunities to peel off. They require different frequencies. I think"</p> <p>- Cite RBF to Verner Smythe, NYC, Reel 2, pp.8-9, 25 Feb'69</p>	<p>RBF DEFINITIONS</p> <p><u>Railroad Tracks: Great Circle Energy Tracks on the Surface of a Sphere: Convex and Concave:</u></p> <p>"Dr Einstein pointed out that you could be the little man in the Universe who always went from sphere to sphere and through the points of tangency. You lived inside the concave surface of a sphere and you could get to the point of tangency in the next sphere, and the next sphere, concavely, and you could go right through the Universe that way. Or you could be the little man who lived on the outside of the sphere, and always lived convexly, and you came to the same point of tangency and you went on. This is one way of looking at Universe and the sphere is another way of looking at Universe. This is typical of not being fooled by just looking at the spheres-- or just looking at the little triangle locally on the surface of your big sphere where you had your big triangle. This is beginning to give us ways of seeing the complementarity at all times."</p> <p>- Cite Oregon Lecture #7, p. 258. 11 Jul'62</p> <p style="text-align: center;">SYSTEM- SEC 452.02</p>
<p>RBF DEFINITIONS (B)</p> <p><u>Railroad Tracks: Great Circle Energy Tracks on the Surface of a Sphere:</u></p> <p>"if you follow different great circles and their frequencies, incidentally, every one of the chemical elements has been identified by four different frequencies which absolutely leads to that chemical element.</p> <p>"This has all the symmetries there are.</p> <p>"Now the same sphere could become the icosahedron. . . It has the only great circles we have which don't go through the transfer points. Then they are not in agreement any more. When they get into an icosahedron you can shut off the energy supply and any waves would start going through the system and vector equilibrium would go through it."</p> <p>- Cite RBF to Verner Smythe, NYC, Reel 2, p.9, 25 Feb'69</p>	<p>RBF DEFINITIONS</p> <p><u>Railroad Tracks: Great Circle Energy Tracks on the Surface of a Sphere: Foldability:</u></p> <p>"This may be pure accident but I could say something to you now categorically that is really very fascinating, that is, I found that you could fold and make all the 25 and 31 great circles. There are no other circles though that I know how to fold and make any other kind of great circle patterns on spheres. They and they alone seem to be foldable into these conditions. This seems to be a very strange kind of control because if they did they all relate, they are the ways of the grand central station and all the shortest, most economical railroad tracks between all the points in Universe-- flying either concave or convex."</p> <p>- Cite Oregon Lecture #7, p. 271. 11 Jul'62</p>
<p>RBF DEFINITIONS (1)</p> <p><u>Railroad Tracks: Great Circle Energy Tracks on the Surface of a Sphere:</u></p> <p>"The shortest distance between points on the surface of a sphere are the great circles. They are called the geodesic lines and inasmuch as there is no such thing as a straight line and we are working in some kinds of developing surfaces, the great circles are called geodesic lines. We are now getting into the axes of spin which are inherent in any system. We found that systems could be joined up /See Rubber Tires/ and they develop axial aspects, but they don't frustrate the rest of the Universe.</p> <p>"Now we are very interested in the kinds of great circles which are developed by the various spins because they must have some kind of important relationship. We saw that if we had twelve spheres in what we call closest packing-- if you wanted to go the shortest distance between points on the surface of spheres-- supposing you were an electric charge, an electron. We make great copper spheres, the old Van de Graaff generators and so forth, you could build up enormous charges of electricity on the surface of this sphere."</p> <p>- Cite Oregon Lecture #7, p. 266. 11 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Railroad Tracks: Triangular Systems of Energy Networks.</u></p> <p>"In any network high energy charges refuse to take the long way round to their opposite pole. They tend to push through, the separating space, striving to 'short.' Thus energy will automatically triangulate via a diagonal of a square, or via the triangulating diagonals of any other polygon to which the force is applied. Triangular systems represent the shortest, most economical energy networks. . . The triangles are the basic unit of energy configurations, whether occurring as free energy or as structure."</p> <p>- Cite R.W. MARKS, p. 43. 1960</p> <p style="text-align: center;">SYSTEM- SEC. 452.04</p>
<p>RBF DEFINITIONS (2)</p> <p><u>Railroad Tracks: Great Circle Energy Tracks on the Surface of a Sphere:</u></p> <p>"The charges never try to go on the concave side of this sphere. They always stay on the convex side. You run into this kind of behavior just in trying the electroplate phenomenon. You will find that you cannot plate the concave side. You automatically electroplate the convex side. The convex side goes into higher tension which means that it is actually thinner and therefore less resistant and therefore the energy tries to follow the convex surfaces. Supposing you were the kind of energy that always follows the convex kind of surfaces and yet, being energy, you always have to do it the shortest way. You want to go from sphere to sphere on the surface of the sphere so you would have to take the great circles at the points where the spheres touch one another and therefore you would take the great circles of them. Therefore those 25 great circles are very important because they are all the possible great circles that carry all the traffic between the twelve points-- they are all the possible geodesic railroads. With that kind of energy which always has to follow surfaces, these are the railroad tracks that you would have to follow. . ."</p> <p>- Cite Oregon Lecture #7, pp. 266-267. 11 Jul'62</p> <p style="text-align: center;">SYSTEM- SEC. 452.03</p>	<p><u>Railroad Tracks: Great Circle Energy Tracks on the Surface of a Sphere:</u> (1)</p> <p>See Foldability of Great Circles Frequency: Alternate Wavelength Frequency Grand Central Station of Universe Holding Circuit Kissing Point: K Tensegrity: Vertexial Connections Vector Equilibrium: Great Circles Of</p>

Synergetics Dictionary

<p><u>Railroad Tracks:</u> <u>Great Circle Energy Tracks on the Surface of a Sphere:</u> (2)</p> <p>See Allspace Filling: Octa & VE, 1967 Gravitational Constant (1)(2) Omnidirectional Typewriter (2)-(4)</p>	<p>K&F DEFINITIONS</p> <p><u>Rain:</u> "Earth's biospheric inventory of water is radially dispersed outwardly by vaporization and omnilocally condensed as inwardly 'falling' drops of rain, which are gravitationally and convergently collected as ocean."</p> <p style="text-align: center;">- Citation & context at <u>Islanded Radiation & Tensional Constancy</u>, 11 Feb'76</p>
<p><u>Railroads:</u> <u>Railroad Tracks:</u> (1)</p> <p>See Airplanes vs. Railroads</p>	<p><u>Rain as Radial:</u></p> <p>See Cosmic vs. Terrestrial Accounting, (3) Ecology, 16 Feb'73 Precession, (1) Rain, 11 Feb'76</p>
<p><u>Railroads:</u> <u>Railroad Tracks:</u> (2)</p> <p>See Dymaxion Airocean World, (I) Convergent vs. Parallel Perception, 13 Nov'75</p>	<p><u>Rain:</u></p> <p>See Ecological Pattern, 19 Sep'64 Ecology Sequence, (a) Radiation Sequence, (2) Trespassing, (1) Water, May'65 Wind Power Sequence, (5) Islanded Radiation & Tensional Constancy, 11 Feb'76*</p>
<p><u>Railway Trains:</u> <u>Loosely Coupled:</u></p> <p>See Diesel Ship at Sea, May'72</p>	<p><u>Rainbow:</u></p> <p>See Optical Rainbow Range</p>

Synergetics Dictionary

RBF DEFINITIONS

Raison d'Etre:

"The illogically developed stigma*
Which misinforms millions today
Is being swiftly eradicated
As its championship raison d'etre
Is manifest in world athletics."

[*of race.]

- Cite EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH,
Jan '72, p. 15

RBF DEFINITIONS

Raison d'Etre:

(1)

RBF DEFINITIONS

Raison d'Etre:

"Environment is the whole raison d'etre of man's
existence. . . This is why I became preoccupied with
environment: how do we protect the infant, being born
a genius, from being de-geniused by his environment."

~~- Cite RBF to Students International Dedication Seminar -
H. Hesse, Amherst, 22 July 1971.~~

- Citation at Environment, 22 Jul'71

Raison d'Etre:

(2)

See DNA, 31 May'71
Environment, 22 Jul'71*
More With Less: Sea Technology, (4)
Building Industry, (12)
Propaganda, 29 Mar'77

Raison d'Etre of Boast & Fear:

See Superstition, May'49
Ignorance, (1)(2)

RBF DEFINITIONS

Ramify:

"Unlike Siddhartha . . . I decided to ramify the ramifiable."

- Cite RBF to EJA, Governor House Motel, Bethesda, 28 April 1971
after reading Herman Hesse's "Siddhartha" the night before,
given him by Mary Cohen.

Raison d'Etre of Going Awayness:

See Repulsion, 7 Feb'71

Ramify the Idealistic:

See Now, 14 Feb'72

Synergetics Dictionary

<p><u>Ramify:</u> (1)</p> <p style="text-align: center;">See Multiramifications</p>	<p><u>Random Element:</u> (1)</p> <p style="text-align: center;">See Inadvertence = Random Element</p>
<p><u>Ramify:</u> (2)</p> <p>See Capabilities, 20 Apr'72 Thinking, (3) Dymaxion Airocean World Map, (5)</p>	<p><u>Random Element:</u> (2)</p> <p>See Inadvertence, 1938 Man as a Function of Universe, (B) Profess: Profession, 22 Apr'61 Stardust, May'65 Wow: The Last Wow, 22 Apr'71</p>
<p><u>Random Element: Law of Increase of The:</u> (1)</p> <p>See Entropy Expanding Physical Universe Thermodynamics: Second Law Of</p>	<p>RBF DEFINITIONS</p> <p><u>Randomness:</u></p> <p>"All stars radiate energy in a random manner. Randomness begets increasing disorder which is self-expansive."</p> <p style="text-align: center;">- Citation and context at <u>Boltzmann Sequence</u> (5), Dec'72</p>
<p><u>Random Element: Law of Increase of The:</u> (2)</p> <p>See Antientropy, 10 Oct'63 Man as a Function of Universe, (B) Sorting, May'65 Stardust, May'65</p>	<p>RBF DEFINITIONS</p> <p><u>Randomness:</u></p> <p>"Randomness of lines automatically works back to a set of interactions and a set of proximities which begin to triangulate themselves. . . . The most comfortable condition of triangles is equilateral so there will be a tendency for them to try to become equilateral. . . . This effect goes on in depth and in to the tetrahedra or octahedra."</p> <p style="text-align: right;">- Cite Carbondale Deaft Nature's Coordination, p. VI, 1</p> <p style="text-align: center;">- Cite Ledgmont Lab, p.20, 15 Oct'64</p>

Synergetics Dictionary

RBF DEFINITIONS

Randomness:

"Entropy is not random; it is always one negative tetrahedron."

~~- Cite OMNIDIRECTIONAL HALO, p. 157, 1960 -~~

- Citation at Entropy, 1960

RBF DEFINITIONS

Range Finder: Range Finding:

See Convergent vs. Parallel Perception, 13 Nov'75

Random: Randomness:

(1)

See Brouwer, L.E.J:
 Coincidental Articulation Sequence
 Intercept the Random Event
 Omnidirectionness
 Order Underlying Randomness: Principle Of
 Probability
 Rearrange Random Receipts
 Entropy ≠ Randomness
 Happen: Happening: Happenstance

RBF DEFINITIONS

Rate:

"Rate occurs only when there is terminal. Rate is a modulation between terminals. With termination, a system's integrity is brought about by the individually covarying magnitudes and the omnidirectional experience pulls on the system."

- Cite SYNERGETICS text at Sec. 411.37; galley rewrite, 2 Nov'73

Random: Randomness:

(2)

See Boltzmann Sequence (5)*
 Entropy, 1960*
 Nebula, 29 Oct'72
 Space Technology (7)
 Triangle, 8 Oct'64
 Biological Life (1)
 Thinking, 6 Nov'73
 Light on Scratched Metal, 9 Nov'73

RBF DEFINITIONS

Rate:

"You don't get rate until there is terminal. Rate is a modulation between terminals. With termination of a system's integrity is brought about by the individually covarying magnitudes and the omnidirectional experience pulls on the system."

- Cite RBF to EJA, 3200 Idaho, incorporated in SYNERGETICS draft At Sec. 411.38, 9 Nov'72

[37]

RBF DEFINITIONS

Range Finder:

"Dual personality... provides two viewpoints... equivalent to the eyes of a range finder, an instrument which mechanically widens the distance between the two human eyes..."

- Citation and context at Genius, 1938

RBF DEFINITIONS

Rate:

"...Rate being the inseparable relationship of time and space."

- Citation and context at Conscious World, 1938

Synergetics Dictionary

Ratios: Ratio-ing: (2)
 See Cartilage vs. Bone, Dec'61
 Efficiency, 22 Jan'75
 Greater Intellect, (2)
 Inverse, 11 Jul'62
 Trigonometry: Spherical Trigonometry, (1);
 11 Jul'62

Rational Fractions: (1)
 See Modules: A & B Quanta Modules

Rational Action in a Rational World:

See Dymaxion, 1967

Rational Fractions: (2)

See Vector Equilibrium Field, 20 Dec'73

Rationality by Complementation:

See Icosahedron & Vector-edged Cube

Rational - Relational:

See Reason, Aug'73

Rational Concentricity:

See Unified Operational Field, 30 Dec'73

Rationalization of Selfishness:

See Propaganda, 29 Mar'77
 News & Evolution, (3)
 Technology: Enchantment vs. Disenchantment, (3)(4)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p>Rational Whole Numbers:</p> <p>"Rational values . . . can be expressed as a ratio of a whole number. . . . Nowhere in" Synergetics "is it necessary to introduce irrational numbers such as π, (3.14159..+)."</p> <p style="text-align: right;">* Cite MARKS, pp 47-48, 1960</p>	<p>Rationality: (2)</p> <p>See Cosmic Accounting, 20 Dec'73 Dymaxion, 1967; 1960 Oscillation, 21 Dec'71 Powering: Second Powering, 21 Dec'71 Vector Equilibrium, (1)(2) Triacotrahedron, 3 May'77 Min-max Limits, 8 Aug'77</p>
<p>Rational Whole Numbers: (1)</p> <p>See Low Order Prime Numbers Asymmetry: Plus & Minus Magnitudes as Rational Fractions Prime Rational Integer Characteristics Single Integer Differentials</p>	<p>RBF DEFINITIONS</p> <p>Rationalization Sequence : (1)</p> <p>"Upon the premise that the sumtotal human desire to survive is dominant over the sumtotal of the impulses to destroy, this book is designed. It does not seek to provide a formula to attainment. To do so would develop dogma and nullify the process of individual rationalization that is utterly essential for growth.</p> <p>"Rationalization is an act similar to walking through a half-frozen, marshy, unexplored country to mark out a trail that others may eventually follow. It involves not only the familiar one-two progression of shifting the weight and balance from one foot to the other, but an unknown quantity progression of selective testing to avoid treacherous ground before putting full weight upon the forward foot.</p> <p>"Rationalization is a time-word to replace 'thinking,' which is an ancient, mystically evolved word tentatively signifying an attempt to force the power of god into one's self. Rationalization connotes a constant, selective balancing of relative values, gained from experience, for the purpose of harmonious, inclusive recomposition and subsequent extension.</p> <p>- Cite NINE CHAINS TO THE MOON, p. ix, 1938</p>
<p>Rational Whole Numbers: (2)</p> <p>See Simplex, 1965 Vector Equilibrium (1) Twelve Universal Degrees of Freedom, Dec'61 Energy Has Shape, 24 Sep'73 Absolute Network, 10 Nov'74 Omnialo, Nov'71 Module: A Quanta Module: Introduction Of, 22 Feb'77 Multiplication by Division, 20 Jan'77 Kites & Quarks as Basic Notes, (1)-(3) Trigonometry, 26 Sep'77</p>	<p>RBF DEFINITIONS</p> <p>Rationalization Sequence: (2)</p> <p>"It is central to my philosophy that everything in the Universe is constantly in motion, atomically if not visibly, and that opposing forces throughout this kinetic picture are always in neat balance; furthermore, that everything invariably moves in the direction of least resistance.</p> <p>"The history of man's creative effort is the story of his struggle to control 'direction' by the elimination of known resistances.</p> <p>"To the degree that the direction of least resistance is controlled by vacuumizing the advance and de-vacuumizing the wake, the course of society can be progressively better charted and eventually determinable with a high degree of certainty.</p> <p>"The creative control, or streamlining, of society by the scientific-minded (the right-makes-rightist) is in direct contrast to attempts by scheming matter-over-mindists (the might-makes-rightist) to control society by increasing, instead of lessening, resistance to natural flows through such devices as laws, tariffs, prohibitions, armaments, and the cultivation of popular fear.</p> <p>- Cite NINE CHAINS TO THE MOON, p.x, 1938</p>
<p>Rationality: Rational: (1)</p> <p>See Omnrationality Prime Rational Integer Characteristics Reason Nuclear Geometrical Limit of Rational Differentiation</p>	<p>RBF DEFINITIONS</p> <p>Rationalization Sequence: (3)</p> <p>"By controlling direction it becomes possible, scientifically, to increase the probability that specific events will 'happen.'</p> <p>"Preparation of the material herein set forth dates from the very beginning of my experience. Up to a point in that experience I lived by the common code of loyalty and good fellowship with all of its convincing and romantic 'tradition.' Then, through my own particular quota of important slaps in the face, it became apparent that in 'tradition' lies fallacy, and that to be guided in conduct and thought by blind adherence to tenets of tradition is, as said in slang, bravely to 'stick the neck out.' I realized that experience is the vital factor, and that, since one can think and feel consciously only in terms of experience, one can be hurt only in terms of experience. When one is hurt, then somewhere in the linkage of his experience can be discovered the parting of the strands that led to the hurt. Therefore it follows that strict adherence to rationalization, within the limits of self-experience, will provide corrections to performance obviating not only for one's self, but for others, the pitfalls that occasion self-hurt. By cultivating the ability to rationalize in the absolute, one acquires the power of so ordering experience that truths are"</p> <p>- Cite NINE CHAINS TO THE MOON, p.x, 1938</p>

Synergetics Dictionary

RBF DEFINITIONS

Nationalization Sequence: (4)

"Clarified and susceptibility to self-hurt is diminished to the point of negligibility. Through rationalizations anyone may evolve solutions for any situations that may arise, and by the attainment of this ability through experience one obtains his license to be of service to mankind.

"Nationalization alone, however, is not sufficient. It is not an end in itself. It must be carried through to an objective state and materialize into a completely depersonalized instrument-- a 'pencil.' (Who knows who made the first pencil? Certainly not Bernhard Faber or 'Venus.) The pencil not only facilitates communication between men, by making thought specific and objective, but also enables men cooperatively, to plan and realize the building of a house, oxygen tent, flat iron, or an x-ray cabinet by virtue of the pencil's availability. The inventor, alive or dead, is extraneous and unimportant; it is the 'pencil' that carries over. Abstract thought dies with the thinker, but the mechanism was building for a long time before the moment of recognized in-vention.

"The substance of this book develops my conviction of these truths. In a final chapter I have recorded certain thought--"

- Cite NINE CHAINS TO THE MOON, pp.x-xi, 1938

Rbf DEFINITIONS

Hazor:

"... The blade of a razor is a randomly dumped breakwater of spherical rubble."

- Cite SYNERGETICS draft at Sec. 1009.41, 10 Feb'73

RBF DEFINITIONS

Nationalization Sequence: (5)

"Processes and results of abstract intuitive thinking which would be obscure without reading the preceding sections. The reason for exposing myself to possible suspicion of 'mysticism' is to show how important it is to transcribe the faint thought messages coming into our personal cosmos at the time of occurrence-- sketchy and puzzling though they may be-- because time, if well served, will turn them into monkey-wrenches and gas torches.

"The title 'Nine Chains to the Moon' was chosen to encourage and stimulate the broadest attitude toward thought. Simultaneously, it emphasizes the littleness of our Universe from the mind viewpoint. A statistical cartoon would show that if, in imagination, all of the people of the world were to stand upon one another's shoulders, they would make nine complete chains between the Earth and the Moon. If it is not so far to the Moon, then it is not so far to the limits-- whatever, whenever, or wherever they may be.

"Limits are what we have feared. So much has been done to make us conscious of our infinite physical smallness that the time has come to dare to include the complete Universe in our"

- Cite NINE CHAINS TO THE MOON, p.xi, 1938

Reachable Point:

See Vector Equilibrium: Unarticulated VE, 2 Nov'73

RBF DEFINITIONS

Nationalization Sequence: (6)

"Rationalizing. It is no longer practical to gaze at the surfaces of 'named' phenomena within the range of vision of the smoking car of the 5.15 with no deeper analysis of their portent than is ~~derivable~~ derivable from a superficial exchange of complexed opinion-notions with fellow-commuters.

"After all,' Jeans said, 'it is man who asked the question.' The question is survival, and the answer, which is unit, lies in the progressive sumtotaling of man's evolving knowledge. Individual survival is identifiable with the whole-- as extension or extinction. There is no good country doctor on Mars to revive those who, through mental inertia, are streamlining into extinction."

- Cite NINE CHAINS TO THE MOON, p.xi, 1938

Reach-miles:

See Radiation: Speed Of, 30 Nov'72
Vector Equilibrium: Unarticulated Ve, 2 Nov'73

Rationalization:

See Political Mandates: Inventory Of, 27 Dec'73
Selfishness, 20 Sep'76

Reach: Reachability Range:

(1)

See Limit Reach
Radial Reach
Radiant Viability of IVM-defined Wavelength Sweepout

Synergetics Dictionary

<p><u>Reach:</u> <u>Reachable:</u> (2)</p> <p>See Isotropic Vector Matrix, 30 Nov'72 Point, 16 Nov'72 Time, 30 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Reading:</u></p> <p>"We don't know how we retrieve information from our brain. The conscious part does some triggering; it acts as a valve; it can be a brake or it can be an accelerator. But the conscious part is less than one-millionth of the retrieval process. The rest is subconscious. There is an automatic process. When we can't remember a name the brain doesn't forget we asked the question, although maybe we have forgotten. But the lags are variable, and therefore the feedbacks are not orderly. The only conscious part is the holding back of irrelevancies. And this is true of reading, too."</p> <p>- Cite RBF in tape interview with Mike Bandler, Wash. Post, "Portrait of a Man Reading," 3200 Idaho, Wash DC, 29 May'72</p>
<p>RBF DEFINITIONS</p> <p><u>Reaction:</u></p> <p>"While the human's actions are antientropic, his reactions are entropic, ergo unpredictable."</p> <p>- Citation and context at <u>Individuality</u>, May'65</p> <p>- Cite RBF in AAUW Journal, [redacted] p. 176, May 1965</p>	<p>RBF DEFINITIONS</p> <p><u>Reading:</u> (1)</p> <p>Q. "Mr. Fuller, you're quite a traveler. Where do you find the time and the places to read?"</p> <p>A. "Obviously airplanes and airports are great places, as are hotel rooms very late at night. I'm convinced you can't put out if you don't put in. In other words, thinking does come from experience. Reading increases the number of experiences from which you may gradually adduce generalized principles. I am now fairly aware of what my conscious part is in this very complex system called thinking. That conscious part, which is only one-millionth of the picture, can do some triggering, can be a brake or an accelerator, a valve that can shut off or turn off a process.</p> <p>"We experience different rates of retrieval of information. Even in my vocabulary and in my reading, there are lags, and when people talk about speed reading, it's really just a means of diminishing the lag. I'm not interested in speedreading, but rather in content and understanding. But I find the subconscious is very powerful.</p> <p>"During 1938-1940 I was consultant in science and technology to the editor of Fortune magazine, and my function was to emphasize the science foundations of great industry.</p> <p>- Cite Michael Bandler Interview, BOOK WEEK, 11 Jun'72</p>
<p><u>Reaction:</u> (1)</p> <p>See Action Action-reaction-resultant Resultant Z Cobras</p>	<p>RBF DEFINITIONS</p> <p><u>Reading:</u> (2)</p> <p>"I read 'Patent Gazette,' and I could literally spin the pages, and when my eyes saw something I wasn't familiar with they would stop me. They recognized absolutely everything I wasn't familiar with. So when I read today I don't have to process the material. I know my subconscious will stop me when I'm not familiar with something. Everybody has that capacity, but not [redacted] everyone uses it."</p> <p>- Cite "Books and Buckminster Fuller," Interview by Michael J. Bandler, BOOK WEEK, 11 Jun'72</p>
<p><u>Reaction:</u> (2)</p> <p>See Sixty Degreeness, 8 Dec'72</p>	<p>RBF DEFINITIONS</p> <p><u>Reading:</u> <u>Escapist Reading:</u></p> <p>Q: "What do you do in the way of what might be called escapist reading?"</p> <p>A: "I have nothing to escape. I'm really so fascinated with life."</p> <p>- Cite query from Mike Bandler, Wash. Post, "Portrait of a Man Reading," to RBF in tape interview, 3200 Idaho, 29 May'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Reading Out Loud:

"We read all of Dickens out loud. In reading out loud your eye really goes several lines ahead and you can anticipate the meaning and inflections. Out loud reading went right on through the time of World War I, but it went out just like that when popular radio came in."

- Cite RBF in tape interview with Mikeandler, Wash. Post., "Portrait of a Man Reading," 3200 Idaho, Wash DC, 29 May'72

Real:

(2)

See Principle, May'49
Vector, 27 May'72*

Reader: Reading:

See Child Sequence (3)
Fuller, R.B: Books Read in His Youth, 1971
Semantics, 20 Feb'73

RBF DEFINITIONS

Real Estate:

"Big money has left all the sovereignly locked-in, local-property-game players holding the unmovable bags of real estate...."

- Citation & context at Transnational Capitalism & Export Of Know-how, (1); 20 Sep'76

RBF DEFINITIONS

Real:

"... Vectors being the product of physical energy constituents, are 'real,' having velocity multiplied by mass operating in a specific direction; velocity being a product of time and size modules; and mass being a volume-weight relationship."

- Citation at Vectors, 27 May'72
- Cite SYNERGETICS Dept, Sec. 410-05, RBF raw tape 27/2 May'72

RBF DEFINITIONS

Real Estate Development:

"We find that generally speaking the geographically larger the physical task to be done, the duller the conceptual brain is brought to bear upon the technically realized applications."

- Cite RBF quoted by Hal Aigner, in Holling Stone, 10 June 1971
- Citation and context at Politics, 10 Jun'71

Real:

(1)

See Ideal vs. Real
Realm: Real: Royal
Real Models of Reality
Real Universe

Real Estate: Real Estate Development:

(1)

See Building Business
Realm: Real: Royal
Whitehead's Dilemma
Land Exploitation
Deed: (Property Deed)
Miniature Castle Building

Synergetics Dictionary

<p><u>Real Estate: Real Estate Development:</u> (2) See New York City (12) Transnational Capitalism & Export of Know-how, (1)* Houses & Infrastructure, 20 Sep'76</p>	<p>RBF DEFINITIONS</p> <p><u>Reality:</u> "Nature modulates probability and the degrees of freedom, i.e. frequency and angle, leads to the consegrity sphere; which leads to the pneumatic bag; all of which are the same kind of <u>reality</u> as the three automobiles."</p> <p style="text-align: right;">_ Citation and context at <u>Sphericity of Whole Systems</u>, 26 Sep'73</p>
<p>TEXT CITATIONS</p> <p><u>Realistic:</u> Synergetics draft at Sec. 1001.14, 16 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Reality:</u> ". . . What we call <u>reality</u> is always a positive or negative set of the whole."</p> <p>(This is in the context of a description of zero vector equilibrium.)</p> <p>- Citation & context at <u>Vector Equilibrium: Zero Tetrahedron</u> (3), 11 Jul'62</p> <p style="text-align: center;">- Cite Carbonale Draft Natural's Coordination, p. VI, 45</p> <p>- Cite Oregon Lecture #7, p. 236, 11 Jul '62 Incorporated in SYNERGETICS draft at Sec. 441.23, 9 Jun'72</p> <p>- See RBF rewrite on galley at Sec. 441.23, cited at <u>Physical Reality</u>, 4 Nov'73</p>
<p>RBF DEFINITIONS</p> <p><u>Reality:</u> "The reality is always orbital."</p> <p style="text-align: right;">- Citation & context at <u>Orbit = Circuit</u>, 10 Sep'74</p>	<p>RBF DEFINITIONS</p> <p><u>Reality:</u> "What the mathematicians have been calling abstraction is reality. When they are inadequate in their abstraction then they are irrelevant to reality. The mathematicians feel they can do anything they want with their abstraction because they don't relate it to reality. And, of course, they can really do anything they want with their abstractions but, like masturbation, it is irrelevant to the propagation of life.</p> <p>"The only reality is the abstraction of the principles, the eternal generalized principles. . . Most people talk of reality as what are just the after-image effects-- the realization lags, which register superficially and are asymmetric and off center. (The principles themselves have different lag rates and different interferences.) When we get to reality it's absolutely eternal.</p> <p>"The inherent inaccuracy is what people call the reality. Man's way of apprehending is always slow; ergo the superficial and erroneous impressions of solids and things, which can actually be explained only in principle."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash. DC, 24 Feb'72 - Citation at <u>Abstraction</u>, 24 Feb'72</p>
<p>RBF DEFINITIONS</p> <p><u>Reality:</u> "Reality is always indeterminate."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash. DC, 5 May'74</p>	<p>RBF DEFINITIONS</p> <p><u>Reality:</u> "The principle is more of a reality than the qualities they produce."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, DC, 24 Feb'72 - Citation and context at <u>Principle</u>, 22 Feb'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Reality:

"...There is no straight line; only the wave coincides with reality."

- Citation & context at Now, 14 Feb'72

RBF DEFINITIONS

Reality:

"All of the weightless metaphysical thoughts concerning reality are mentally understandable independently of any special-case physical sense experience. All such weightless thoughts can be imaginatively described by one person either to himself or to another person by weightless conceptions. Such weightless thinking-- independent of physical sensing-- plus our scientific discovery of the great infra- and ultra-to-human-sense-ranging of physical energy's electromagnetic spectrum regularities altogether combine to both establish and confirm that less than one-millionth of reality is now directly apprehensible by the human senses."

- Cite ARCHITECTURE AS ULTRA INVISIBLE REALITY, p. 150, Dec. '69

RBF DEFINITIONS

Reality:

"The nonsimultaneity and dissimilarity Of the complementary interpatternings Produce what we sense to be reality. Otherwise they would cancel one another And there would be no sensoriality."

- Citation at Senses, 1971

RBF DEFINITIONS

Reality:

"The wellspring of reality is the family of weightless generalized principles."

- Cite NEHRU SPEECH, p.41, 13 Nov'69

RBF DEFINITIONS

Reality:

"... Not until we have size, not until we have energetic experienceability, i.e., not until we have reality, do we have structural stabilization of the nuclear 12 \sphericalangle balls of the vector equilibrium 7."

~~- Cite RBF to CIA, Bear Island, 23 August 1971.~~

- Citation & context at Vector Equilibrium, 23 Aug'71

RBF DEFINITIONS

Reality:

"Every chemical element has its unique frequencies. That became the way that you know, this is what you mean by that, mathematically and scientifically this is the element, this is the reality. Copper is real, and copper was those frequencies. . . "

- Cite RBF Address THE HABITABLE CITY, 14 Oct '69.

~~UNIQUE FREQUENCIES - SEC. 418.12 REJECTED BY RBF, 11 NOV'74~~

RBF DEFINITIONS

Reality:

"Conceptuality is metaphysical and weightless.

"Reality is physical."

~~- Cite RBF to CIA, Somerset Club, Boston, 22 April 1971~~

- Citation & context at Conceptuality & Reality, 22 Apr'71

RBF DEFINITIONS

Reality:

"...Everything we know as reality has to be either a positive or negative condition."

- Citation and context at Nature, Jun'66

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Reality:</u></p> <p>"Pure science events represent openings of windows through the wall of ignorance and fiction, to reveal the only <u>reality</u>-- the behavior of the naked Universe that always was, is, and will be. True it is that the first glimpses may be hazy and imperfect, but the behavior itself is absolute and progressively clarified. . . ."</p> <p style="text-align: right;">- Citation and context at <u>Science</u>, p.13, 1947</p>	<p>TEXT CITATIONS</p> <p><u>Reality = Inexactitude</u></p> <p>e543.05</p>
<p>RBF DEFINITIONS</p> <p><u>Reality: Fuller's Reality vs. Popular Reality:</u></p> <p>"I really very clearly differentiate today what I call reality and what most people call reality. Their reality is that you have got to make money and you have got to pay your bills. I consider that really a game. So it is part of my reality that man is hooked with a game, which makes it very inconvenient for me where they are not dealing with reality. The game includes social standings, reputation... that there is a place called Chicago... because in my reality there are probably no names."</p> <p style="text-align: right;">- Citation & context at <u>Interrelatedness vs. Names</u>, (1); 20 Feb'77</p>	<p>RBF DEFINITIONS</p> <p><u>Reality as Structural Interaction of Principles:</u></p> <p>"The relative abundances of reciprocally patterning principles everywhere constitute the so far discovered inventory of <u>minimally complex, ergo fundamentally differentiable</u> structurally regenerative universal governance. The complex of interactively accommodating principles and their relative abundance accommodation are <u>reality</u>-- the only reality. What man, in his sensorially preoccupied misapprehending, has termed 'abstract,' in contradistinction to sensorial, as well as that which man has designated as metaphysical in contradistinction to physical, are altogether one reality. The fact of meagerness of the experience-generated knowledge of man in respect to the omniregenerative structure of <u>reality</u> and the observational facts taken in the twilight zones between the meager known and the as-yet -unexperienced, in no way alters the unitary integrity of the utter interaccommodation of complex structural interaction of the principles as so far sum totally inventoried by the faithfully reported experiences of man."</p> <p style="text-align: right;">- Cite I&I, DOMECS, p. 147, 1963</p>
<p><u>Reality: Fuller's Reality vs. Popular Reality:</u></p> <p>See Earning a Living</p>	<p><u>Reality as Structural Interaction of Principles:</u></p> <p>See Universe (p.131) 1960 Airplane, May'49 Periodic Experience, (7)</p>
<p>RBF DEFINITIONS</p> <p><u>Reality vs. Generalization:</u></p> <p>"There are a lot of different realities. That is the difference between reality and generalization. There is only one generalization."</p> <p style="text-align: right;">- Citation & context at <u>Individuality & Degrees of Freedom</u>, (3) 17 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Reality: Structurings as the Only and Inescapable Reality:</u></p> <p>"The mathematical patterning and intertransformability of nature's geometrical structurings are the only <u>reality</u> of Universe. The infinitely regenerative dynamism, always potential in the fundamental relationship of the principles, in itself constitutes the intellectually tunable and ever inescapable <u>reality</u>."</p> <p style="text-align: right;">- Cite I&I, DOMECS, p. 147, 1963</p>

Synergetics Dictionary

<p><u>Reality & Unreality:</u></p> <p>See Dynamic Equilibrium, 24 Apr'76</p>	<p><u>Reality:</u> (2B)</p> <p>See Vector Equilibrium, 23 Aug'71*; 1 May'71 Vector Equilibrium: Zero Tetrahedron (3)* Velocity, 12 Jul'62 Senses, 1971* Orbit = Circuit, 10 Sep'74* Principle, 6 Apr'75 Thought, May'49 In, Out & Around, Nov'71 Multidimensional Accommodation, 11 Dec'75 Life & Death, 26 Jan'76 Me, 18 Dec'76 Life is Not Physical, 20 Feb'77 Conceptual Limits, 22 Jun'77</p>
<p><u>Reality:</u> (1A)</p> <p>See Common Sense Reality Conceptuality & Reality Cosmetry Earth: Let's Get Dow to Earth Game of Reality Geometry of Reality Ideal vs. Real Invisible Reality Local Reality Mind as Reality Minimum Reality Nonreality Official Reality Perceptual Peephole Physical Reality Residual Reality A Priori Four-dimensional Reality Mind-over-matter Reality Temporality = Tempo-reality = Time-reality</p>	<p><u>Reality:</u> (3)</p> <p>See Reality: Fuller's Reality vs. Popular Reality Reality vs. Generalization Reality as Structural Interaction of Principles Reality: Structurins as the Only & Inescapable Reality Reality & Unreality</p>
<p><u>Reality:</u> (1B)</p> <p>See Sensorial Identification of Reality Spherical Reality Superficial Reality Wellspring of Reality Vectors Are Real Four-dimensional Reality Momentary Reality</p>	<p>RBF DEFINITIONS</p> <p><u>Realizable:</u></p> <p>"Physical interferences of our sensibilities are alike true and real, or <u>realizable</u>, only in principle."</p> <p style="text-align: center;">- Citation and context at <u>Principle</u>, May'49</p>
<p><u>Reality:</u> (2A)</p> <p>See Abstraction, 24 Feb'72* Apprehending, 22 Nov'73 Benday Screen, 28 Oct'72 Conceptuality & Reality, 22 Apr'71* Dream, 1968 God, May'68 Invisible Colors, 4 Mar'69 Imaginary Universe vs. This Universe, 22 Feb'72 Magic, 18 Nov'72 Mother: Infant Nursing at Mother's Breasts, 18 Nov'72 Nature, Jun'66 One, 20 Dec'73 Now, 14 Feb'72* Positive & Negative, 11 Jul'62 Principle, 22 Feb'72* Quantum Mechanics, Jun'66 Responsibility, 14 Oct'69 Science, 1917* Sphericity of Whole Systems, 26 Sep'73*</p>	<p>RBF DEFINITIONS</p> <p><u>Realization:</u></p> <p>"...All physical realisations are always disequilibriumous."</p> <p style="text-align: center;">- Citation and context at <u>Basic Triangle: Basic Disequilibrium</u> <u>120 LCD Triangle</u>, 20 Dec'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Realization:</u></p> <p>"A vector is a partial generalization being either metaphysically theoretical or physically <u>realized</u>, and in either sense, an abstraction of a special case. . . "</p> <p style="text-align: right;">- Citation and context at <u>Vector</u>, 26 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Realization:</u></p> <p>"The new reliable understanding of meaning. . . requires the revision not only of semantics but also of their complex aspect as thought habits employed to describe experience with accuracy, such as . . . the substitution of the word '<u>realization</u>' for the very inaccurate use of the verb 'to create.' Man creates naught. If he comprehends in principle, he rearranges locally in Universe by realization of the interactions of principles."</p> <p style="text-align: center;">_____ _____</p> <p style="text-align: right;">- Cite <u>SOPAL THINKING</u>, I&I, P.234, <u>May'49</u></p> <p style="text-align: right;">- Citation & context at <u>Meaning</u>, May'49</p>
<p>RBF DEFINITIONS</p> <p><u>Realization:</u></p> <p>"Realizations are always imperfect."</p> <p style="text-align: right;">- Citation and context at <u>Physical Is Always the Imperfect</u>, 14 Feb '72</p> <p style="text-align: right;">- Cite RBF marginalia at notes, 'Facing Reality', p. 1, 14 Feb. '72</p>	<p>RBF DEFINITIONS</p> <p><u>Realization Lag:</u></p> <p>"Where all the local vectors are approximately equal we have a potentially local isotropic vector equilibrium, but the operative vector complex has the inherent qualities of both proximity and remoteness in respect to any locally initiated action, ergo, a complex of relative velocities of <u>realization lags</u>."</p> <p style="text-align: right;">- Citation at <u>Proximity</u>, Oct'59</p> <p style="text-align: right;">- Cite SYNERGETICS, Corollaries, Sec. 240, 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Realization:</u></p> <p>"Potential lines are metaphysically straight, all physically <u>realized</u> relationships are geodesic and curved trajectories."</p> <p style="text-align: right;">- Cite <u>SYNERGETICS Corollaries, Sec. 240, 1970</u></p> <p style="text-align: right;">- Citation at <u>Metaphysical & Physical</u>, 1971</p>	<p><u>Realization Lags:</u></p> <p>See Abstraction, 24 Feb'72 Local Vector Equilibrium, 2 Nov'73 Metaphysical, 14 Feb'72 Proximity, Oct'59* Time, 23 May'72</p>
<p>RBF DEFINITIONS</p> <p><u>Realization:</u></p> <p>"Realization is objective integrity."</p> <p style="text-align: right;">- Cite I&I, PRIME DESIGN, p. 245, May'60</p>	<p><u>Realization: Realizable:</u> (1)</p> <p>See After-image Conceptual Genesis Creativity Cyclic Realization Discovery Potential vs. Realized Pulsivity of Realizations Regenerative Design: Law Of Quantum Values Self-realization Time-somethingness Systematic Realization Operational Realizations Comprehensive Realizer Operational = Physically Realized Temporary Realizations</p>

Synergetics Dictionary

Realization: Realizable:

(2A) ■

See Basic Triangle: Basic Disequilibrium 120 LCD Triangle, 20 Dec'73*
 Conceptuality & Reality, Jun'66
 Experience, 1960
 Four, 26 Jan'73
 Frame of Reference, 4 Oct'72
 Interference, May'49
 Isotropic Vector Matrix, 6 Mar'73
 Isotropic-vector-matrix Field, 20 Dec'73
 Meaning, May'49*
 Metaphysical & Physical, 1971*
 Physical Is Always the Imperfect, 14 Feb'72*
 Principle, May'49*; 7 Oct'75
 Space Nothingness & Time Somethingness, 28 Dec'73
 Timeless, 1 Apr'72
 Time-sizing, 30 Nov'72
 Vector, 26 May'72*
 Wavilinear, 28 Oct'73
 Radial Depth, 20 Feb'74

Realms vs. Surfaces:

See Black Holes & Synergetics, 1 Mar'77

Realization: Realizable:

(2B)

See Special Case, 27 Dec'74
 Scenario vs. Absolute Symmetry, 11 Dec'75
 Children as Only Pure Scientists, 28 Apr'77

ETYMOLOGICAL DICTIONARY (WEEKLEY)

Real:

OF reame, reeme, L. regimen, later becoming realis, reisme (royaume under influence of real, royal. Mod. form, later influencing pronounc., is due to influence of ME real, royal, usual early forms being reame, reeme.)

RBF DEFINITIONS

Realis: Real: Royal:

"All of us really carry on much on a really safe basis, going back again to people with swords and farming the land. We go back to somebody with weapons more powerful than other people saying, 'I claim this and don't anybody say No.' If nobody said 'No' then you called your officers to write the deeds... We have our deedings going back to whoever is the sovereign of that land. The word real in Spanish is the word royal or our word real-- coming from is it valid to the king... Our real estate going back to royalty's estate. Valid to the king-- comes back to the deeds of the king. Then we have man monopolizing the physical. Fantastic laws we have protecting the land and almost no laws protecting man's ideas, the metaphysical. We protect the physical. It is the underlying financing of the building in terms of the land. This land exploitation is very dominant in the building world, making the equities of land more and more, not thinking at all about the fundamentals of how do you really serve man."

(Edited and slightly rearranged.)

- Cite Transcript Univ. of Alaska Address, p.2, 20 Apr '72

ETYMOLOGICAL DICTIONARY (WEEKLEY)

Real:

Adj. F. réel, Late L., realis, from reg, thing. As trade description perh. influenced by ME real, rial (royal), stock epithet for superior merchandise.

RBF DEFINITIONS

Realis: Real: Royal:

"The great pirates came into the various lands and picked the strongest man in each to be their local head man. He became their general manager of the local realm (realm = real-m). Real (pronounced re-all) means royal in Spanish. Roi means King (French). Roy means grand ruler (India). All are derived from Ra or Rg: Thu sun gods of India, China, Mesopotamia, and Egypt. From this comes 'the real thing,' realization, and reality, i.e., the commonly recognized experience-- ergo, real estate which was certified under royal deeds issued by the original sovereign claimant of the land. There is an official reality which is sometimes unnatural."

- Cite ENVIRONMENT AND CHANGE, Ed. W.R. Ewald, P. 350. Above passage omitted from OPERATING MANUAL FOR SPACE SHIP BIRTH text at P. 28. 1968

Realis: Real: Royal:

See Religion: Related to 'Regio' or Rule

Synergetics Dictionary

<p><u>Real Models of Reality:</u> (1)</p> <p>See Grand Central Station of Universe Local Vector Equilibrium Railroad Tracks: Great Circle Energy Tracks on The Surface of a Sphere</p>	<p>RBF DEFINITIONS</p> <p><u>Real World:</u> "The real world is a special case."</p> <p>- MRBF confirmed his authorship of above bumper sticker by leaping out of EJA car on 34th Street in Georgetown en route to a State Dept. Meeting. RBF chatted with woman driver of DC license # 160-585; she also attributed statement to RBF; 12 May'75</p>
<p><u>Real Models of Reality:</u> (2)</p> <p>See Graphable, 27 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Rearrange Elemental Order:</u> "Energy is the capability or the capacity to rearrange elemental order."</p> <p>- Citation & context at <u>Energy</u>, 1967</p>
<p><u>Real Universe:</u> (1)</p> <p>See Real World</p>	<p>RBF DEFINITIONS</p> <p><u>Rearranging the Environment:</u> "I'm experienced in going from original conceptions, i.e. inventions-- ergo, unknown to others-- to <u>altering the environment</u> in a complex of ways which are omni-considerate of all side effects on the altered environment. I am accustomed to starting from primitive conditions, where as far as one can see no other man has explored. I have learned how to <u>rearrange the environment</u> in such a way that it does various things for our society that we could not do before, such as building a dam which in turn produces a pond..."</p> <p>- Cite RBF Introduction to Victor Papanek's "Design for the Real World," 9 Apr'71</p>
<p><u>Real Universe:</u> (2)</p> <p>See Graphable, 27 May'72 Probability, (1)</p>	<p><u>Rearrange the Environment:</u> See Success, May'72 Wealth, 8 Dec'75</p>

Synergetics Dictionary

Rearranging the Furniture:

See Furniture

Rearrange Random Receipts in Molecular Chains:

See Antientropy, (A)(B)
Earth, Jun'66

RBF DEFINITIONS

Rearrange the Landscape:

"It is only the metaphysical that can rearrange the physical landscape to human advantage..."

- Cite Nehru Speech, pp.46-47, 13 Nov'69

RBF DEFINITIONS

Rearrange the Scenery:

"To date, we have gained vast inventories Of trial-and-error experience From all of which information we have developed A family of generalized scientific principles Which are weightless pattern concepts, Being weightless they are metaphysical. From the metaphysics We have in turn designed Rearrangements of the physical behavior constituents Of our omnikinetic environment scenery. We have rearranged the scenery In the pattern of world-around occurring power-driven tool networks All of which teleologic process Has produced an ever-increasing survival advantage for humanity."

- Cite HABIN & MIND, p.92 May '72

Rearrange Locally:

(1)

See Comprehension = Rearrange Locally

RBF DEFINITIONS

Rearrange the Scenery:

(1)

"I'd like to answer one more sort of challenge we had a little earlier, and that is that I've learned not only this grand strategy of not trying to reform the individual; to assume that the individual can concentrate entirely on rearranging the scenery in permitted ways to make it more favorable for life-- to demonstrate its capabilities. I have also learned that where you see things that need to be done-- you can see the scenery can be rearranged. Your experience tells you that scenery can be rearranged to a higher advantage for man. . . And there's nobody to tell you to do it. . . You will try to do something about it, to rearrange it, and then he says, 'What have you done?' And then you explain what you've done and how it works, and then he says 'Well, that's very interesting,' but then goes right on about his regular business. Then I find that there's always an emergency, when you have to have something waiting there. So my whole strategy is-- and I've been able to live now on the frontier without anybody guaranteeing me anything, or telling me what to do-- taking the economic initiative and trying to find out what nature needs to be done."

- Cite RBF to World Game at NY Studio School 12 Jun-31 Jul'69, Saturn Film transcript, Sound 2, Part 3, pp. 68-69.

Rearrange Locally:

(2)

See Hammering Sheet Metal, (1)
Realization, May'49

RBF DEFINITIONS

Rearrange the Scenery:

(2)

"When you can't go any further with one thing, then you look over to another one that needs attending to, and you keep shifting from one to the other. So, at any rate, I've learned how to survive there. One of the things I do is never try to persuade anybody. I don't try to sell anything. You see what needs to be done and you do it. And you wait until a man says 'What is that?' and then you tell him what it is. For instance, I've learned that there's no use going around with pulmotors door-to-door like a Fuller Brush man and say 'I'd like to sell pulmotors.' But all of a sudden there's some suffocation and you have to have a pulmotor in a hurry, and then it's lucky you did it. So I find that society has its emergencies. . . So you have what I call emergence by emergency. And that's what is really going on at this table with the individuals really beginning to find out how you do do it. That's the thing, not talking about it theoretically, but just really looking at what can be done-- and more than just getting the figures. This then leads to design: What are the things that need designing?"

- Cite RBF to World Game at NY Studio School, 12 Jun-31 Jul'69, Saturn film transcript, Sound 2, Part 3, pp. 69-71

Synergetics Dictionary

<p><u>Rearrange the Scenery:</u> (1)</p> <p>See Environment: Altering the Environment Furniture entries Individual Economic Initiative Reform of Environment Rather than Reform of Man</p>	<p>RBF DEFINITIONS</p> <p><u>Reason:</u></p> <p>"Reason ≠ Cause. (See Introduction to "Nine Chains to the Moon".)*</p> <p>"Rational = Relational."</p> <p>[*N.B. - Passage from Introduction to NINE CHAINS TO THE MOON cited in this file as <u>Rationalization</u> Sequence (1)-(6).]</p> <p>- Cite RBF marginalia at <u>Foundations of Physics</u>, Vol. 1, No. 4, 1971, pp. 362-363. D. Bohm: "Quantum Theory as an Indication of a New Order in Physics."</p>
<p><u>Rearrange the Scenery: Rearrange the Landscape:</u> (2)</p> <p>See Biosphere Inventory, 15 Nov'74 Copper, (1); (A) Leonardo Type, 13 Nov'69 Man as a Function of Universe, Jun'69 Comprehensive Realizer, May'49</p>	<p><u>Reason ≠ Cause:</u></p> <p>See Reason, Aug'73</p>
<p><u>Rearrange: Rearrangements:</u> (2)</p> <p>See Hammering Sheet Metal, (1) Invention, 27 Dec'73 Pattern, 3 Oct'72 Windows of Nothingness, (2)</p>	<p><u>Reason: Reasonable: Reasoning:</u></p> <p>See Faculty: Conceptual & Reasoning Faculties Knowing vs. Reasoning</p>
<p><u>Rearrange:</u> (3)</p> <p>See Rearrange Elemental Order Rearrange the Environment Rearranging the Environmental Furniture Rearrange the Furniture Rearrange the Landscape Rearrange Locally Rearrange Random Receipts Rearrange the Scenery</p>	<p><u>Rebirth:</u> (1)</p> <p>See Centers of Energy Rebirth Eternal Rebirth System</p>

Synergetics Dictionary

Rebirth:

(2)

See Eternal Slowdown, (2)
Isotropic Vector Matrix, 16 Nov'72
Time-size, 20 Dec'73

Recall Playbacks:

See Brain's TV Studio, (2)

Rebonding:

See Unbonding-rebonding

RBF DEFINITIONS

Recall Set:

"Brains differentially correlate the succession of special case informations communicated to the brain by the plurality of senses. The brain distinguishes the new, first-time-event, special case experiences only by their comparison with the set of all its recalled prior cognitions."

- Cite SYNERGETICS 2 draft at Sec. 100.015; 28 Apr'77

RBF DEFINITIONS

Recall Lags:

"The whole of Universe is a consequence of our not seeing instantly. As a result of the recall lags the physical is always imperfect."

~~- Cite Ref to Edt, 3200 Idaho, Wash Dc, 26 May'72 -~~
(Citation and context at Equanimity Model, 26 May'72)

Recall Set:

See Set, 5 Jul'62

RBF DEFINITIONS

Recall Momentum:

"Again reviewing for recall momentum..."

- Cite RBF marginalis on SYNERGETICS galley at Sec. 954.55,
28 Dec'73

Recall: Recall Lags:

(1)

See Afterimage
Double Take
Experience Recalls
Physical Experience Recalls
Memory Call-ups

Synergetics Dictionary

<p><u>Recall</u>: <u>Recall Lags</u>: (2)</p> <p>See Brain, 5 Jun'75 Equanimity Model, 26 May'72* Frequency Islands of Perception, 13 Nov'75 Happening Patterns, 6 Nov'73 Life, 25 Mar'71 Metaphysical & Physical Tetrahedral Quanta, 25 Mar'71 Pattern, Jun'66 Thinking, (A)(B); 22 Oct'72; 7 Nov'73 Thought, 31 May'71 Unitary Conceptuality, 22 Oct'72</p>	<p>RBF DEFINITIONS</p> <p><u>Reciprocal</u>:</p> <p>"It is very interesting to consider . . . a total inventory of the relative abundance of different patterns remembering that the patterns are <u>reciprocal</u>."</p> <p style="text-align: center;">- Cite OREGON Lecture #5 - p. 167, 9 Jul'62 -</p> <p style="text-align: center;">- Citation at <u>Pattern</u>, 9 Jul'62</p>
<p><u>Recall</u>: <u>Recall Lags</u>: (3)</p> <p>See Recall Lags Recall Momentum Recall Playbacks Recall Set</p>	<p>RBF DEFINITIONS</p> <p><u>Reciprocal</u>:</p> <p>"Since universe is the minimum perpetual motion machine, there is a minimum set of patterns that is a consequence of this set of patterns reacting with that set of patterns."</p> <p style="text-align: center;">- Cite OREGON University Lecture #5 - p. 167, 9 Jul'62 -</p> <p style="text-align: center;">- Citation and context at <u>Minimum Set</u>, 9 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>recede</u>:</p> <p>"The external crossing points of the system continually <u>recede</u>."</p> <p style="text-align: center;">- Cite RBF 16 Feb citation <u>Surface</u> as re-written 17 Feb '72 (Q.V.)</p>	<p><u>Reciprocal Involvement</u>: (1)</p> <p>See Paired Congruency Sleeping in the Same Bed</p>
<p><u>Recentering</u>:</p> <p>See Structure, 3 Oct'72</p>	<p><u>Reciprocal Involvement of Experiences & Principles</u>:</p> <p>See Simplicity, 1954</p>

Synergetics Dictionary

Reciprocals of Permissible Viewpoints:

See Pattern, 1954-59

Reciprocating Torus Model:

See Rubber Tires, 24 Jan'75

Reciprocal Self-processors:

See Omnidirectional, 1954
Zoneness: System Zoneness, 8 Jan'55

RBF DEFINITIONS

Reciprocity:

(1)

"But as we come to explore for the fundamental principles of interpotentials and interactions called atoms, we find that, despite the astronomical number of aspects and events, only a few principles of behavior pervade the whole of Universe as, for instance, 92 tendencies to self-impoundment of energy; a fundamental inwardness and outwardness relative only to the 'system' center of observation; the corollary principles of inherent first tendencies to inward-outward pulsations and to precession, and the principles of inside-outing-- convergence-divergence, spin and counterspin, torque and countertorque tension and pressure, the biological reciprocals of Universe (and diaphragming).

"Relativity leads us toward fundamental classification of our experience and observation, in the terms of a few hierarchies of dynamic interactions and principle transformations of an all-energy, continuous-discontinuous, synchronous-dissynchronous Universe tensionally cohered, precessional of local compressive spherical energetic collections-- as (Suns) stars or planets or moons or asteroids or meteorites; and the progression of within-ward sub-sets of events of interactions at planet crust, etc., and inward to "

- Cite TOTAL THINKING, I&I, pp.235-236, May'49

Reciprocating Engine:

See Cosmic Accounting Sequence, (4)

RBF DEFINITIONS

Reciprocity:

(2)

"the 92 common principles of atomic convergence of energy in principle, and the pervasive sets of dynamic associations by contraction, expansion, spin, orbit, torque, push, and pull, and precession. This all brings us by progressive collections of thoughts into a fundamental twoness of dynamic reciprocities which, internally paired, ultimately become one with outwardly paired principles of reciprocity.

"The becoming one of both the finity inward with the finity outward indicates a sensibility of experience preoccupying man as a superficial reality which only occurs at middling dimensions of Universe and appears schematically as a magnetic field. Its flux patterns, like two tangent balls, include every size of particle, as their hour-glass-like tangentially linked inwardness, displays both inwardly and outwardly mingled sets of fountain and reverse fountain flows-- concurrently at both ends-- and through the middle. Periodically, the whole double-bulbed dynamic flux contracts axially, as the two bulbs of dynamic flow merge progressively, and then merge completely, and again separate axially. It is obvious that inasmuch as the whole system was always in flow, that the new bulbs of flux are of necessity"

- Cite TOTAL THINKING, I&I, p.236, May'49

Reciprocating Sub-sets:

See Relativity, May'49

RBF DEFINITIONS'

Reciprocity:

(3)

"new and are therefore only identifiable in principle with the previous comprehensive duality of shapes. The system has inherent yet empty twoness.

"The reality is real-- or realized-- in principle only, by events of relative interaction transpiring only in principle. The whole of the above pulsive-waveful-dynamic-duality is schematic, and is in principle clarifying only, for, though it progressively groups all-energy Universe into an oscillating binary system, it must be understood that the whole scheme cancels out by virtue of a super paradox which finds that the infinity inward and the infinity outward of an infinite plurality of centers must be identical, and one with the infinity inward, of an infinite plurality of centers, and that: in comprehensive Universe, dimension drops out and conceptual principle remains. Physical interferences of our sensibilities are alike true and real, or realizable, only in principle. Positive and negative cancel as the principle zero.

"It is discovered in principle that probability probing of physical Universe on a statistical basis is now becoming of"

- Cite TOTAL THINKING, I&I, PP.236-237, May'49

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Reciprocity:</u> (4)</p> <p>"necessity frustrated while, probing in empty conceptual principle could be instituted and accelerated for further advancement or fundamental information. Exploration in principle is re-rewarding.</p> <p>"It is necessary that the comprehensive designer explore in principle for verification of this significance of relativity, whereby it is discovered that in the consciously realizable comprehensive binary, truth may not be dealt with as isolated, but only as relative relationships of interaction governing in principle the interactions of specially nonsimultaneous sets of dynamic principles. The comprehensive realizer thus will come, with acceleration, to competence in rearranging forwardly anticipated events, measured in principle, and forwardly projected, in associated principles of <u>reciprocal</u> interaction and juxtaposition to the anticipated energetic magnitudes of variable stresses and flows. These interactions are known as structures and mechanics.</p> <p>"Thus it is discerned how the comprehensive realizer of relativity may become competent as an integrator of the until-then- threatening chaotic dissipation of common"</p> <p>- Cite TOTAL THINKING, I&I, p. 237, May'49</p>	<p><u>Reciprocal:</u> <u>Reciprocate:</u> <u>Reciprocity:</u> (3)</p> <p>See Reciprocal Involvement of Experiences & Principles Reciprocals of Permissible Viewpoints Reciprocal Self-processors Reciprocating Engine Reciprocating Subsets Reciprocity</p>
<p>RBF DEFINITIONS</p> <p><u>Reciprocity:</u> (5)</p> <p>"advantage of men in Universe brought about by runaway, diametric preoccupations of specializations. The comprehensive realizer becomes a synergist."</p> <p>- Cite TOTAL THINKING, I&I, p.236, May'49</p>	<p><u>Recirculation:</u></p> <p>See Ecological Balance Metals: Recirculation Of Roundtrip Scrap Sorting & Mongering Recycling</p>
<p><u>Reciprocate:</u> <u>Reciprocity:</u> <u>Reciprocal:</u> (1)</p> <p>See Axes of Corotation Design Reciprocity Energetic Functions Gear Train: Locking & Blocking Motion Reciprocity Reality as Structural Interaction of Principles Structural Functions Twoness of Dynamic Reciprocities Complementary & Reciprocal Alternate: Alternative Mutual: Mutuality Bicycle Wheel Model</p>	<p>RBF DEFINITIONS</p> <p><u>Recognition:</u></p> <p>"Everything that you have ever recognized in Universe as a pattern is re-cognited as the same pattern you have seen before. Because only the triangle persists as a constant pattern, any recognized patterns are inherently recognizable only by virtue of their triangularly structured pattern integrities. Recognition is as dependent on triangulation as is original cognition...."</p> <p>- Citation & context at <u>Omnitriangulation</u>; 3 Oct'72</p>
<p><u>Reciprocal:</u> <u>Reciprocate:</u> <u>Reciprocity:</u> (2)</p> <p>See Automation, 4 Mar'69 Intellect, 16 Aug'50 Minimum Set, 9 Jul'62* Pattern, 1954; 9 Jul'62* Prime Dichotomy (2) Simplicity, 1954 Spacaship, 26 Sep'68 Technology, 12 May'39 Tidal, Dec'61 Hierarchy of Patterns, 1954 Zoneness: System Zoneness, 8 Jan'55 Simplicity, 1954 Ninety-two Elements, 15 Jun'74 Jitterbug, 1 Dec'65 Synergetics Constant, 10 Dec'75 Fourth Dimension: VE as Fourth-dimension Model, 22 Jun'77</p>	<p>RBF DEFINITIONS</p> <p><u>Recognition:</u></p> <p>"We have an expression, something we say very often, 'I recognize that.' Recognition means that you have seen that pattern before. You have probably seen its several time before you say, 'I recognize it.' Recognizability of pattern would depend upon the stability of the pattern; it would have to have some fundamental shape. Only a triangle has any reliability of pattern. So I say [REDACTED] everything and anything that you and I ever say 'I recognize,' must go back to a triangle. Only triangle is structure."</p> <p>- Cite RBF Address at National Conference for Philosophy of Creativity at SIU, Carbondale, Ill., 16 Oct. '69. - p. 64.</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Recognition:</u></p> <p>"Everything that you have ever recognised in the Universe as a pattern is re-cognited as the same pattern you have seen before. Because only the triangle persists as a constant pattern any <u>recognized</u> patterns must be <u>recognizable</u> only by virtue of being a triangle or a complex of triangles." This is the only possible basis of <u>recognition</u>."</p> <p style="text-align: right;">- Cite NASA Speech, p. 54. Jun'66</p>	<p style="text-align: right;"><u>Recognition:</u> <u>Recognizable:</u> (2)</p> <p>See Experience, 1971 Mass, 29 Dec'58 Thinkable You (1) Triangle, 25 Feb'69 Understanding, 1960 Minimum Awareness, (1) Identity, 2 Jul'75 Local System, Jun'66 Omnitriaagulation, 3 Oct'72</p>
<p><u>Recognition Lags:</u></p> <p>See Mind, 24 Feb'72 Tunability, 24 Apr'76</p>	<p><u>Recollect:</u> <u>Recollections:</u></p> <p>See Design Covariables: Principle Of, 1959 Words, 2 Jul'62 Conceptual Systems, 27 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Recognizability:</u></p> <p>"Everything you say you recognize, means that you recognize a pattern. The recognizability of the pattern must go back to some triangles."</p> <p style="text-align: right;">- Cite RBF at SIMS Seminar, U. Mass., Amherst, 22 July '71, Transcript p. 18</p>	<p><u>Reconsider:</u> <u>Reconsideration:</u></p> <p>See Metaphysical & Physical Tetrahedral Quanta, 25 Mar'71 Thought, 31 May'71 Conscious & Subconscious, 1960 In, Out & Around, Nov'71 Nonsimultaneity, 7 Nov'73</p>
<p><u>Recognition:</u> <u>Recognizable:</u> (1)</p> <p>See Pattern Cognition: Pattern Cognisance Unrecognized Cognition vs. Recognition</p>	<p><u>Record:</u> <u>Off the Record:</u></p> <p>See Fuller, R.B: His Modus Operandi, 15 Jun'74</p>

Synergetics Dictionary

<p><u>Recourse:</u></p> <p style="text-align: center;">See Survival Recourse</p>	<p style="text-align: right;"><u>Rectilinear:</u> <u>Rectilinear Grid Systems:</u> (2)</p> <p>See Air Space, May'65 Frame of Reference, 27 Feb'72 General Systems Theory, 8 Nov'73 Nucleus, (1) Spherical Triangle: Equator as Square, (3) Twelve Universal Degrees of Freedom: General Systems, (III)</p>
<p><u>Rectification:</u></p> <p style="text-align: center;">See Social Adjustment, Feb'72</p>	<p>RBF DEFINITIONS</p> <p><u>Recyclings:</u></p> <p>"... The integrity of Scenario Universe's Never exactly identical <u>recyclings</u>."</p> <p style="text-align: right;">- Citation and context at <u>Metaphysical</u>, p.152 May '72</p>
<p>RBF DEFINITIONS</p> <p><u>Rectilinear Frame:</u></p> <p>"A vectorial evolution in no way conforms to a rigid <u>rectilinear frame</u> of the XYZ coordinate analysis which arbitrarily shuns most economical directness and time realizations-- by virtue of which calculus is able only awkwardly to define positions rectilinearly, moving only as the chessman's knight. Nature uses rectilinear patterns only processionally; and precession brings about orbits and not straight lines."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 540.09, 24 Sep'73</p>	<p><u>Recycling:</u> (1)</p> <p>See Junkyard Metabolic Flow Recirculation Spiral</p>
<p><u>Rectilinear Grid Systems:</u> <u>Rectilinear:</u> (1)</p> <p>See Grid: Crisscross, Right-angle Grid in Civil & Agrarian Law Local Squareness Ninety Degreeeness Two-way Rectilinear Grid XYZ Coordinate System Right Angle Square Two-way Crisscross</p>	<p><u>Recycling:</u> (2)</p> <p style="text-align: center;">See Time, circa 1970</p>

Synergetics Dictionary

<p><u>Redemonstrable:</u> See Children as Only Pure Scientists, 28 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Reductio ad Absurdum:</u> "When scientists and mathematicians fail to find positive clues leading towards solution of their problems, they sometimes reverse their frontal strategies and employ <u>reductio ad absurdum</u>, which by a process of eliminating all the impossibles and improbables, leaves a residue of <u>least absurd</u>, ergo <u>most plausible</u> solutions, which may be reduced, by physically testing to unequivocal answers."</p> <p style="text-align: right;">- Cite RBF foreword to Samuel Rosenberg's "The Come As You Are Masquerade Party." 1970</p>
<p><u>Redesign Cycle:</u> See Energy & Intellect, May'49 Improvement, May'49 Periodic Experience, (6)</p>	<p><u>Reductio ad Absurdum:</u> (1)</p> <p style="text-align: right;">See Boole Absurd Boolean Algebra Twenty Questions</p>
<p>RBF DEFINITIONS</p> <p><u>Reductio ad Absurdum:</u> "The deliberately nonstraight line of synergetics employs the mathematicians' own invention for dealing with great dilemmas: the strategy of reductio ad absurdum. Having moments of great frustration, the mathematician learned to forsake looking for local logic; he learned to go in the opposite direction and deliberately to choose the most absurd. And then, by progressively eliminating the degrees of absurdity, he could work back to the not too absurd. In hunting terms, we call this quarrying his objective. Thus he is able at least to learn where his quarry is within a small area."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 522.03; Nov'71</p>	<p><u>Reduction By Bits:</u></p> <p style="text-align: right;">See Bits: Biting</p>
<p>HBF DEFINITIONS</p> <p><u>Reductio ad Absurdum:</u> "Having demonstrated to the mathematician that his imaginary straight line gets worse and worse-- every time he gives me an example, I am going to employ the mathematician's own strategy of dealing with the great dilemmas as invented by Boole-- the <u>reductio ad absurdum</u>. Where I now a Deliberately Non-Straight Line \angle q.v. /.</p> <p>"The mathematician having moments of great frustrations learned to forsake looking for local logic by going in the opposite direction and choosing the most absurd, and then progressively eliminating the degrees of absurdity and working back to the not too absurd. And he is liable to be able at least to learn the quarry, where his quarry is a small area. What we call quarrying is objective. These are hunting terms."</p> <p style="text-align: right;">- Cite Tape transcript HBF to EJA and BOVR, Chicago, 1 June 1971.</p>	<p><u>Reduction of Myriadness to Unity:</u> (1)</p> <p style="text-align: right;">See Fractionating the Whole</p>

Synergetics Dictionary

<p><u>Reduction of Myriadness to Unity:</u> (2)</p> <p>See Metaphysical & Physica; , Jun'66</p>	<p><u>Reduction to Practice:</u> (1)</p> <p>See Development Science-Technology-Industry-Economics-Politics Sequence Prototype Artifact</p>
<p>RdP DEFINITIONS</p> <p><u>Reduction to Practice:</u></p> <p>"There is no use talking about bright ideas. Everyone has bright ideas. But there is no use talking about the artifact until we reduce it to practice, until we see whether nature permits it, whether society permits it-- including worldwide distribution."</p> <p style="text-align: center;">-----</p> <p>- Cite RBF at Penn Bell videotaping, Philadelphia, 29 Jan'75</p>	<p><u>Reduction to Practice:</u> (2)</p> <p>See Dome: Rationale for the Big Dome (A) Generalized Principle, 5 Jul'62 Intuition of the Child (3) Inventability Sequence (2) Invention Sequence (B)(C) Omnidirectional: Physical Existence Environment Surrounds (2) Philosophy, 21 May'28; 1946 Surfing: Surfboarding, 5 Jul'62</p> <p style="text-align: center;">-----</p> <p>Trim Tab, 22 Jul'71* Design Science (A) Navy Sequence (2) Artifacts, 17 Sep'74 Icosahedron: Subtriangulation, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Reduction to Practice:</u></p> <p>"Back in 1932 then, thinking that I would commit myself to only alterations of the environment-- not to 'multidisciplines' and so forth. I must never then 'talk about' anything. Whatever ideas I have I must find out how to translate them into some effect on the environment, in principle, and I must not talk about them until I have reduced them into practice and have discovered advantage for man. And I've really been able to prove to myself-- I find that bright ideas are so profuse-- but they don't get reduced to practice, you don't really know what the interactions are with the times and other environmental events. . . . So I would never talk about it until I have reduced it to practice: something physical. And somebody would say: what is that? And then I'd have the responsibility of telling them what it was. But I mustn't even ask them to look at it. I've really held very tightly to these disciplines, because I was interested in what the individual could do on behalf of his fellow man. . . even in a very few years."</p> <p style="text-align: center;">-----</p> <p>- Cite RBF lecture at Wistar Inst, U. of Penn. LJA transcript pp 8-9, 19 Feb'73</p>	<p><u>Redundant Excess:</u></p> <p>See Norm: Tetrahedron as Norm, 15 May'72</p>
<p>RBF DEFINITIONS</p> <p><u>Reduction to Practice:</u></p> <p>"A trim tab is a physical environmental control device in a Universe where change, motion, and evolution are inexorable.... You must not just have a theoretical idea but <u>reduce it to practice</u>. That is my strategy."</p> <p style="text-align: center;">-----</p> <p>- Citation at Trim Tab, 22 Jul'71</p>	<p>RBF DEFINITIONS</p> <p><u>Redundancy:</u></p> <p>"Edges and vertexes do not come together as the same number system. You can describe the world both ways and not be <u>redundant</u>. The world as seen by a child and the world as seen by an old man could not be <u>redundant</u> descriptions."</p> <p style="text-align: center;">-----</p> <p>- Cite RBF to LJA, 25 August 1971, Bear Island.</p> <p>- Citation at Description, 25 Aug'71</p>

Synergetics Dictionary

RBF DEFINITIONS

Redundancy:

"... Redundancy being a temporal consequence of brain lagged dullness of comprehension and ignorance."

- Citation and context at Differentiation, 27 May'72

Redundancy: Redundant:

(2)

See Antipathy, 15 May'72
 Cube, (1)
 Description, 25 Aug'71*
 Differentiation, 27 May'72*
 Knot: Square Knot, 20 Oct'72
 Strut, 1950's*
 Tensegrity: Unlimited Frequency of Geodesic
 Tensegrities, (9)
 Triangular Topology Integrity, 15 May'72
 Minimum System: Minimum Structural System, Nov'71

RBF DEFINITIONS

Redundancy:

"Redundancy cannot be determined by energetic observation of behaviors of single struts, (beams or columns) or any chain-linkage of same which are less than six in number, or less than tetrahedron."

- Citation & context at Strut, 1950's
 - ~~Cite RBF undated holograph on M.I.T. memo pad, (1950's)~~

Reef:

See Coral Reef

RBF DEFINITIONS

Redundancy: Reduction Of:

"In the Greek temple each column carries its share of the stone on top of it. Figuring the ultimate compressive weight of the stone as 50,000 psi-- which equals 25 tons-- the result is that each column can carry 1000 tons when it only has to carry 25 tons. The rest of the column is unnecessary except for stability. We can make it a cone or a tripod, like a camera tripod.

"We find the only thing holding up ^(the) a Greek column was a tetrahedron... The thorns and buds of trees are tetrahedra: concentric cones-- the wing roots of the limbs. Goethe spoke of trees as waves.

"Only the tetrahedron can become visible and invisible. This is life: life is male & female, visible and invisible, but immortal.

"Hydraulics, mechanics, and the wave connection cofunction as the big-connection: big-logic. (A nice name.)"

- Cite composite of RBF holographs drawn for EJA at Somerset Club, Boston, 22 Apr'71

Reel:

See Fish: Playing the Fish on a Reel

Redundancy: Redundant:

(1)

See Necklace
 Nonredundance
 Safety Factor

Reel of Tape Recorder:

(1)

See Hole in the Victrola Disc

Synergetics Dictionary

<p><u>Reel of Tape Recorder:</u> (2)</p> <p style="text-align: center;">See Axis of Spin, (1)(2)</p>	<p><u>Reference:</u> (2)</p> <p style="text-align: center;">See Size, 22 Jun'72</p>
<p><u>Re-exterior:</u> (1)</p> <p style="text-align: center;">See Obverse</p>	<p><u>Referendum:</u></p> <p style="text-align: center;">See Electronic Referendum</p>
<p><u>Re-exterior:</u> (2)</p> <p style="text-align: center;">See Brouwer's Theorem, 1 Jan'75</p>	<p><u>Refinement:</u> <u>Refining:</u></p> <p style="text-align: center;">See Relativity, May'49 Truth, 10 Nov'72</p>
<p><u>Reference:</u> (1)</p> <p>See Axis of Reference Cyclic Reference Frame of Reference Scheme of Reference Sphere of Reference</p>	<p>REF DEFINITIONS</p> <p><u>Reflection:</u> ". . . It is possible To conserve energies by <u>reflection</u> As well as to reach Great distance by beaming. . ."</p> <p style="text-align: right; margin-top: 20px;">- Citation & context at <u>Eye-beamed Thoughts (I)</u>, May'72 - <u>Cite: BILAIN & KINB, p.16</u> May '72</p>

Synergetics Dictionary

RBF DEFINITIONS

Reflection Sequence: Apple: (1)

"I see an apple.

"The light of the Sun is reflected from the surface of an apple, after the occurrence of the spectroscopic action of light segregation through the medium of crystals on the surface of the apple.

"Not all of the energy ray tones are reflected, however. Those that are useful to the apple are absorbed by it, while the remainder, i.e., the non-useful, or nondigestible, or, more specifically, non-chemically combinable ray tones are reflected from the surface of the apple through the air to and through the lens of the human eye, where they are analyzed by the retina and telephotographed to the brain of the beholder.

"Incidentally the light that the apple gives off is a negative, that is, the opposite of the light complementary to the growth phenomenon 'apple.' It is not one of the chemical apple's actual constituents. This is something like the phenomenon of the camera film negative except that the latter is more honest than the eye's for the eye reverses light and shadow instead of properly appraising them as does the camera. In printing,"

- Cite NINE CHAINS TO THE MOON, pp.42-43, 1938

Reflection: (1)

See Beamable: Beaming
Bounce Patterns of Energy
Focal: Focus
Interference
Light on Scratched Metal
Radar Reflector

RBF DEFINITIONS

Reflection Sequence: Apple: (2)

"the black and white of the film have to be reversed in order to represent the illusion of the apple as the eye sees it. Many apples are probably blue, having taken blue from the spectrum, but the eye, taking up the rejected red, 'sees' the apple as red.

"Whether or not the eye sees a negative or a positive of the apple, light absorption and reflection are mechanical considerations because neither life nor mind activity is involved until the essence of the picture has been articulated in the 'brain' and has been automatically referred to the memory filing department (the system of which is even more complicated than the worldwide Bertillon system of finger-print identification) for comparison with all of the apple experiences of the 'see-er.' The new picture of 'apple' is laid out on the table for comparison with the whole reference file by the executive officer 'brain,' who never sees the phantom captain although under his permanent orders to lay out the file in the captain's outer study. Then 'brain' retires through the front door, closes it behind him, and the phantom captain enters from his inner sanctum to peruse the exhibit.

- Cite NINE CHAINS TO THE MOON, p.43, 1938

Reflection: (2)

See Broadcast, May'72
Eye-beamed Thoughts, (I)*
Interference, (2)
Radiation, (pp.158-9) May'72
Sight, 1 Apr'49
Vertaxial Spheres, 8 Apr'75
Cloud Chamber, Nov'71
Octahedron: Eight-octahedra, (3)(4)
Visual, 22 Feb'77

RBF DEFINITIONS

Reflection Sequence: Apple: (3)

"If interested at all-- generally he is not-- the captain considers the progression of apple phenomena, as indicated by the pictures in the file, and decides that the latest addition is a better or worse apple, i.e., it is an apple that would, or would not, be useful as fuel for his ship, in the cleansing process of his machinery, or as bait. Having decided 'yes' or 'no,' he leaves a message for 'brain' beside the exposed file and retires."

- Cite NINE CHAINS TO THE MOON, pp.43-44, 1938

RBF DEFINITIONS

Reflexes:

"In 1927 when I was starting to re-educate myself, trying to unlearn all the things that I'd been taught to be so, that I had proven not to be so, I tried to get my reflexes disconnected from the false reactions or the unfavorable and the hard reactions and try to become sensitive again."

- Cite Museums Keynote Address Denver, p. 6. 2 Jun'71

Reflecting Lake Waters:

See Invisible Pneumatics, 27 Dec'73

RBF DEFINITIONS

Reflexes:

". . . The designing capability . . . of human organisms . . . to offset the gamut of non-thinking conditioned reflexes of all biological systems."

- Cite Museums Keynote Address, p. 14. 2 Jun'71

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Reflexes:</u></p> <p>"Probably our most polluted resource is that of the tactical information to which humanity spontaneously <u>reflexes.</u>"</p> <p>- Citation at <u>Information: Tactical Information</u>, 13 Nov'69</p> <p>- Cite MEXICO SPEECH, p. 37, 13 Nov'69</p>	<p>RBF DEFINITIONS</p> <p><u>Reform of Environment Rather than Reform of Man:</u></p> <p>"I developed a fundamental philosophic concept in 1927 which was that it is possible, instead of trying to reform man, to reform the physical patterns-- to reform the environment in such a way as to make the physical environment patterning more favorable to the new life being born into it. It seemed possible that the new human generation, born into the streamlined environment, might quickly react by re-employing the newly designed advantages, and in so doing might establish a new level of integrity of human response to environmental stimuli whereby society might come to act in creative spontaneity to continually convert the highest knowledge born of the cumulative experience of man toward the direct enhancement of the life processes, instead of, as at present, leaving the prime social initiative for the weaponry exploiters who derive their mandate only from the negative fears born of ignorance, and the congealing inertia of that ignorant fear."</p> <p>- Cite MEXICO '63, p.18, 10 Oct '63</p>
<p><u>Reflex: Reflexes:</u> (1)</p> <p>See Automatics Bias on One Side of the Line Common Sense: Official News Conditioning Conditioned Reflexes Decondition My Subconscious Reflexing Feedback Ignorance Knowledge as Reflexes Mine: That's Mine Nonthinking Muscle & Reflex Jobs Planar Reflex Sensorial Reflex Structure vs. Reflexes Quickness Habit Reflexes Mind vs. Reflex Crowd-reflexing Proclivities: Basic vs. Secondary</p>	<p><u>Reform of Environment Rather than Reform of Man:</u> (1)</p> <p>See Blind Date with Principle Design Revolution Design Science Fuller, R.B: Crisis of 1927 Fuller, R.B: His Decision that he Must not be a Persuader but a Doer Fuller, R.B: What I Am Trying To Do Individual Economic Initiative Inventions as Lifeways of Human Behaviors Leonardo Type Rearrange the Scenery</p>
<p><u>Reflex: Reflexes:</u> (2)</p> <p>See Antithinking, 2 Jun'71 Awareness, Feb'50 Computer, (B) Ecology Sequence, (H)(I) Environment Events Hierarchy, (2) Fighting, 7 Nov'67 Cross World Product Sequence, (1) Information: Tactical Information, 13 Nov'69* Intuition, 22 Jun'72 Fuller, R.B: Crisis of 1927, (2) Life Is Not Physical, 13 Jul'74 Mind, 26 Nov'72 Poverty, May'72 Spaceship, (D) Space Technology, (2) Survival Sequence: Love, (1) Telepathy, 29 Jun'72 War: Official & Unofficial, (1) Semantics, 20 Feb'73 Death, 29 Mar'77</p>	<p><u>Reform of Environment Rather than Reform of Man:</u> (2)</p> <p>See Artifacts (1)(2); 17 Sep'74 Bridge, 13 Nov'69 Design Science, (1); 29 Jun'73; (A) Environment, May'65 Trim Tab, 8 Jan'66 Fuller, R.B: I am Apolitical, 15 May'75</p>
<p>RBF DEFINITIONS</p> <p><u>Reform of Environment Rather than Reform of Man:</u></p> <p>"My discipline is to reform the environment in ways favorable to the success of all humanity with confidence that propitious environmental circumstances induce spontaneously pro-social behaviors."</p> <p>- Citation and context at <u>Design Science</u> (1), 29 Jun'73</p>	<p><u>Reform: Reformers:</u></p> <p>See Trim Tab Sequence, (1) Political Revolution, 10 Oct'63 Success, 10 Sep'75</p>

Synergetics Dictionary

<p><u>Refraction:</u> (1)</p> <p>See Interference Manifest: Two Color Spectrum: Red, Orange, Yellow, Green, Blue, Violet</p>	<p>RBF DEFINITIONS</p> <p><u>Regeneration:</u></p> <p>"The Universe is The min-max, self-regenerative organism. The <u>regeneration</u> is A nonsimultaneous sequence Of only partially overlapping Physical transformation events-- Occurring in a vast range Of ever-and-again, synchronizing, Pulsative frequencies With associative concentrations Here and there Nonsimultaneously accommodating Disassociative dispersals In other heres and theres-- Like the 'high' and 'low' interalternations Of the forever changing atmosphere's 'weather.'"</p> <p style="text-align: center;">- Cite Drayfus Preface, "Dessac of Meaning." 28 April 1971, pp. 1--2.</p> <p>- Citation & context at <u>Universe</u>, 28 Apr'71</p>
<p><u>Refraction: Refractive:</u> (2)</p> <p>See Boltzmann Sequence, (5) Interference, (2) Radiation Sequence, (2) Sweepout: Spherical Sweepout, (1) Van Allen Belt, May'72 Bendings, 23 Jun'75 Wind Stress & Houses, (9)(10) Cloud Chamber, Nov'71 Halo Concept, Jun'71</p>	<p>RBF DEFINITIONS</p> <p><u>Regeneration:</u></p> <p>"Universe is the minimum as well as the maximum closed system of omni-interacting, precessionally transforming, complementary transactions of synergetic <u>regeneration</u>. . ."</p> <p style="text-align: center;">- Citation & context at <u>Universe</u>, 1960 - Cite DENUDIRECTIONAL HALO, p. 135, 1960</p>
<p><u>Refrigeration:</u></p> <p>See More With Less: Sea Technology, (3)(4) Human Unsettling, (2)</p>	<p>RBF DEFINITIONS</p> <p><u>Regenerative:</u></p> <p>The isotropic vector matrix "coordinate system is ever <u>regenerative</u> in respect to the nuclear centers all of which are rationally accounted for by synergetics."</p> <p style="text-align: center;">- Citation and context at <u>Omnisynergetic</u>, 30 Jan'73</p>
<p>RBF DEFINITIONS</p> <p><u>Regeneration:</u></p> <p>"The significance of Einstein's electromagnetic radiation's top speed unfettered in vacuo is that there is a cosmic limit accommodation point of complete <u>regeneration</u> by which Universe is the only and minimum perpetually self-regenerative system."</p> <p style="text-align: center;">- Citation at <u>Absolute Velocity</u>, 30 Oct'73</p>	<p>RBF DEFINITIONS</p> <p><u>Regenerative:</u></p> <p>"Regenerative means local energy-pattern conservation."</p> <p style="text-align: center;">- Cite SYNERGETICS text at Sec. 600.04, 3 Oct'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Regenerative:

"Regenerative means local energy pattern conservation.

"Regenerative means local conservation of energy events inter patterning.

"Structures are pattern conservations."

- Cite RBF to EJA, Beverly Hotel, NYC, 15 Mar'71

STRUCTURE - 600.04 + 601.02

RBF DEFINITIONS

Regenerative:

"If the spheres^M are close packed^D to form a vector equilibrium, "and the center sphere is removed or compressed, the remaining spheres close in to form a 20-sided 'solid,' the icosahedron. From this it follows that a vector equilibrium can be translated into an icosahedron and vice versa. They are close relatives. Each has twelve vertexes and the same number of surface-defining spheres. And each is a model of symmetrical regularities. Each, in fact, has a place in a family of relationships which is capable of cycling through a sequence of phases, hence . . . regenerative."

- Cite MARKS, p. 41, 1960

RBF DEFINITIONS

Regenerative:

"I use the term regenerative because in an all-motion universe (which Einstein posited and the physicists in due course found to be true), all the patterns of the universe are continually but non-simultaneously affecting all the other patterns of Universe in varying degrees and are continually reduplicating themselves in unique local configurations.

"These patterns may be described as constellar because their component events stand dynamically together like star groupings, and any event patternings which become locally regenerative are constellar patterns. It is a tendency for patterns either to repeat themselves locally or for their parts to separate-out to join severally or singly with other patterns or to form new constellations."

~~- Cite RBF, p. 66, 1965~~

- Citation and context at Structure Sequence (1)(2), 1965

Regenerative Birth:

See Duality of Universe, May'49

RBF DEFINITIONS

Regenerative:

"Universe... a closed system of complementary patterns that is regenerative, that is, adequate to itself...."

- Citation and context at Chess: Game of Universe, 9 Jul'62

RBF DEFINITIONS

Regenerative Design: Law Of: (1)

"The prime eternal law governing design science as thus-far accrued to that of the cosmic law of generalized design science exploration, is realizability and relative magnitude of reproducibility which might be called the law of regenerative design: which is, that the relative physical time magnitude of reproducibility is proportional to the order of magnitude of generalizability. Because the higher the order of generalization the more embracing and simple its statement, only the highest orders can embracingly satisfy the plurality of low-order interaccommodation conditions.

"There are several corollaries to the prime law of regenerative design durability and amplitude of reproducibility. Corollary A is: The simpler, the more enduringly reproducible. Corollary B: The special-case realizations of a given design complex correlate as: the more symmetrical, the more reproducible. Corollary C: There being limit cases of optimum symmetry and simplicity, there are simplicities of conceptual realization. The most enduringly reproducible design entities of Universe are those occurring at the min-max limits of simplicity and symmetry."

- Cite RBF draft Ltr. to Karan Singh incorporated in SYNERGETICS at Secs. 166-7, 13 Mar'73

RBF DEFINITIONS

Regenerative:

"Regenerative means multiorbital, cyclic, pre-cessionally concentric.

"Regenerative means the ability to display one form, then another, in a gamut of phases; each phase however, like a tree ring, or a wave generated by a stone thrown into water, has its own orbit; and the various orbits progress outward or inward in concentric circles or shells.

"A seed is regenerative. A crystal is regenerative. Energy itself is an ever-regenerative patterning entity. Its forms are protean. It can appear as the breath of a hawk or coign of a cliff. It can cloak itself as radiation, as mass, as design, and as the wellspring of work. And since by fundamental law, energy can neither be created nor destroyed, its fate in the cosmic scheme is to meander through eternity in persistent, regenerative bliss."

- Cite MARKS, P. 8, 1960

RBF DEFINITIONS

Regenerative Design: Law Of: (2)

"Corollary D: There being unique minimum-maximum system limits governing the transformation of conceptual entities in Universe which differentiate the conceptually unique entities of Universe into those exceptions occurring exclusively outside the system considered and all of the Universe inside of the conceptual entity, together with the structural pattern integrity system separating the inside from the outside, there being a minimum limited set of structural and operating principles eternally producing and reproducing recognizable pattern integrity. And there are likewise a minimum set of principles which interact to transform already orderly patterns into other structured patterns, and there being minimum constituent patterns which involved the complex intertransformings and structural formings of symmetrical orders and various magnitudes of asymmetrical deviations tolerated by the principles complexly involved. There are scientifically discoverable nuclear aggregates of primary design integrity as well as complex symmetrical reassociabilities of the nuclear primary integrities and deliberately employable relationships of nuclear simplexes which designedly impose asymmetrical-symmetrical periodicities."

- Cite RBF draft Ltr. to Karan Singh incorporated in SYNERGETICS text at Sec. 168, 13 Mar'73

Synergetics Dictionary

RBF DEFINITIONS

Regenerative Design: Law Of: (3)

"Corollary E: The more symmetrical and simple and nuclear, the more frequently employable; ergo more frequently occurring in eternally regenerative Universe transformative problem solutions.

"Corollary F: The smaller and simpler, more symmetrical, frequently-occurring in Universe and the larger and more complex, less-frequently originally occurring, and periodically re-occurring: for example, the hydrogen limit minimum simplex constituting not only nine-tenths of physical Universe but most frequently and most omnipresent in Universe; with asymmetrical terrestrial battleships (fortunately) least-frequently and compatibly recurrent throughout the as-yet known cosmos, being found only on one minor planet in one typical galaxy of one hundred billion stars amongst already-discovered billion galaxies, there having been only a few score of such manmade battleships recurrent in the split-second history of humans on infinitesimally minor Earth."

- Cite RBF draft Ltr. to Karan Singh incorporated in Synergetics text at Secs. 169, 170, 13 Mar'73

RBF DEFINITIONS

Regenerative Intersupport: Equation Of:

"Precession + ecology = regenerative intersupport."

- Cite RBF to State Dept. Senior Seminar, Rosslyn, Va., 22 Dec'74

Regenerative Design: Law Of: (1)

See Reproducibility: Law Of

Regenerative Intersupport: Equation Of:

See Equation: Philosophical Equations

Regenerative Design: Law Of: (2)

See Design, 1938

Regenerative Organica:

See Conads, 22 Sep'71

Regenerative Economic Sustainance:

See Money: Making Sense vs. Making Money, 22 Jun'77

Regenerative Precession:

See Spiralinearity, Nov'71

Synergetics Dictionary

<p><u>Regenerative Stimulation:</u></p> <p>See Discovery, 20 Dec'71</p>	<p><u>Regenerativity:</u> (2)</p> <p>See Concentricity, 1959 Ecology, 16 Feb'73 Petal: Tetrahedron as Three-petaled Flower Bud, 11 Feb'73</p>
<p><u>Regenerative System Integrity:</u></p> <p>See Organic, 26 May'72</p>	<p><u>Regeneration: Regenerative:</u> (2A)</p> <p>See Absolute Velocity, 30 Oct'73* Chess: Game of Universe, 9 Jul'62* Cosmic Accounting Sequence, (1) God, 26 May'72 Infinite, 15 Oct'72 Intertransformation, 22 Jul'71 Isotropic Vector Matrix, 30 Nov'72 Metaphysical & Physical, 2 Jun'74 Monkey Wrench, 30 Oct'73 Nuclear & Nebular Zonal Waves, 1955 Octet Truss, 1955 Omnisynergetic, 30 Jan'73* Principle, (1) Push-pull, 22 Feb'73 Spaceship, 26 Sep'68 Star, Dec'72 Structure Sequence, (1)(2)* Tactile Sequence, (2) Universe, 28 Apr'71*, 1960* Wow: The Last Wow, 22 Apr'71</p>
<p>RBF DEFINITIONS</p> <p><u>Regenerativity:</u></p> <p>"The regeneration may be that of a complete new baby or the local regeneration of cells in an ongoing organism. Rebirth is continual. The overall growth and refinement of information and comprehension by continuous humanity transcends the separate generations of life and steadies toward eternal unalterability; the special case physical experiences and the identification of their significance in the overall scheme of eternal cosmic regenerativity ever accelerate as the information bits multiply exponentially; wherefore the overall rate of gain of metaphysical comprehension of the physical behavior in general accelerates exponentially in respect to such arithmetical periodicities as that of the celestial cycles of the solar system."</p> <p>(s1052.67)</p> <p>- Cite RBF rewrite of SYNERGETICS, 2nd. Ed. at Sec. 1052.67; 17 Jan'75</p>	<p><u>Regeneration: Regenerative:</u> (2B)</p> <p>See Technology, 20 Jan'75 Quantum Mechanics: Grand Strategy, 10 Apr'75 Constellar, May'71 Aesthetics of Uniformity, (1) Cosmic & Local, 3 Oct'75 Object, 9 Nov'73 Great Circles, May'44 Self-discipline, 28 Mar'77 Electron, 12 May'77 Identity, 16 Feb'78</p>
<p><u>Regeneration: Regenerative:</u> (1)</p> <p>See Automation of Metabolic & Regenerative Processes Biologicals Center of System Regeneration Epigenetic Landscape Integrity Coherence Local Regeneration Metabolic Regeneration Minimum Regenerative Set Ninety-two Elements Rganic Model Origin Primitive Regeneration Procreation Rebirth Self-regenerative Cosmic Regeneration Nuclear = Regenerative Eternally Regenerative Infinite = Eternally Regenerative Syntropy</p>	<p><u>Regeneration: Regenerative:</u> (3)</p> <p>See Regenerative Design: Law Of Regenerativity Regenerative Organics Regenerative Stimulation Regenerative System Integrity Regenerative Intersupport: Equation Of Regenerative Birth Regenerative Procession Regenerative Economic Sustenance</p>

Synergetics Dictionary

RBF DEFINITIONS

Regenerativity:

"I've been looking for the word to take the place of creativity and it's regenerativity . . . it suggests not the creation of something new but simply the reorganization of something that was always there."

- Cite RBF to EJA, 3200 Idaho, DC, 14 Feb '72

RBF DEFINITIONS

Regularity:

"Regularity is eternal. But the regularities are eternally omni-interaccommodative, permitting approximately limitless freedoms of selectable alternative developments involving a vast plurality of time-dimensioned frequency involvements."

[31]

- Cite SYNERGETICS draft at Sec. 780.33, 2 Nov'72

Regenerativity:

(1)

See Creativity
Feedback
Rebirth

Regular Polyhedra:

(1)

See Mites Make All Regular Polyhedra

RBF DEFINITIONS

Regenius:

"Man shows synergetic regenius inferior to nature's regeneration."

- Citation & context at Charting Alternating Experiences of Man & Nature (1), May'49

Regular Polyhedra:

(2)

See Planck's Constant, (A)
Subvisible Discontinuity, 19 Oct'72

Regression:

See Progression & Regression

RBF DEFINITIONS

Regular Tetrahedron:

"The four obtuse central angles of convergence of the four perpendiculars of the regular tetrahedron pass convergently through the center of the tetrahedronal volume at 109° 28'."

[21]

- Cite SYNERGETICS draft at Sec. 966.22, 29 Nov'72

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Relationships:</u></p> <p>"Relationships which have definite integrity and independence of size are conceptual principles of abstract thought independent of physical realization."</p> <p style="text-align: center;">- Cite OMNIDIRECTIONAL HALO, p. 146, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Relationship Analysis:</u> (2)</p> <p>"interconnect the experiences and to find the generalised patterns and orderly principles underlying all our randomly encountered experiences."</p> <p style="text-align: center;">- Cite Nasa Speech, p.95, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Relationships:</u></p> <p>"The whole of Universe is the minimum consideration and the relationship of its regenerative subsystem functionings are alone elementary."</p> <p style="text-align: center;">- Citation and context at <u>University</u>, 15 Apr '55</p>	<p><u>Relationship Analysis:</u></p> <p>See Connections and Relatedness Order Underlying Randomness Number: Tetrahedral Number Process Relationships</p>
<p>RBF DEFINITIONS</p> <p><u>Relationship:</u></p> <p>"There are no empty sets but only generalized group or system synergetical <u>relationship characteristics</u>."</p> <p style="text-align: center;">- Cite RWF Synergetics notes, Feb'50</p>	<p><u>Relation: Relationship: Relatedness:</u> (1)</p> <p>See Absolute Relationship Arelational Behavioral Relationships Connections & Relatedness Envelopmental relationship Epistemological Stepping Stones Nonrelationship Order Underlying Randomness Number: Tetrahedral Number Process Relationships Omninterrelationships Rational = Relational Interrelationships</p>
<p>RBF DEFINITIONS</p> <p><u>Relationship Analysis:</u> (1)</p> <p>"We look at the stars and they look very random scattered throughout the sky. I will tell you then that the numbers of relationships between all the stars is always $\frac{N^2 - N}{2}$ and this chart tells you quite clearly and simply that I am mathematically justified in doing so. This will give you a personal sense of the power of the infinitely tiny human's mind in the presence of that vast array of stars whose distances and occurrences can only be identified in terms of millions and billions and higher numbers of years and miles away.</p> <p>"This <u>relationship analysis</u> discloses the omniuniversal orderliness that scientific man finds to be always underlying all superficial randomness of experience. This tells us that the seeming disorder of physical entropy is only superficial and explains why metaphysical thought can always find the orderliness that engulfs the disorderliness. Disorderliness is nonthinking. Brain, which stores the memories of all special case experiences, does not find the relationship any more than a library in itself can find or does find the interrelationships of the data that it houses. Only mind, the great metaphysical, pattern-seeking function, has demonstrated to us the capability to"</p> <p style="text-align: center;">- Cite Nasa Speech, pp.94-95, Jun'66</p>	<p><u>Relation: Relatedness: Relationship:</u> (2)</p> <p>See Abstraction, 1971* Constants, 26 Sep'73 Line, 7 Nov'72*; 9 Jun'75 Pattern, 20 Dec'71* Potential, 1963* Reason, Aug'73* Space, Nov'71* Thinkable You, (1) Time & Space, May'71* University, 15 Apr'55* Twoness, 27 May'72 Threeness, 27 May'72 Human beings & Complex Universe, (1)</p>

Synergetics Dictionary

RBF DEFINITIONS

Relative Abundance:

"I began to play a game of looking at relative total abundances of various patterns in various systems and looking at a daisy and looking at a tortoise and looking at a waste basket, I find that the relative abundance of the fundamental patterns called chemical elements vary quite greatly. I sort of began to play a game of relative abundance because this is a nice 100 per cent game and that is the kind of game that the physicist learned to do so ably as a synergetic capability because he was always dealing in 100 per cent. Remember that when he had an unknown percentage showing in an experiment, that is what gave him his clue to meson or whatever it might be. I found it very interesting to look at the total pattern man."

- Cite OREGON Lecture #5 - p. 168, 9 Jul'62

Relative Activity Diameters of Stars & Electrons:

(2)

See Gravity: Circumferential Leverage, (2)
Radiation: Speed Of, (C)(D)

Relative Abundance:

(1)

See Constant Relative Abundance
Euler
Man: Relative Abundance of Chemical Elements In Man & Universe

Relative Activity Diameters:

See Orbiting Magnitudes

Relative Abundance:

(2)

See Gravity: Circumferential Leverage, (3)
Reality as Structural Interaction of Principles, 1963
Sweepout: Spherical Sweepout, (2)

RBF DEFINITIONS

Relative Asymmetry Sequence:

(1)

"Observing that there is a fundamental complementarity, and that the complementations are rarely mirror images of one another, we find that the physical Universe is always locally entropic-- that is, it is always giving off energy in one way or another. Because each local system has its own orbiting, and its own frequencies and so forth, the ways in which they give them off are not synchronized with the others. Therefore, as they're given off, they're relatively disorderly. . . . And actually calculably disorderly; they're not infinitely disorderly at all. They're not something we might call chaos. It may look disorderly to you as you look at the turbulence of a waterfall, and the water's going down there, But I've become very fascinated with the fact that I'm beginning now to understand what the different turbulences are. I can begin to see what the vortex is and all the interprecessional effects.

"It's no longer looking quite as disorderly to me as it used to look. Our word 'disorder' is a relative matter: it gets to be relatively asymmetrical. Relative to the symmetry of equilibrium it gets to be relatively asymmetrical, and I find that it goes to a maximum asymmetry and then comes back"

- Cite RBF to World Game, Jun-Jul'69

Relative Activity Diameters of Stars & Electrons:

(1)

See Atom as Solar System
Astro & Nucltic Interpositioning
Invisibility of Macro- and Micro- Resolutions
Nuclear & Nebular: Nucleus & Galaxies

RBF DEFINITIONS

Relative Asymmetry Sequence:

(2)

"to symmetry again.

"I think this is why we might have something we call octaves in music. There are sort of octaves in our thinking. We think octavely. . . We say the atom has its nuclear arrangement, has its own synergetics, which is how they associate to form molecules and the molecules associate to form cells and how the cells associate to form living organisms, and so forth."

- Cite RBF to World Game at New York Studio School, 12 Jun-31 Jul'69, from Saturn Film transcript, #327, pp.3-4.

Synergetics Dictionary

<p><u>Relative Asymmetry:</u> (1)</p> <p>See Asymmetric Pulsation</p>	<p><u>Relative:</u> (2)</p> <p>See Avogadro: Generalized Avogadro System, 1959 Description, Jun'66 Epigenetic Landscape, May'49 Functions, 26 May'72 Synergetics, undated Unique Frequencies, 9 Jul'62</p>
<p><u>Relative Asymmetry:</u> (2)</p> <p>See Entropy, Jan'72</p>	<p>RBF DEFINITIONS</p> <p><u>Relativity:</u></p> <p>"Lines are relativity. A line is the first order of relativity: the basic sixness of minimum system and cosmically constant sixness of relationship identifies lines as the relativity in the formula $\frac{N^2 - N}{2}$."</p> <p style="text-align: right;">- Citation and context at <u>Line</u>, 7 Nov'72</p>
<p><u>Relative Volumetric Frequency & Interval:</u></p> <p>See Mass, 12 May'77</p>	<p>RBF DEFINITIONS</p> <p><u>Relativity:</u></p> <p>"Size is where <u>relativity</u> becomes generated. The eternality of synergetics is conceptually experienciable independent of the successive experiences of <u>relativity</u> of time and size."</p> <p style="text-align: right;">- Citation and context at <u>Size</u>, 22 Jun'72</p>
<p><u>Relative:</u> (1)</p> <p>See Constant Relative Abundance Relative Abundance Shunting: Relative Motion Patterns</p>	<p>RBF DEFINITIONS</p> <p><u>Relativity:</u></p> <p>"I have a railroad train going west through the desert and a man leans out the window and drops a flaming apple. He sees it go East. He has a sextant and a stopwatch with him and measures the angle and the amount of time, and so forth. But he sees that he himself is standing still. He is like all of the people standing on the surface of the Earth not realizing that the Earth is going around the Sun at 60,000 miles per hour. And so for him the apple seems to go in an easterly direction.</p> <p>"Another man standing at a great distance simply sees the apple descend toward the Earth.</p> <p>"Then a man standing very much to the north sees the apple go west-- with the motion of the train.</p> <p>"All these different observers then come out with <u>different</u> results concerning the <u>same</u> experiment."</p> <p style="text-align: right;">- Cite RBF to BO'R, Kent, Ohio, 23 May'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Relativity:

"Is is always special case relativity."

- Citation and context at Is, 24 Apr'72

RBF DEFINITIONS

Relativity:

"The theory of functions holds for Universe itself. Universe consists at minimum of both the metaphysical and the physical. The fundamental twoness of physical Universe was embraced in Einstein's one word, 'relativity,' and in a more specific and experimental way in the physicists' concept of complementarity."

- ~~Cite Carbondale Bratt~~
~~Return to Modelability, p-V.3~~

- Cite NASA Speech, p.68, Jun'66

RBF DEFINITIONS

Relativity:

"We cannot have relativity without at least two phenomena to be differentially related. There is also the word complementarity. We cannot have one phenomenon complemented by less than one other phenomenon. The words complementarity and relativity do not identify identical physical phenomena. We need to discover whether there exists a generalized concept which embraces both phenomena, and we find that the ponderable physical energy Universe that is, physical Universe, in contradistinction to the Universe's weightless, metaphysical aspects, does embrace both complementarity and relativity."

- Cite BRAIN & MIND, p.135 May '72

RBF DEFINITIONS

Relativity:

"Time can be expressed only ~~as~~ as 'relativity' in the terms of relative frequency of reoccurrence of any constantly recycling behavior of any chosen sub-system of universe."

- ~~Cite NASA Speech, p. 49, Jun'66~~

- Citation at Time, Jun'66

RBF DEFINITIONS

Relativity:

"Time, relativity and consciousness are always and only coexistent functions of an a priori Universe. . . ."

- Citation and context at Consciousness, p. 12, May '72

RBF DEFINITIONS

Relativity:

"Science states that the entire physical universe is energy. $E = mc^2$."

- Cite HOW TO MAINTAIN MAB AS A SUCCESS, p. 228, Mar'65

RBF DEFINITIONS

Relativity:

". . . What Einstein realized has not as yet been comprehended in any important way except that of developing the atomic bomb. . . ."

"Einstein intuited from scientific observations, such as that of the Brownian Movement in water, and black body radiation, that the physical universe is always transforming complexly. Massively twisted, the geology of our Spaceship Earth's crust makes clear how severe have been the great transformings of its history."

- UNESCO TIFLIS 1968, p. 9

RBF DEFINITIONS

Relativity:

"Relativity leads us toward fundamental classification of our experience and observation, in terms of a few hierarchies of dynamic interactions and principle transformations of an all-energy, continuous-discontinuous, synchronous-dissynchronous Universe tensionally cohered, precessional of local compressive spherical energetic collections-- as (Suns) stars or planets or moons or asteroids or meteorites; and the progression of within-ward sub-sets of events of interactions at planet crust, etc., and inward to the 92 common principles of atomic convergence of energy in principle, and the pervasive sets of dynamic associations by contraction, expansion, spin, orbit, torque, push, and pull, and precession. This all brings us by progressive collections of thoughts into a fundamental twoness of dynamic reciprocities which, internally paired, ultimately become one with outwardly paired principles of reciprocity."

- Citation and context at Reciprocity (1) + (2), May'49

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Relativity:</u></p> <p>"The concept of <u>relativity</u> involves high frequency of re-established awareness, and progressively integrating consideration of the respective of the respective, and also integrated, dynamic complexities of the moving and transforming frame of reference and of the integrated dynamic complexities of the observed, as well as of the series of integrated sub-dynamic complexities, in respect to each of the major categories of the relatively moving frames of reference of the observer and the observed. It also involves constant reference of all the reciprocating sub-sets of the comprehensive totality of nonsimultaneous Universe, from which naught may be lost."</p> <p style="text-align: right;">- Citation and context at <u>Dynamic Frame of Reference</u> (5), May'49</p>	<p>RBF DEFINITIONS</p> <p><u>Relativity: Special Theory of Relativity:</u></p> <p>"The Special Theory of Relativity states that (1) the laws of physical phenomena are the same for all inertial systems, and (2) the velocity of light in any given inertial system is independent of the velocity of that system."</p> <p style="text-align: right;">- Cite RBF Glossary of terms bound with "The Live Book Squad," 1967. (Reconfirmed by RBF, 3200 Idaho, Wash DC, 15 Jul'73.)</p>
<p>RBF DEFINITIONS</p> <p><u>Relativity:</u></p> <p>"Relativity treats with concepts in principle; therefore, it can be treated in words as well as in mathematical phrasing. Relativity is inherently convergent, though convergent toward a plurality of centers of abstract truths. Degrees of accuracy are only degrees of refinement, and magnitude in no way affects the fundamental reliability, which refers, as directional or angular sense, toward centralized truths. Truth is a relationship."</p> <p style="text-align: right;">- Cite TOTAL THINKING, I&I, p.233, May'49 - Citation & context at <u>Words</u>, May'49</p>	<p><u>Relativity:</u> (1)</p> <p style="text-align: right;">See <u>Dynamic Frame of Reference</u> Einstein Generalization: Fourth Degree Generalizations Reduced to One Word Synergy: Metaphysical Synergy Stars as Live Shows Billions of Years Ago</p>
<p>RBF DEFINITIONS</p> <p><u>Relativity:</u></p> <p>"The invisible structure was $E = mc^2$."</p> <p style="text-align: right;">- Cite PREVIEWS, I&I, p. 211, 1 Apr'49</p>	<p><u>Relativity:</u> (2)</p> <p style="text-align: right;">See <u>Complementarity</u>, Jun'66 <u>Consciousness</u>, May'72* <u>Dynamic Frame of Reference</u>, (5)* Is, 24 Apr'72* Line, 7 Nov'72* <u>Reciprocity</u>, (1)(2)* Size, 22 Jun'72* <u>Tetrahedral Dynamics</u>, (1) Time, 23 May'72; May'72; Jun'66* Words, May'49* Time-angle-size Aspects, 30 Apr'77 Mass, 12 May'77</p>
<p><u>Relativity: Marriage of Social & Natural Law:</u></p> <p style="text-align: right;">See <u>Air Space</u>, May'65</p>	<p><u>Relax: Relaxed:</u></p> <p style="text-align: right;">See <u>Hexagon</u>, 30 Dec'73</p>

Synergetics Dictionary

<p><u>Relay: Relaying:</u> (1)</p> <p>See Noninterference Relaying Precessionally Shunted Pattern Relay Social-Industrial Relay Substitutional Relaying Telemation: Satellite-relayed Interference-noninterference Relaying Valvability</p>	<p>RBF DEFINITIONS</p> <p><u>Relevant: Lucidly Relevant Set:</u></p> <p>"... All irrelevancies fall into two main categories or 'bits.' One set embraces all the events which are irrelevant because they are too large in magnitude and too delayed in rate of reoccurrence to have any effect on the set of relationships we are considering. The other set of irrelevancies embraces all the events that are too small and too frequent to be differentially resolved at the wave length we are tuned in at, in any discernible way to alter the interrelationship values of the set of experience relationships we are considering. Having dismissed the two classes of irrelevancies there remains the <u>lucidly relevant set</u> to be studied."</p> <p style="text-align: right;">- Cite NASA Speech, p. 40, Jun'66</p> <p style="text-align: center;"><u>CONSIDERABLE SET - SEC 509.03</u></p>
<p><u>Relay: Relaying:</u> (2)</p> <p>See Ecological Pattern, 19 Sep'64 Eye-beamed Thoughts, (I) Manifest: Two: 1963 Dynamic vs. Static, 12 Nov'75</p>	<p>RBF DEFINITIONS</p> <p><u>Relevant. Lucidly Relevant Set:</u></p> <p>"Thinking is a momentary dismissal of irrelevancies. . . . There is a twilight zone of tantalizingly almost relevant. There are two such twilight zones-- the macro and the micro-- tantalizingly almost relevant. Between them there is always a set of extraordinarily lucid items of ██████████ relevance."</p> <p style="text-align: right;">-- Cite SUMMARY VISION 65, p. 136 Oct'65 - Citation at <u>Thinking</u>, Oct'65</p>
<p>RBF DEFINITIONS</p> <p><u>Relevance:</u></p> <p>"Relevance is systematic; a relatedness; something going on around the intertriangulation of the six vectors. (What is the structure involved?)"</p> <p style="text-align: right;">- Cite RBF to EJA, Beverly Hotel, NY, 22 Jun'72</p>	<p>RBF DEFINITIONS</p> <p><u>Relevant: Lucidly Relevant Set:</u></p> <p>"Thinking consists . . . of a self-disciplined deferment of conscious consideration of any incoming information traffic other than that which is <u>lucidly relevant</u> to the experience intuited quest for comprehension of the significance of the emergent pattern under immediate priority of consideration."</p> <p style="text-align: right;">- Cite OMNIDIRECTIONAL HALO, p. 136, 1960</p> <p style="text-align: center;"><u>CONSIDERABLE SET - SEC 509.04</u></p>
<p><u>Relevant: Almost Relevant:</u></p> <p>See Twilight Zone</p>	<p><u>Relevant System Potential:</u></p> <p>See Vector as 1/12th of Relevant System Potential</p>

Synergetics Dictionary

<p><u>Relevant:</u> <u>Relevance:</u> <u>Relevant Set:</u> <u>Lucidly Relevant:</u> (1)</p> <p>See Corelevant Bits: Bitting Irrelevancies: Dismissal Of Irrelevancy Stark Thought = Relevant Set Omninterrelevant Exterior Relevantas Interior Relevantas Star Events Zone of Lucidity Interrelevant</p>	<p style="text-align: right;">RBF DEFINITIONS</p> <p><u>Religion:</u> (1)</p> <p>"...Another young lady came to me and said was I going to talk some more about these religious ideas. I really had talked a whole lot about it to you but... I had never really used the word <u>religion</u>. I knew what she was talking about because she spoke about some kind of faith, some confidence in an integrity and a meaning in our experience of life... The word really is 'religio.' They had come out of a set of rules of dogma, interpretations at second-, third, and fourth-handings, sometimes very remote, a thousandfold secondariness of experiences of others and thought which have occurred spontaneously to original explorers.</p> <p>"I myself am quite confident that the more we know about who specifically inspired religions-- Christ, Mohamed, Buddha, and Confucius-- these may be generalized characters, but there was one or several men who at various times in history tended to have the kinds of experiences that are accounted for word by word, mouth by mouth, word of mouth. These experiences are experiences of individuals who have extreme confidence in the integrity of the invention man and the invention Universe, who in every instance find this integrity to have great power, to be a priori to human intellect."</p> <p style="text-align: right;">- Cite Oregon Lecture #5, p. 160, 9 Jul'62</p>
<p><u>Relevant:</u> <u>Relevance:</u> <u>Relevant Set:</u> <u>Lucidly Relevant:</u> (2)</p> <p>See Part, May'72 Powering: One Dimension, 15 Oct'72 Stark, 29 May'72 Thinking, Oct'65* Repetition, (1) Halo Concept, Nov'71 Omnihalo, Nov'71 Pronouns: I = We = Us, (2) Human Beings, 22 Jun'77</p>	<p style="text-align: right;">RBF DEFINITIONS</p> <p><u>Religion:</u> (2)</p> <p>"None of them ever account experiencing a god in the image of man. That is one thing that Einstein was talking about in his nonanthropomorphic concept of the scientists. At any rate, they are people who experience an a priori integrity, a comprehensive anticipatory intellectual integrity greater than that of man. And they have enormous confidence in it, great faith in it, and try to help others to understand the success that they have experienced through their confidence in that integrity. At any rate, apparently these people have had such success as to have excited people by various patterns of experiences that have occurred. There are many then who in their day were excited, really very blindly and superstitiously, into subscribing to what was going on. This man was a man of powrs without their trying to understand what those powers were. When they die then there were those who do better than others and they tend to become the authorities; and while they are alive they then are asked to make various recordings of what they think had been said and what the rules were. Gradually this gets thinner and thinner and we have official custodians of the information and interpretations and that is the way our religions have developed."</p> <p style="text-align: right;">- Cite Orgeon Lecture #5, p.161, 9 Jul'62</p>
<p><u>Reliable:</u> <u>Eternal Reliability:</u></p> <p>See A Priori Mystery, 22 Jul'71 Integrity, 25 Jan'72 Inherent, 3 Oct'72</p>	<p style="text-align: right;">RBF DEFINITIONS</p> <p><u>Religion:</u></p> <p>"As these individual explorers of the sciences went off into their laboratory and went down with their blinders on, men of enormous integrity, they said they never found anything in that particular area that seemed to confirm any of the given <u>religions</u>. Therefore, atheism began to develop, not as something you profess-- but there was sort of a double life. These men tended to honor their forebears, honor the literature, honor the humanism, and they would say probably the trouble is that I am such a narrow person from being in such a narrow field, that I just don't understand your other things. But there is nothing that I am doing experimentally here that seems to tell me that what the people have said about how the Universe was put together and the way it works, particularly from a religious <u>viewpoint</u>, that really seems to be valid. I think these people over here are dear muddleheaded people, but I am just going to have to leave them alone for my own professional part. So what has been thought of as an atheism is really just an evasion. It wasn't a declaration of againstness, and was not something against religion, but there seemed to be nothing to take its place."</p> <p style="text-align: right;">- Cite Oregon Lecture #4, p. 130. 6 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Religion:</u></p> <p>"I do not want to inaugurate another religion and persuade people to believe in a set of rules. I am convinced that the Almighty does not need anybody to promote God."</p> <p style="text-align: right;">- citation & context at <u>God</u>, May'65</p>	<p>RBF DEFINITIONS</p> <p><u>Religious Edifices:</u></p> <p>"... The enormous credit and physical investment of local undertakings in the most transcendental class as mystical insurance for eternal equanimity as built into the great <u>religious edifices</u> by the local communities, as representing the most generalized problem treatment and infinite range planning known to man's history."</p> <p style="text-align: right;">- Citation and context at <u>Ships</u> (1), 1954-59</p>

Synergetics Dictionary

Religious Edifices:

See Permanent Symbolic Communications Devices

TEXT CITATIONS

Religion:

Oregon Lecture #5 - pp. 160-163 - 9 Jul'62

203.10

5531.05

1056.20 (24)

Religion as Make-believe:

See Synergetics, Apr'72

Religion: Religions:

(1)

See Catholic Church
 Christian Legend & Philosophy
 Einstein: Cosmic Religious Sense
 Faith
 God
 Belief

RBF DEFINITIONS

Religion: Related to 'Reglio' or Rule:

"I personally interpret the word religion as being related to 'reglio' or rule. You begin with the assumption that everyone is very ignorant, and somebody much wiser comes along and says, "Darling, you're not old enough to understand. I do understand however, and I want you to believe every word I say." And you say, "All right, father, I know you love me and wouldn't mislead me or cause me harm, so I believe you. There you have an exchange that I'd call religious. It is built on subscription to dogma. You're told what to believe and you learn how to repeat it."

Feb'72

- Cite RBF in Barry Farrel Playboy Interview Transcript, Pp. 19-20

Religion: Religions:

(2)

See A Priori Mystery, May'72
 Child Sequence, (1)
 Modelability, (3)
 Synergetics, 19 Jun'71
 Thinking, (1)
 Iceland, 7 Oct'75
 Word Trends, May'44
 Belief, 20 Feb'77
 Greater Intellect, (2)

ETYMOLOGICAL DICTIONARY (WEEKLEY)

Religion:

F., L. religio-n, from religens, careful, opposite of negligens, and prob. cogn. with diligens.

RBF DEFINITIONS

Remember:

"To be remembered, it must first be membered, to be membered it must be structured, to be structured it must be triangulated."

- Cite RBF to BO'R, 3200 Idaho, DC, 20 Feb '72

Synergetics Dictionary

<p><u>Rememberable Entity:</u></p> <p>See Member, 9 Nov'73 Dodecahedron, 23 Feb'72</p>	<p><u>Rememberable Number:</u> (2)</p> <p>See Prime Number, Oct'71</p>
<p><u>Remembering Names:</u></p> <p>See Subconscious, Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Remembered:</u></p> <p>"Experiences remembered by none are, in effect, nonexistent-- may never have occurred."</p> <p style="text-align: right;">- Citation and context at <u>Experience</u>, 1968</p>
<p>RBF DEFINITIONS</p> <p><u>Rememberable Numbers:</u></p> <p>"When nature gives us a number we can remember, she is putting us on notice that the cosmic communications circuits are open: you are connected through to many sublime truths!"</p> <p style="text-align: right;">- Cite RBF addition to Synergetics Galley at Sec. 1234.02, Santa Monica, CA, 14 Jan'74</p>	<p><u>Remember:</u> (1)</p> <p>See Memory Pattern Cognizance Trail Making & Trail Remembering Furniture of Remembered Experiences Unremembered = Nonexistent</p>
<p><u>Rememberable Number:</u> (1)</p> <p>See SSRCD Scheherazade Number</p>	<p><u>Remember: Remembering:</u> (2)</p> <p>See Model, 22 Jan'75 Universe, May'72 Minimum Awareness, (1) Environment, (B)</p>

Synergetics Dictionary

Remergent Synchronization:

See Hot Line of Intuition, 15 Aug'72

Remote: Remoteness:

(1)

See Maximum Remoteness
Proximity & Remoteness
Remote = Intellectual
Cosmic & Local

RBF DEFINITIONS

Remote:

"The remote aspect of a spiral is a wave because there are no planes."

- Citation & context at Spiralinity, Nov'71

Remote: Remoteness:

(2)

See Energy, 6 May'48
Physical, 27 Dec'74
Spiralinity, Nov'71*
Structure, 15 Oct'64

RBF DEFINITIONS

Remote = Intellectual:

"The more remote the function the more intellectual the perspective we have on it and the greater the speed with which we accelerate its adaptability into our economic life."

- Citation & context at Intellectual Perspective, 1 Jul'62

Renting: Rental:

(1)

See Mobile Rentability vs. Immobile Purchasing
Service Industry

Remote = Intellectual:

See Largest Pattern

Rent: Rental:

(2)

See Service Industry, 15 May'73
Mobile Homes, (1)(2)
Dome House Grand Strategy: 1927-1977. (3)
Building Industry, (8)
Energy Environment-harvesting Machines, 27 Jan'77

Synergetics Dictionary

<p><u>Reoccur:</u> <u>Reoccurrence:</u> (1)</p> <p>See Cycle: If You Wait Long Enough the Cycles All Reoccur</p>	<p><u>Re-origin:</u> <u>Re-originatable:</u></p> <p>See Origin Regenerative</p>
<p><u>Reoccur:</u> <u>Reoccurrence:</u> (2)</p> <p>See Entropy, 16 May'72</p>	<p><u>Repelling Fields:</u></p> <p>See Domains of Actions, 9 Jul'62; 21 Dec'71 Black Holes & Synergetics, 1 Mar'77</p>
<p><u>Reorganize:</u></p> <p>See Rearrange</p>	<p>RBF DEFINITIONS</p> <p><u>Repetition:</u></p> <p>"In a recent study of the use of repetition in literature, Bruce F. Kawin observes that 'Events whose repetition is not extraordinary do not seem worth recording, in fact, hardly seem worth noticing.' This statement is very close to what has been the strategy of my life. This is what it means to dare to be naive. The preoccupied search for the extraordinary pattern cannot fail to obscure the larger and more obvious ordinary patterns-- so obvious that they always seemed to be missed."</p> <p>- Cite SYNERGETICS, 2nd. Ed. front matter, Author's Note on Rationale for Repetition in This Work, p.xxi, 2 Jul'75</p>
<p><u>Reorientation:</u></p> <p>See Tools of Reorientation</p>	<p>RBF DEFINITIONS</p> <p><u>Repetition:</u></p> <p>"Le Corbusier told the whole story on the first page. And then he told it again in a few pages. And then he told it again in the whole book. And that's the only way people can really understand it. You have to keep retelling it. This is the way Le Corbusier did it in his book called ... and everyone loved it that way.</p> <p>"This gives me another metaphor.... It is all part of the grand strategy. You know how a pole vaulter can't do it all the first time. He has to run over the same cinder path hundreds and hundreds of times before he gets to his new record. And that's the way we should tell it in the book."</p> <p>- Cite RBF to EJA, by telephone from Philadelphia, 8 Mar'75</p>

Synergetics Dictionary

RBF DEFINITIONS

Repetition: (1)

"It is the writer's experience that new degrees of comprehension are always and only consequent to ever-renewed review of the spontaneously rearranged inventory of significant factors. This awareness of the processes leading to new degrees of comprehension spontaneously motivates the writer to describe over and over again what-- to the careless listener or reader-- might seem to be tireless repetition, but to the successful explorer is known to be essential mastering of operational strategies from which alone new thrusts of comprehension can be successfully accomplished.

"To the careless reader seeking only entertainment the repetition will bring about swift disconnect. To those experienced with the writer and motivated by personal experience with mental discoveries-- co-experiencing comprehensive breakthroughs with the writer-- are not dismayed by the seeming necessity to start all over again inventorying the now seemingly lucidly relevant.

"Universe factors intuitively integrating to attain new perspective and effectively demonstrated logic of new degrees of comprehension-- that's the point! I have not forgotten that"

- SYNERGETICS front papers; RBF to EJA, Wash. DC, 30 Oct'72

Repetition: Repetitive: (1)

See Reproducibleness
Standardization
Nonidentically Repetitive
Pole Vaultter

RBF DEFINITIONS

Repetition: (2)

"I have talked about these things before. It is part of the personal discipline, no matter how formidable the re-inventing may seem, to commit myself to that task when inspired by intuitive glimpses of important new relationships-- inspired overpoweringly because of the realized human potential of successful escape from ignorance."

- Cite SYNERGETICS front papers, "Author's note on Rationale for Repetition in this Work," p. xxi, from notes of RBF to EJA, 3200 Idaho, Wash., DC, 30 Oct'72

Repetition: Repetitive: (2)

See Interval, 6 May'48
Reproducible, 30 May'72
Generalized Principle, (1)
Scenario, 2 Jun'71
Harmonic Interval, May'49
Identity, 2 Jul'75
Metaphor, 2 Jul'75
Aesthetics of Uniformity, (1)

RBF DEFINITIONS

Repetition:

"Of course it can be abused, like cast iron souvenir statuas of G.I.'s, where the motive and integrity is so low the effect is cloying. But repetition has a very high function."

- Citation & context at Reproducible, 30 May'72

Reprecession: (1)

See Regenerative Precession

RBF DEFINITIONS

Repetitive:

"Metaphor is repetitive. Wave function and frequency are inherently repetitive. Sight, the awareness of all the electromagnetic-spectrum reality, is identified only by its unique frequencies of reliable repetition. Identity results only from a family of uniquely repetitive frequencies."

- Cite RBF to EJA and RBF marginalia in Bruce F. Rawin, "Telling It Again and Again," p.5; 28 May'75

Reprecession: (2)

See Two Kinds of Twoness, (B)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Reproducible:</u></p> <p>"The more symmetrical: the more reproducible. The more asymmetrical, the less it fits Universe. The most successful design in Universe is the hydrogen atom. The more adequate the prototype, the better it fits Universe. . . .</p> <p>There is an unfortunate tendency to abhorrence of the plastic. Our fingernails are plastic. Our eyes are elastic. Of course it can be abused, like cast iron souvenir statues of G.I.'s, where the motive and integrity is so low the effect is cloying. But repetition has a very high function."</p> <p style="text-align: right;">- Cite RBF to Bill Whitehead, 3200 Idaho, Wash DC, 30 May'72</p>	<p><u>Reproducible:</u> <u>Reproducibility:</u></p> <p>See Aesthetics of Uniformity Mass Production Prototype Regenerative Design; Law Of Simplicity Standardization</p>
<p>RBF DEFINITIONS</p> <p><u>Reproducible:</u></p> <p>"...The Sun energy impounding functions of the billions times billions of blades of grass around its spherical surface are essential to the regeneration of life aboard Spaceship Earth, ergo Whitman's 'Blades of Grass' are almost infinitely <u>reproducible</u>."</p> <p style="text-align: right;">- Cite GENERALIZED LAWS OF DESIGN, pp.2-3, 22 Apr '68</p>	<p><u>Reproduction:</u> (1)</p> <p>See Procreation Sex Survival Sequence: Love Tactile Sequence Aesthetics of Reproduction</p>
<p>RBF DEFINITIONS</p> <p><u>Reproducible:</u></p> <p>"It seems to be a law of nature that the more fundamentally simple and biologically propitious an evolutionary growth may be, the more aesthetically satisfying and lastingly acceptable is its multireproduction, e.g., roses, stars, and blades of grass."</p> <p style="text-align: right;">- Cite ARCHITECTURE: THE PRESENT SCENE, Newsweek, 1968</p>	<p><u>Reproduction:</u> (2)</p> <p>See Reproducible, 1968 Aesthetics of Uniformity, (1)</p>
<p><u>Reproducibleness:</u> <u>Law Of:</u></p> <p style="text-align: right;">See Harmonic, 22 Apr'68</p>	<p><u>Repro-shelter Industry:</u></p> <p style="text-align: right;">See Industrial Hypocrisy, May'32</p>

Synergetics Dictionary

<p><u>Reservoir:</u> (2)</p> <p style="text-align: center;">See Shunt, Jun'66</p>	<p><u>Residual Ignorance:</u></p> <p style="text-align: center;">See Understanding, 1 Apr'49</p>
<p>RBF DEFINITIONS</p> <p><u>Residual Error:</u></p> <p>"There will always be <u>residual error</u> to surprise man. The integration of all possibilities of the complementary alternates, though confinable, inherently defies exact identity because the minimum is pattern and not isolated integer. All pattern has inherent plurality of viewable aspects, which are the reciprocals of pluralities of permissible viewpoints, for instance, from within or from without a system. All treatable pattern is a subdivision of Universe, and disposes, in its first generalization, of the macrocosmic and microcosmic irrelevancies. Ergo, thought identification and communication to self or others must tune in a zone system, with inherent center-of-zone, equilibrium 'sphere,' and therefore possessed of inherent wave propogative inward-outward tendency between the unstable variable limits, or infra-ultra twilights confining the clearly tunable mean interior-exterior zone limits occurring between the ultra-tunable macrocosmos and the intra-tunable microcosmos."</p> <p style="text-align: center;">- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>	<p><u>Residual Reality:</u></p> <p style="text-align: center;">See Specialization, Dec'69</p>
<p><u>Residual Error:</u></p> <p style="text-align: center;">See Observing & Articulating, 4 Aug'75 Cybernetics, 7 Nov'75</p>	<p><u>Residual:</u></p> <p style="text-align: center;">See Truth as Progressive Diminution of Residual Error</p>
<p>RBF DEFINITIONS</p> <p><u>Residual Ignorance of Temporality:</u></p> <p>"Only residual ignorance of temporality dulls the growing comprehension and allows fear to corrupt the child's innately absolute trust in love."</p> <p style="text-align: center;">- Citation and context at <u>Death</u>, 11 Sep'73</p>	<p><u>Residual:</u> (2)</p> <p style="text-align: center;">See Exactitude, May'72 Historical, 1971</p>

Synergetics Dictionary

<p><u>Residual:</u></p> <p>See Residual Error Residual Ignorance of Temporality Residual Reality</p>	<p>RBF DEFINITIONS</p> <p><u>Resolution:</u></p> <p>"Things in parallel never get resolved. Convergent things get beautifully resolved; they get exactly... they get nature into a corner."</p> <p style="text-align: right;">- Citation & context at <u>Convergence & Divergence</u>, 1 May'77</p>
<p><u>Resilience:</u></p> <p>See Bend: Sending Rigidity vs. Resilience</p>	<p>RBF DEFINITIONS</p> <p><u>Resolution:</u></p> <p>"...The resolution is not linear nor planar; it is omnidirectional; it is hierarchical in ascending or descending hierarchies."</p> <p style="text-align: right;">- Citation & context at <u>Minimum Limit Case</u>, 12 May'75</p>
<p><u>Resistance:</u> (1)</p> <p>See Least Resistance Passive Resistance Precessionally Shunted Pattern Relay</p>	<p>RBF DEFINITIONS</p> <p>██████████ <u>Resolution:</u></p> <p>"Vectors are not abstractions: they are <u>resolutions</u>."</p> <p style="text-align: right;">- Citation at <u>Vector</u>, 21 Dec'71 - Cite: RBF to EJA, 3200 Idaho, Washington, DC, 21 Dec. '71.</p>
<p><u>Resistance:</u> (2)</p> <p>See Tunability, 1960</p>	<p>RBF DEFINITIONS</p> <p>██████████ <u>Resolution:</u></p> <p>"Points are complex but nondifferentiably <u>resolvable</u> to superficial inspection."</p> <p style="text-align: right;">- Cite: RBF to EJA, Beverly Hotel, New York, 19 June 1971. - Citation & context at <u>Point</u>, 19 Jun'71</p>

Synergetics Dictionary

RBF DEFINITIONS

Resolution:

"A star is something you cannot resolve. We call it a point, playing Euler's game of crossings. One star does not have an outside and an inside. It is a point because you cannot resolve it."

- Cite RBF to EJA, Carbondale, 2 April 1971.

- Citation & context at Point, 2 Apr'71

Resolution: Resolvable:

(2)

See Female Leg, Aug'64
 Point, 6 Nov'73; 19 Jun'71*; 2 Apr'71*
 Prime Otherness, 24 Sep'73
 Tetrahedron as Conceptual Model, Nov'71
 Vector, 21 Dec'71*
 Clusters, 7 Nov'73
 Minimum Limit Case, 12 May'75*
 Convergence & Divergence, 1 May'77*
 Six Motion Freedoms & Degrees of Freedom, (1)(2)

RBF DEFINITIONS

Resolution:

"... Think about some of the limits of thinking of what we call resolution. Just look at this ruler... it is divided into centimeters and it is down to tenths of centimeters... Or if you take an engineers' rule and get down to hundredths of an inch a good eye can see and resolve the black from the white, but beyond that you stop operating and you see gray. These are frequencies. From now on we really get into the phenomena of frequency-- and then you see pink and yellow. I want you to realize you are seeing something to do with frequencies, where you do not have resolution of separation and this is not at all mysterious. We realize how very limited we are, and then when we begin to see things superficially-- they are tactile-- we don't realize how much confusion we are having on an extraordinary set of frequencies."

- Cite Oregon Lecture #3, pp. 100. 5 Jul'62

RBF DEFINITIONS

Resonance:

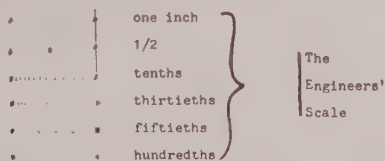
"... Lines are always curvilinearly realized because of universal resonance, spinning, and orbiting."

- Citation and context at Line, 7 Nov'72

RBF DEFINITIONS

Resolvability Limits:

"The visual limits of 'now-you-see-it-now-you-don't,' yes-no-yes-no, something-nothing-something-nothing, dot-dash-dot-dash are relative size-scale discernibilities spoken of technically as resolution. These resolvability limits of the human eye may be pictured as follows:



"The finest 'smooth' surface, intercolor-crossblending, continuum photogravure printing is accomplished with a benday screen which employs 200 unique color dots per each square inch of printed surface."

- Cite SYNERGETICS 2 draft at Sec. 100.031; 30 Apr'77

RBF DEFINITIONS

Resonance:

"I'm talking about physics and the waves of the periodic table... its unique frequencies would interact... and what the permutations would be mathematically-- And I found this highly suggestive that the octave with its characteristic flat resonance really governing the interactions of frequencies. The resonances are the key to much of modern physical exploration."

- Citation and context at Pythagoras (2), 18 Jun'71

Resolution: Resolvability:

(1)

See Benday Screen
 Differentiation
 Point
 Tunability
 Abstraction vs. Resolution
 Unresolvable
 Frequency Islands of Perception
 Invisibility of Macro- and Micro Resolution
 Conceptual Genesis

RBF DEFINITIONS

Resonance Field:

"...Employing as a resonance field all the intertransforming spheres and between-sphere spaces; and employing the myriadly selectable, noninterfering frequencies of such propagatable intertransformation resonance..."

- Citation and context at Atomic Computer Complex (8), 13 May'73

Synergetics Dictionary

<p><u>Resonance: Resonatability:</u> (1)</p> <p>See Feedback Omninterresonated Oscillation Pulsation Synchro-resonance Tidal Zone of Neutral Resonance Omniresonant Heard & Unheard Resonances Wavelength, Frequency & Resonance Harmonic: Harmony Tensed String Chords & Notes</p>	<p>RBF DEFINITIONS</p> <p><u>Resources:</u> "... Spaceship Earth's prime <u>resources</u> belong to everybody."</p> <p style="text-align: right;">- Citation and context at <u>Young World</u> (10), 4 Jul'72</p>
<p><u>Resonance: Resonatability:</u> (2)</p> <p>See Integer, 15 Oct'72 Isotropic Vector Matrix, 16 Nov'72; 30 Nov'72 Line, 7 Nov'72* Music, 4 Mar'69 Observing vs. Articulating, Mar'71 Octave, 18 Jun'71 Point, 16 Nov'72 Pythagoras, (2)* Synergetics Calculation, 30 Oct'72 Time-size, 20 Dec'73 Tunability, 19 Oct'72; 16 Nov'72 Radiation-gravitation: Harmonics, 3 Jan'75 Womb of Permitted Ignorance, 13 Dec'73 Metaphysical & Physical Tetrahedral Quanta, 25 Mar'71 Energy Involvement of 92 Elements, (1) Metaphysical & Physical, 13 Nov'75 Aural, 22 Feb'77 Olfactoral, 22 Feb'77 Mites & Quarks as Basic Notes, (3)</p>	<p><u>Resource Effectiveness:</u></p> <p>See Industrial Man, 10 Oct'63 Revolution by Inadvertence, 10 Oct'63</p>
<p>RBF DEFINITIONS</p> <p><u>Resources:</u></p> <p>"If there's so little of it, it must be used in a broad sense. I must never have helium in a retail pub; it must be in the tools that serve the tools...."</p> <p>"I want to really do something, but I don't want to sell boron on the street-corner to use for toothpicks. I want to see that everything is used where it's meant to be used."</p> <p>1st. Para - Cite <u>Scrap Sorting & Monegering</u> (3), 15 Jun'74 2nd. Para - Cite Tape transcript, p.4; RBF to W. Wolf, 2 Jun'74</p>	<p><u>Resources: Fresh vs. Waste:</u> (1)</p> <p>See Outbound Packaging of Human Food Waste</p>
<p>RBF DEFINITIONS</p> <p><u>Resources:</u></p> <p>"...All the 'cream rich' initial discoveries of original resource geography lodes become exhausted..."</p> <p style="text-align: right;">- Citation and context at <u>Womb of Permitted Ignorance</u>, 13 Dec'73,</p>	<p><u>Resources: Fresh vs. Waste:</u> (2)</p> <p>See Biological Life, (2)</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Resource Inadequacy:</u></p> <p>"I also realize intuitively That the elimination Of the condition of <u>resource inadequacy</u> And thereby the elimination of human want May probably eliminate war -- Or quick death-- Which is always consequent to the overlong protraction Of the slow and more anguished poverty's Slow dying As brought about by lethal ignorance In respect to the design revolution potentials As society takes its only known recourse In political actions..."</p> <p style="text-align: right;">- Cite INTUITION, pp.63-64, May '72</p>	<p><u>Resource Inventorying:</u> (1)</p> <p style="text-align: center;">See Satellite: World Satellite Sensing</p>
<p><u>Resource Inadequacy:</u> (1)</p> <p style="text-align: center;">See Inadequacy of Life Support Scarcity: Not Enough to Go Around</p>	<p><u>Resource Inventorying:</u> (2)</p> <p style="text-align: center;">See Biosphere, (1) Problem: Statement Of, Aug'72</p>
<p><u>Resource Inadequacy:</u> (2)</p> <p style="text-align: center;">See Political Revolution, 10 Oct'63 Selfishness, 22 Jun'75</p>	<p>RBF DEFINITIONS</p> <p><u>Resource & Principle:</u></p> <p style="text-align: center;">"Inventions are extemporaneous. They represent trial balances of resource and principle drawn off in the light of shifting needs."</p> <p style="text-align: right;">- Citation & context at <u>Inventions</u>, 1947</p>
<p><u>Resource Integration:</u></p> <p style="text-align: center;">See Leaders: Take Away the Leaders, 4 Jul'72</p>	<p><u>Resources:</u> Resources: (1)</p> <p style="text-align: center;">See Pollution Control Wilderness Resources</p>

Synergetics Dictionary

<p><u>Resource: Resources:</u> (2)</p> <p>See Biological Life, (1) Biosphere, (1)(2) Leaders: Take Away the Leaders, 4 Jul'72 Miniature Earth, 28 Apr'74 Wealth, 1947; 20 Sep'76 Womb of Permitted Ignorance, 13 Dec'73* World Game: Grand Strategy, 2 Jun'74 Young World, 4 Jul'72* Intellect, 21 Jun'77</p>	<p>RBF DEFINITIONS</p> <p><u>Responsibility:</u></p> <p>"We are all equally responsible not only for the big complementary surface areas which we develop on systems by our every act. . . We are inherently responsible for the transformation of Universe, inwardly, outwardly, and all around every system which we alter."</p> <p>- Citation and context at <u>Spherical Triangle (4)</u>, 13 Nov'69</p>
<p><u>Resource: Resources:</u> (3)</p> <p>See Resource Effectiveness Resource Inadequacy Resource Integration Resource Inventorying Resource & Principle</p>	<p>RBF DEFINITIONS</p> <p><u>Responsibility:</u> [REDACTED]</p> <p>"... Up to the nineteenth century, or the beginning of the twentieth century, what we could smell, see, hear, and touch was what he meant by reality. I think to many in our society today that is still what you mean by reality. Freud and Mesmer shook society's concept of this kind of reality, because man up to this time had been saying, because that is reality, every human being knows just what he is doing. If he is of sound mind, when he is awake, then he knows just what he is doing. Therefore, he must be entirely responsible for his every act. So as we developed laws, we made man utterly responsible for his every act. But Freud and Mesmer, through their hypnotism, were able to disclose behaviors of human beings for which the human being was not responsible at all. So this shook the idea of the courts, and we have had to have psychiatrists and others come in to bring you a reconsideration of the responsibilities of human beings. Now, what has really not been paid attention to in our society, again because we are all so specialized, is that there is almost no tendency to look at the whole and to really understand the whole."</p> <p>- Cite RBF Address, THE HABITABLE CITY, 14 Oct. '69.</p>
<p>RBF DEFINITIONS</p> <p><u>Responsible:</u></p> <p>"We have to take the responsibility of being responsible. So far we have not been very responsible. You don't say to a new child, 'You'd better go back in there, you're not very responsible...' They're just using words-- foxes and daisies... I say: what might I do that made it logical for man not to do these things? That's what I'm caring about. That's what design science is."</p> <p>- Citation and context at <u>Spaceship (C)</u>, Feb'73</p>	<p><u>Responsibility:</u> (1)</p> <p>See Man's Conscious Participation in Evolution Doing What Needs to Be Done Everybody's Business</p>
<p>RBF DEFINITIONS</p> <p><u>Responsibility:</u></p> <p>"Our history of social customs indicates that until very recently, when Freud offered evidence to the contrary, man thought of his awake self as being utterly conscious. The laws held people absolutely responsible for all their awake acts. Reality was what could be seen, smelled, touched, tasted, and heard. There was no popular awareness of sub- or ultra-visible reality. There were beliefs of invisible gods or demons playing tricks on the humans."</p> <p>- Cite ARCHITECTURE AS ULTRA INVISIBLE REALITY, p. 149, Dec. '69</p>	<p><u>Responsibility:</u> (2)</p> <p>See Design Scientist, 30 Jan'75 Publishing, 30 Jan'75 Success, 10 Sep'75</p>

Synergetics Dictionary

RBF DEFINITIONS

Rest: At Rest:

"The words 'at rest,' artificial, and failure are all meaningless."

- Citation and context at Meaningless, Oct'66

RBF DEFINITIONS

Rest of the Universe:

"The complementarity of the octahedron with the vector equilibrium permits us to get down to the local and not be afraid of missing the rest of the Universe, because we know the fundamental complementations of macro tetra and micro tetra. We were always looking at the XYZ quadrant-- focusing on the quadrant at the center of the octahedron, rather than on the functioning of the covariations."

- Citation and context at Trigonometric Limit, 22 Jun'72
 - Cite SYNERGETICS para 16 at Sec. 12/23, 3 Part 73

Rest: At Rest:

(1)

See Imobility
 Instant Universe
 Newton's Cosmic Norm of "At Rest"
 No Change
 No Speed
 Static

RBF DEFINITIONS

Rest of the Universe:

". . . You and I are matched by the rest of the Universe. There is an invisible hole-- a matrix of you and I sitting in the Universe. So it really isn't annihilated, but it is nonlocally identifiable. . . "

- Citation and context at invisible Hole, 16 Jun'72

Rest: At Rest:

(2)

See Norm of Einstein as Absolute Speed, Jun'56
 Radiation: Speed Of, (C)
 Future: Man Backs into His Future, May'49
 Dynamic Equilibrium, 24 Apr'76

RBF DEFINITIONS

Rest of the Universe:

"The Platonic Solids do not stand in a vacuum of Universe. They are in Universe and if you change that thing you change the rest of Universe. Nothing can change locally without changing everything else."

- Citation at Platonic Solids, 12 Jul'62

Restlessness:

See Energetic Functions, 8 Aug'77

Rest of Universe Other than Earth:

See Spherical Triangle Sequence, (iii)

Synergetics Dictionary

<p><u>Rest of Universe:</u> (1)</p> <p>See Local Change Motion Freedom from Rest of Universe Nonconceptuality</p>	<p>RBF DEFINITIONS</p> <p><u>Restraints:</u></p> <p>"Nothing stands in a vacuum of Universe. Nothing can change locally without changing everything else. We have to look for conditions where there is permitted transformability and where there is some really great unanimity of degrees of freedom. We see that certain kinds of patterns accrue from certain numbers of restraints. You could see how planar things could happen as a consequence of two restraints and how linear things could happen as a consequence of three restraints. (See Sec. 401, Twelve Vectors of Restraint Define minimum System.) We see, then, that we are in a Universe where there is a certain limited number of permitted freedoms. Synergetics discovers that whatever is rigidly related to anything else discloses 12 restraints. There are a minimum of 12 restraints in developing anything we might call a rigidly related set of events."</p> <p>- Cite SYNERGETICS text at Sec. 537.01; RBF modified and deleted much of text on galley, 7 Nov'73, but EJA reinstated text to conform to manuscript of Dec'71.</p>
<p><u>Rest of Universe:</u> (2A)</p> <p>See Allspace Filling: Octahedron & Vc, 22 Jun'72 Eternity: Equation Of, 27 May'72 Event, 1968 Invisible Hole, 16 Jun'72 Local Entity, 1960 Nonmirror Image, 13 Jun'74 Orbiting, 5 Jun'73 Key-keyhole Sequence, (1)(2) Platonic Solids, 12 Jul'62* Plus One, 9 Jul'62 Rubber Tires, (4) Sphere, (1) Tetrahedron: Coordinate Symmetry, 10 Jul'62 Thinkable System Takeout, (2) Thinking, (1) Trigonometric Limit, 22 Jun'72*</p>	<p>RBF DEFINITIONS</p> <p><u>Restraints:</u> (1)</p> <p>"I've got a way of checking degrees of freedom. I said there's myself and the universe, and I see a hole in the stars. I try to shoot out through the stars. I go like the Pleiades; the stars get closer and closer together; I seem to be very far. All the stars in the rest of the universe are in one huddle, and I am over here. . . ."</p> <p>"I can't get away from the universe: one tension restraint. I can do as a tetherball; you hit it and make any kind of a spherical form that you want. . . . I give myself now two restraints, I only had one restraint, now I have two restraints, not as if I were a ball in the middle of a music string. I can still move but I can only move in a plane. I give myself a third restraint; I am in a drumhead; I can still move, but only in a line. Then I give myself a fourth restraint and first I am pulling the drumhead in one direction and I seem to be immobilized. . . . I found that even though semi-immobilized, you could put a monkey-wrench on it and it would contort. . . ."</p> <p>"I had to get each one of the four restraints; they had to be three-folded and come in tangentially, making a total of 12. There would be six positive and six negative, corresponding SYSTEM SEC 408.1 +2+3] - Cite Ledgemont Lab. Lecture, p.52, 15 Oct'64</p>
<p><u>Rest of Universe:</u> (2B)</p> <p>See Universal Joint: Tetrahedron, 9 Nov'73 Minimum Sphere, Aug'71 Quantum Sequence, (5) Time is Only Now, 19 Jul'76 In, Out & Around, 17 May'77 Human Beings & Complex Universe, (4)</p>	<p>RBF DEFINITIONS</p> <p><u>Restraints:</u> (2)</p> <p>"to the six edges of the tetrahedron, negative and positive... They keep showing up in these models.</p> <p>"You are trying to make a wire wheel. How many spokes does it take? You have to have three out this way and three out that way to keep the hub from shimmering. You have to take care of the rotation and the torque-- that way and this way-- we had six... multiply each of these by two by two... comes 12. You cannot have a wire wheel with less than 12 spokes."</p> <p>- Cite Ledgemont Lab. lecture, p.53, 15 Oct'64</p>
<p>RBF DEFINITIONS</p> <p><u>Restraints:</u></p> <p>"Six restraints are essential to structure and pattern stability."</p> <p>- Cite RBF marginalia to SYNERGETICS 2 draft at Sec. 400.664; 8 Aug'77</p>	<p>RBF DEFINITIONS</p> <p><u>Restraints:</u></p> <p>"The Platonic Solids do not stand in a vacuum in a vacuum of Universe. Nothing can change locally without changing everything else. We have to look for conditions where there is permitted transformability and where there is some really great unanimity and I have been looking for degrees of freedom-- ways in which this could happen, the kinds of patterns that accrue to one restraint, two restraints and so forth. You could see how linear things could happen as the consequence of three restraints and how planar things could happen as the consequence of two restraints, and so forth. We then get into a Universe of a certain number of permitted freedoms and I have discovered that nothing was-- you might say-- rigidly related to anything else unless there were twelve restraints so there was a minimum of twelve restraints to develop anything we might call rigidly related set of events."</p> <p>- Cite Oregon Lecture #8, p. 285, 12 Jul'62</p> <p>12 DEGREES OF FREEDOM - SEC. 537.01</p>

Synergetics Dictionary

RBF DEFINITIONS

Restrains:

"Here are those degrees of freedom that I spoke about and illustrated where we have the single ball able to move to all kinds of patterns, but when there are two restraints they can only move in a plane, when there are three restraints they can only move in a line, and with four restraints it stays fixed, but it can rotate locally."

- Cite OREGON Lecture #6, p. 208, 10 Jul'62

Restructurings:

See Unstructurings & Restructurings

Restraint Focus:

See Aberration, 1y Dec'73

RBF DEFINITIONS

Resultant:

"The resultant was not recognized until it was realized that light had a speed."

- Cite RBF at Penn Bell videotaping session, Philadelphia, PA., 20 Jan'75

Restrains:

(1)

See Degrees of Freedom
 Inventions which Decrease the Degrees of Freedom
 Mast in the Earth
 Me Ball
 Otherness Restraints
 Vectors & Restraints

RBF DEFINITIONS

Resultant:

"Now, up to the speed of light measurement, engineers spoke of every action as having a reaction and it was thought by the engineers-- because the public didn't understand-- that every action had a reaction. Little man is so small, and Earth is so big, he doesn't realize that when he steps this way, he's pushing the Earth the other way. But you can feel it in an automobile when it accelerates rapidly, showing the pebbles in the opposite direction. Now with the speed of light measurements, we discover while the speed of light is very great, say 700 million miles an hour. . . While, That's very fast it is very slow in contrast to no time at all. And the engineers have not updated their thinking since the speed of light. They hadn't realized the speed of light had anything to do with their action and reaction. But because there is now no instantaneity, no simultaneity, there is always some energy lag, and time is involved here. Therefore every action not only has a reaction but it has its resultant, and the resultant and the reaction are not the same. So we now realize that every energy event is characterized not only by a reaction but also by a resultant."

- Cite RBF at SIMS, UMass, Amherst 22 July '71, pp 19-20

Restrains:

(2)

See Lifetime: Personal Lifetime Experience for
 Elective Investment, 31 May'74
 Ellipse, 20 Jan'75

Resultant as Disturbance Diminishing:

See Precession & Degrees of Freedom, (1)

Synergetics Dictionary

<p><u>Resultant:</u> (1)</p> <p>See Action Action-reaction-resultant Interference Reaction Z Cobras Integrated Vectorial Resultant Vectorial Model of Interference</p>	<p>RBF DEFINITIONS</p> <p style="text-align: right;"><u>Returning Upon Itself: Systems Return Upon Themselves:</u></p> <p style="text-align: center;">"To be able to return upon itself is a characteristic of all systems. A plane would go on to infinity, so to form a system you would have to take an angle out."</p> <p style="text-align: right;">- Cite RBF at Students International Meditation Seminar, U. Mass., Amherst, 22 Jul '71, p. 10</p> <p><u>SYSTEM - Sec. 400.081</u></p>
<p><u>Resultant:</u> (2)</p> <p>See In, Out & Around, Nov'71</p>	<p style="text-align: right;"><u>Returning Upon Itself: Systems Return Upon Themselves:</u> (1)</p> <p>See Closed System Embrace Finite Geometrical Integrity Nature Always Comes Back on Itself Patterns of Experience Return Upon Themselves in All Directions Wave Returns Upon Itself</p>
<p>RBF DEFINITIONS</p> <p><u>Retirement:</u></p> <p>"Retirement was invented by the insurance companies. There are 9,000 Ph.D.'s in physics today and only 2,000 of them have jobs."</p> <p style="text-align: right;">- Cite RBF at Penn Bell videotaping, Philadelphia, 28 Jan'75</p>	<p style="text-align: right;"><u>Returning Upon Itself: Systems Return Upon Themselves:</u> (2A)</p> <p>See Closed System, 26 May'72 Comprehension, Dec'61 Congruence, 25 Jan'72 Considerable Set, 1959 Finite, 13 Nov'69 Gears, 7 Nov'73 Geometrical Integrity, 25 May'72 Infinity & Finitude, Jun'66 Interference, 15 Oct'64 Motion, 4 Feb'68 Omnidirectional, 23 Sep'73 Polygon, Jun'66 Prime Structural Systems, 11 Jul'62 ; 3 Nov'73 Radiation: Speed Of, 22 Jun'72 Simultaneous, 5 Jul'62 System, (1)(2) Thinkability, 1 May'71 Triangle, 5 Jul'62</p>
<p><u>Retirement: Retiring:</u></p> <p>See Squatters, (1)(2) Building Industry, (2)</p>	<p style="text-align: right;"><u>Returning Upon Itself: Systems Return Upon Themselves:</u> (2B)</p> <p>See Vector, 25 May'72 Vectors Are Real, 23 May'72 Vertexes, Faces & Lines, 1 Jan'75 Plane, 19 Feb'72; 13 Nov'69 General Systems Theory, (A)</p>

Synergetics Dictionary

<p><u>Return to Modelability:</u> (1)</p> <p>See Modelability Science: Gap Between Science & the Humanities</p>	<p><u>Reverse Atomics:</u> (1)</p> <p>See Electrostatic Generating</p>
<p><u>Return to Modelability:</u> (2)</p> <p>See Artist, 6 Jul'62 Powering, (1)(2) Synergetics, Dec'72; 30 Dec'73 Xyz Coordinate System, 1965</p>	<p><u>Reverse Atomics:</u> (2)</p> <p>See Lightning & Atoms, 28 Apr'74</p>
<p><u>Reverify:</u> <u>Reverifiable:</u></p> <p>See Unknown: All the Unknown, 13 May'73</p>	<p><u>Reverse Fountain Flow:</u></p> <p>See Wind Stress & Houses, (9)</p>
<p>RBF DEFINITIONS</p> <p><u>Reverse Atomics:</u></p> <p>"Maybe we ought to try to capture lightning in electrostatic generators underground: build up charges of lightning and then release it later.</p> <p>"We might really reverse our atomics: instead of learning how to release atomic energy we could learn how to make the atoms and how to employ the exponential increase of their gravitational energy as their components are allowed to self-assemble themselves."</p> <p>- Cite tape transcript, DSI Project; RBF to W. Wolf, pp.10-11, 28 Apr'74; as rewritten by RBF at 3200 Idaho, 10 Sep'74</p>	<p>RBF DEFINITIONS</p> <p><u>Reverse Optimism:</u></p> <p>"Optimism is usually thought of as constituting a mildly unwarranted hopefulness in respect to the future. But there is a reverse projection of optimism in the nostalgia-generated myths that recall only the rare and sublime moments of yesterday. Forgetting the negative, <u>reverse optimism</u> overemphasizes, thus deliberately shuts its eyes to reality, and is therefore unable to see the values immediately present.</p> <p>"I am convinced that we are swiftly emerging from the abysmal conformities of yesterday's illiterate, spit-punctuated profanity and monosyllabic verbalism, in which rags, filth, diseased bodies, prevalent stench, devastating superstition, and local bias reigned supreme."</p> <p>(Compare with <u>Conformity</u>, 10 Oct'63 - EJA)</p> <p>- Cite THE PROSPECT FOR HUMANITY, WDSB Doc. 3, p.74, Aug'64</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Reversibility:</u></p> <p>"... The syntropic vector equilibrium's <u>reversibility</u>-- inwardly-outwardly-- is the basis for the gravitationally maintained integrity of Universe."</p> <p> </p> <p>- Citation at <u>Star Tetrahedron</u>, 8 Oct '71</p> <p>- Cite <u>SYNERGETICS</u> draft "Antitetrahedron," 8 Oct. '71, p. 8.</p>	<p><u>Review:</u></p> <p style="text-align: center;">See View & Review</p>
<p>RBF DEFINITIONS</p> <p><u>Reversibility:</u></p> <p>"Each vector is <u>reversible</u> having its negative alternate."</p> <p> </p> <p>-Cite <u>SYNERGETICS</u> Corollaries, Sec. 240. 1970</p> <p>- Citation & context at <u>Vector</u>, Oct '59</p>	<p>RBF DEFINITIONS</p> <p><u>revolution:</u></p> <p>"The revolution is not being effected by pulling the top down. It is being effected by pulling the bottom up. It is being effected by doing more with ever less in such a manner as to take care of all without taking away the functional capabilities and fundamental advantages of any. The surprise-- constantly doing vastly more with ever fewer physical resources per function-- is our legacy from the millenia-long armaments struggle to do more with less in a world where a pea-size transistor now does more than an army of yesterday and a fistful of atomic fuel takes a large ship around the Earth."</p> <p> </p> <p>- Cite THE PROSPECT FOR HUMANITY, WSDS Doc. 3, p. 65, Aug'64</p>
<p><u>Reversibility:</u> (1)</p> <p>See Inward & Outwardness Irreversibility Obverse & Reverse Opposite: Opposition Moving Picture Run Backwards Negative Future: Man Back Into His Future Mirror Reversal Darwin: Evolution May Be Going the Other Way Enantiodromia</p>	<p><u>Revolution: Design Science Revolution vs. Global Political Revolution:</u></p> <p>See Montreal Expo'67 Dome, (B)</p>
<p><u>Reversibility: Reverse:</u> (2)</p> <p>See Energy, 16 Sep'67 Star Tetrahedron, 8 Oct'71* Star Tetrahedron & VE, 9 Nov'73 Vector, Oct'59* Vector Equilibrium, (I); 8 Oct'71 Implosion- explosion, Jun'66 Octahedron as Conservation & Annihilation Model, 23 May'75 Error, 30 May'75</p>	<p>RBF DEFINITIONS</p> <p><u>Revolution: Hard Revolution + Soft Revolution:</u> (1)</p> <p>"The exponentially accelerating rate of a new world order realization is irreversibly emergent through chain reaction emergencies transpiring as a primarily invisible <u>soft revolution</u>. As omni humanity's critical thoughts break out as news events, with the break-outs too swiftly shifting their geography and too frequently multiplying and altering their run-off routes to develop any local power cloutures and consequent burst-out bores of sufficient local magnitude to detonate full scale <u>hard world revolution</u>, yet so far out-performing hard revolutions in omni egalitarian social advancement-- by elevating the bottom instead of depressing the top-- thereby arriving at a world's socio-economic ocean which levels spherically to contain any magnitude of local energy outbursts as storms or volcanoes</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Revolution:</u> <u>Soft Revolution + Hard Revolution:</u> (2)</p> <p>"whose violence is swiftly dissipated by circumferential hydraulic wave displacements. The brimming ocean wave of commonwealth is bound radially by gravity in spherical mantle unity. Thereafter, the ocean will pulse only in world tidal integrity as an omnilateral, closed sphere system democracy consciously, spontaneously, instantly rearticulating its responses to world around electro-telepathetic info-waves.</p> <p style="text-align: right;">- Cite EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH, Jan. '72.</p>	<p><u>Revolution:</u> (1)</p> <p>See Communications Revolution Design Revolution Education Revolution Geosocial Revolution Political Revolution</p>
<p>RBF DEFINITIONS</p> <p><u>Revolution By Inadvertence:</u></p> <p>"Each nation has been looking out for itself and each man within the nations has been looking out for himself and his family! Therefore the surprising and continual increase in the proportion of world humanity being served at ever higher industrial standards . . . cannot be attributed in any way to any consciously organized effort of humanity to make the resources go further. It is in no way attributable to charitable gifts.</p> <p>"Forced to look elsewhere for an explanation, we find that the increase in the world's numbers who are prospering has been brought about entirely by indirection and <u>inadvertence</u> as the consequence of man's earlier heavy and prime subsidy of weapons race evolution."</p> <p style="text-align: right;">- Cit MEXICO '63, p.8, 10 Oct '63</p>	<p><u>Revolution:</u> (2)</p> <p>See Birth, 22 Dec '74 News & Evolution, (3)</p>
<p><u>Revolution by Inadvertence:</u> (1)</p> <p>See Evolution by Inadvertence</p>	<p><u>Rewarding:</u></p> <p>See Re-rewarding Operant Psychology</p>
<p><u>Revolution by Inadvertence:</u> (2)</p> <p>See Economic Accounting System: Human Life-hour Production, (2) Cosocial Revolution, (1) Ignorance, (1)(2)</p>	<p><u>Re-wow:</u></p> <p>See Wow: The Last Wow</p>

Synergetics Dictionary

<p>RbF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The total space is 24--with the vector equilibrium's Eighth Octahedra extraverted to form the rhombic dodecahedron.</p> <p>"For every space there is always an alternate space: this is where we get the 48-ness of the rhombic dodecahedron as the domain of a sphere.</p> <p style="margin-left: 40px;">24 x 8 = 20</p> <p style="margin-left: 40px;">6 x 8 = 48</p> <p style="text-align: center;">(Incorporated in SYNERGETICS 2 draft at Sec. 1033,184)</p> <p>- Cite RBF to EJA, 3200 Idaho, Wash. DC: 12 May'77</p>	<p>RbF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The rhombic dodecahedron is the most faceted, identical faceted (diamond) polyhedron and accounts, congruently and symmetrically, for all the isotropic-vector-matrix vertexes in closest packed spheres and their 'tween' spaces. Each rhombic dodecahedron's diamond face is at the long-axis center of each coupler (Vol. = 1) asymmetrical octahedron, with each of the rhombic dodecahedra sharing it 12 omni-adjacent spherics..."</p> <p style="text-align: right;">- Citation and context at <u>Coupler</u> (1)(2), 22 Mar'73</p>
<p>RBF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The rhombic dodecahedron is the domain of omni-closest-packed spheres; the middle of its diamond face is the control point for the sphere's radius, the unity vector."</p> <p style="text-align: right;">* Citation & context at <u>Triacontahedron as Limit Regular Polyhedron</u>, 13 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The fact that the rhombic dodecahedron can have its 144 modules oriented as either introvert-extrovert, or as three-way circumferential, provides its valvability between broadcasting-transceiving and noninterference relaying. The first radio tuning crystal must have been a rhombic dodecahedron."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 426.43, 30 Nov'72</p>
<p>RbF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The rhombic dodecahedron, like the cube, fills allspace. It has a volume of six. It is the epitome of the behavior of closest packing. The rhombic dodecahedron is the domain of a sphere = spheric."</p> <p style="text-align: right;">- Citation & context at <u>Vectorial & Vertexial Geometry</u>, (20), 27 Jan'75</p>	<p>RBF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The rhombic dodecahedron symmetrically fill allspace in symmetric consort with the isotropic vector matrix. Each rhombic dodecahedron defines exactly the unique and omni-similar domain of every radiantly alternate vertex of the isotropic vector matrix as well as the unique and omnisimilar domains of each and every interior-exterior vertex of any aggregate of closest packed, uniradius spheres whose respective centers will always be congruent with every radiantly alternate vertex of the isotropic vector matrix, with the corresponding set of alternate vertexes always occurring at all the intertangency points of the closest packed spheres."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 426.24, 30 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The rhombic dodecahedron contains the most volume with the least surface of all the allspace-filling geometrical forms, ergo, rhombic dodecahedra are the most economical allspace subdividers of Universe. The rhombic dodecahedra fill and symmetrically subdivide allspace most economically, while simultaneously, symmetrically, and exactly defining the respective domains of each sphere as well as the spaces between the spheres, the respective shares of the inter-closest-packed-sphere interstitial space."</p> <p style="text-align: right;">- Cite RBF rewrite of SYNERGETICS galley at Sec. 426.21, 2 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Rhombic Dodecahedron:</u></p> <p>"The rhombic dodecahedron <u>six</u> is entirely outside, but twelvefoldedly tangential to, the initial sphere..."</p> <p style="text-align: right;">- Citation and context at <u>Constant Relative Abundance</u>, 29 Nov'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Rhombic Dodecahedron:

"The rhombic dodecahedron can be put together with MITE's and so it is all-space filling.

"The symmetrical arrays of the rhombic dodecahedron may explain the chemical compoundings of periodic atoms."

- Cite RBF to EJA, 3200 Idaho, DC, 25 Feb '72

RBF DEFINITIONS

Rhombic Dodecahedron:

"I employ . . . the icosahedron and the rhombic dodecahedron in almost all the geometrical forms where one or another provides unique economic advantage. I use the rhombic dodecahedron as the hub of my octahedron-tetrahedron truss-- the octet truss. Its twelve facets represent the planes perpendicular to the six fundamental degrees of freedom."

- Cite RBF Ltr. to Steve Baer, 19 Apr '66
ISOTROPIC VECTOR MATRIX - SEC. 426.04

RBF DEFINITIONS

Rhombic Dodecahedron:

"Nature always starts over again with the isotropic vector matrix. Energy is not lost; just not available.

"At the heart of the vector equilibrium is the ball in the center of the rhombic dodecahedron at the core-- the one sphere all by itself. You put 12 rhombic dodecahedra around one central rhombic dodecahedron and you get the vector equilibrium.

"This is why synergetics can investigate nuclear symmetries: it all comes out absolutely discretely. And it does have both the A and B Quanta Modules in it. Look at the picture [MARKS, p. 167, Pl. L.8.] which shows the one-half of the rhombic dodecahedron. Of all the polyhedra nothing really falls into a group so easily as the rhombic dodecahedron, the most common polyhedron in nature."

- Cite RBF to EJA, 3200 Idaho, Wash., DC, 24 Feb. '72

RBF DEFINITIONS

Rhombic-Dodecahedron:

"The rhombic-Dodecahedron" has a volume of "six."

The rhombic-Dodecahedron is an all space filler like the cube. . . . This is one of the most common naturally occurring crystals."

- ~~Cite Cardinale Draft~~
~~Nature's Coordination, p. VI-20~~

- Cite Oregon # , p.224, 11thul'62

RBF DEFINITIONS

Rhombic Dodecahedron:

"The rhombic dodecahedron is fundamentally associative."

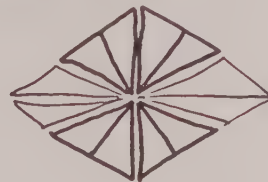
- Cite RBF to EJA, 3200 Idaho, Washington DC, 24 Jan '72

RBF DEFINITIONS

Rhombic Dodecahedron #1: United Sphere:

"In the rhombic dodecahedron #1 there is one sphere integrated at the center. The A and B Quanta Modules as viewed at the peak from above are arrayed around a united sphere. It represents the proton model."

■ A's
■ B's



- Cite RBF to EJA, 3200 Idaho, Wash. DC, 24 Feb '72 + 22 Feb holograph.

RBF DEFINITIONS

Rhombic Dodecahedron:

"Sixth powering is all the perpendiculars to the

rhombic dodecahedron which is all the internal truncations of the tetrahedron."

- ~~Cite RBF to EJA, Bear Island, 25 August 1971.~~

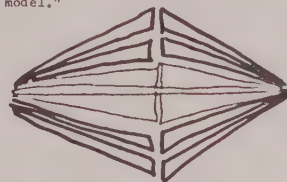
- Citation at Powering: Sixth Powering, 25 Aug '71

RBF DEFINITIONS

Rhombic Dodecahedron #2: Fractionated Sphere:

"In the rhombic dodecahedron #2 there are a large variety of asymmetrical interior aggregations. There is one sphere disintegrated into six symmetrically deployed parts. The A and B Quanta Modules as viewed at the peak from above are arrayed around a fractionated sphere. It represents the neutron model."

■ A's
■ B's



- Cite RBF to EJA, 3200 Idaho, Wash, DC, 24 Feb '72 + RBF Holograph of 22 Feb '72.

Synergetics Dictionary

<p><u>Rhombic Dodecahedron:</u> (1)</p> <p>See Dodecahedron Spheric Spheric Domain Vector Equilibrium Involvement Domain Minimum Limit Case: Hexagon & Rhombic Dodecahedron</p>	<p><u>Rhythm:</u> (1)</p> <p>See Pulse Pattern</p>
<p><u>Rhombic Dodecahedron:</u> (2)</p> <p>See A & B quanta Modules, 10 Jul'62 Constant Relative Abundance, 29 Nov'72* Coupler, 5 Apr'73; 20 Dec'73; (1)(2)* Isotropic Vector Matrix, Feb'72 Octet Truss, 1959 Powering: Sixth Dimension, 9 Nov'73 Powering: Sixth Powering, 25 Aug'71* Vectorial & Vertexial Geometry, (2)* Mite: Positive & Negative Functions, (1)(2) Domains of Interferences, 7 Nov'73 Domain of a Point, 7 Nov'73 Stable & Unstable Structures, 7 Jun'72 Vector Equilibrium Involvement Domain, 11 Dec'75 Quantum Mechanics: Minimum Geometrical Fourness, (2)-(4) Triclinic, 31 Aug'76 Triacontrahedron as Limit Regular Polyhedron, 13 Apr'77* Quanta Loss by Congruence, (2) Triacontrahedron, 13 May'77 Vector Equilibrium: Potential & Primitive Tetravolumes, 12 May'77</p>	<p><u>Rhythm:</u> (2)</p> <p>See Montessori System, 1928 Pole Vaulter, 2 Jul'75 Ghana Dome: Self-chilling Machine, (1)</p>
<p><u>Rhombic:</u> (1)</p> <p>See Antirhombic</p>	<p><u>Ribbon:</u></p> <p>See Pattern Strip Wrapability Tetrascroll</p>
<p><u>Rhombic:</u> (2)</p> <p>See Tensegrity: Unlimited Frequency of Geodesic Tensegrities, (2)</p>	<p><u>Rich Man Drowning in Shipwreck:</u></p> <p>See Wealth, (A)(B) Wealth as "Know-how", (1)</p>

Synergetics Dictionary

Richter Transformation:

See Octahedron as Conservation & Annihilation Model, (4)
 Octahedron as Photosynthesis Model, (D)

RBF DEFINITIONS

Right:

"Now, what we call thinkable is always outside-out.
 What we call space is just exactly as real, but it is
 inside-out. There is no such thing as right and left!"

- Cite Tape transcript RBF to BO'R, Carbondale Dome, 1 May 1971.
- Citation at Parity, 1 May'71

Richter: Don:

See Curvature: Compound, Aug'72
 Triacon, 22 Jun'72

RBF DEFINITIONS

Right Angle:

"The Greeks knew a right angle, but they never called it
 90 degrees."

- RBF on telephone to EJA from Philadelphia, 25 Nov'73

TEXT CITATIONS

Riemann, G.F.R:

Robt. W. Mors, p. 44 : 1960
 Synergetics : Sec. 522.22

Right Angle:

(1)

See Ninety Degreeeness
 Rectilinear
 Roads Turn at Right Angles
 No Right Angles in Nature

Riemann, George Friedrich Bernhard: (1826-1866)

See Spherical Triangle Sequence, (V)
 Geodesics, (1)(2)

Right Angle:

(2)

See Tidal, 15 Oct'64
 Model of Toothpicks & Semi-dried Peas, (1)

Synergetics Dictionary

<p><u>Right to Live: Proving Your Right to Live:</u> (1)</p> <p>See Earning A Living</p>	<p><u>Right-over-Might:</u> (2)</p> <p>See Continuous Man (5) Design Revolution, 6 Mar'74 Ephemeralization, 1938 Rationalization Sequence (2)(3) Society: Control Of, 1938 Superstition of Social Superiority, 1946</p>
<p><u>Right to Live: Proving your Right to Live:</u> (2)</p> <p>See Fuller, R.B: Crisis of 1927, 26 Sep'68 Superstition of Social Superiority, 1946</p>	<p><u>Right:</u></p> <p>See Doing Right things for Wrong Reasons Left & Right</p>
<p>RBF DEFINITIONS</p> <p><u>'Right Makes Might' Dominance:</u></p> <p>"Great historical leaders have always hoped that we may be trending from 'might makes right' to 'right makes might' dominance, which means from a rooted, programed creature, a 'specialist'-- just going after its own honey and stinging others who interfere with its program-- to an ecologically cognizant, spontaneously synergetic, omni-integration of cosmic functioning. . . ."</p> <p>- Citation and context at <u>Ecology Sequence</u> (G), 5 Jun'73</p>	<p>RBF DEFINITIONS</p> <p><u>Rigid:</u></p> <p>"<u>Rigid</u> means 'sized'-- arbitrarily sized. '<u>Rigid</u>' is always special case."</p> <p>- Citation and context at <u>Scheme of Reference</u>, 24 Sep'73</p>
<p><u>Right-over-Might:</u> (1)</p> <p>See Individual Rights Lincoln Metabiblical Cord Might Makes Right Mind-over-Matter Mind-over-Muscle Metaphysical Transcendent of the Physical</p>	<p>RBF DEFINITIONS</p> <p><u>Rigidity:</u></p> <p>D. Bohm, <u>Foundations of Physics</u>, Vol. 1, No.4, 1971, p.369:</p> <p>"The new order and measure introduced in relativity theory implies new notions of structure, in which the idea of a rigid body can no longer play a key role."</p> <p>RBF Comment:</p> <p>"Generalization of tetrahedra utterly independent of <u>rigidity</u>."</p> <p>- Cite RBF marginalis at QUANTUM THEORY AS INDICATION OF NEW ORDER IN PHYSICS, p.369, done Aug'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Rigidity:

"This [thirty strut tensegrity dome] is made out of steel turnbuckles and could be tightened into a very tight structure. As you tighten it up it simply means that the frequencies increase, it gets higher and higher pitched, and finally gets to a point where you don't seem to have any audible tone at all and you call it rigid. In other words then, what we call the rigid structures are not because they are redundant in nature, the atoms, but because they are at a non-aurally tunable frequency."

- Cite OREGON Lecture #5 - p. 181, 9 Jul'62

Rigid: Rigidity:

(2)

See Chemical Bonds, May'72
 Rectilinear Frame, 24 Sep'73
 Scheme of Reference, 24 Sep'73*
 Triangle, 8 Oct'64; 1960
 Prime Nuclear Structural Systems, 27 Dec'74
 Chemical Bonds: Triple Bond, 19 Dec'73
 Light on Scratched Metal, 9 Nov'73

RBF DEFINITIONS

Rigidity vs. Resilience:

"Rigid structural systems consist of whole or truncated interior tetrahedra. If the truncated tetrahedra are shoal enough and if the frequency of the system is high enough, the surface's structural triangles' edge legs may permit resilient bending which will allow an exterior vertex to dimple inwardly of the structural system."

- Cite SYNERGETICS, 2nd. Ed. at Sec. 1071.24, 20 Dec'74

RBF DEFINITIONS

Ring:

"Rings are lines . . . which are all inherently curved and must eventually meet or rejoin their ends."

- Citation, context, and sketch at Two ⁽²⁾, 10 Jan'50

Rigid = Sized:

See Scheme of Reference, 24 Sep'73

Ring:

See Moebius Strip, 10 Jan'50
 Two, (2)*

Rigid: Rigidity:

(1)

See Crystal: Crystalline
 Inflexibility
 Rigidity vs. Resilience
 Rigid = Sized

RBF DEFINITIONS

Yaver: You Might as Well Jump in the River:

"... People who like to be prosaic and like to make man feel so small can say everything is just going to turn out to be inanimate chemistry and you are all the consequence of probabilities and you might as well jump in the river."

- Citation and context at Threshold of Life, 6 Jul'62

Synergetics Dictionary

<p><u>River:</u> (1)</p> <p>See Boats at Anchor Retard the River's Flow Bridge River: You Might as Well Jump in the River</p>	<p><u>Roads: Roadway Systems:</u> (2)</p> <p>See Tools: Craft & Industrial, (2)</p>
<p><u>River:</u> (2)</p> <p>See Lever (II) Naga, (3)</p>	<p><u>Robertson, Donald. W:</u></p> <p>See Invention Sequence, (A)-(D)</p>
<p><u>Roads Turn at Right Angles:</u></p> <p>See Local Squareness, 9 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Robin Hood Sequence:</u> (1)</p> <p>"The chronofile persuaded me ten years after its inception to start my life as nearly new as is humanly possible to do. It persuaded me to dedicate my life to others instead of myself. Not on an altruistic basis but because the chronofile for the first 32 years of my life clearly demonstrated that I was positively effective in producing wealth only when I was dedicated to others. Further chronofile observations then showed me that the larger the number for whom I worked the more positively effective I became.</p> <p>"Thus it became obvious through the chronofile that if I worked for all of humanity I would be optimally effective. Setting out to start life all over again, I did not try to make myself a new, or a different, man, another man. I sought only to allow myself to articulate my own innate motivational integrity instead of trying to accommodate everyone else's prefabricated credos, educational theories, romances, and mores that had occurred in my first life.</p> <p>"One basic tenet of my new volition was that whatever was to be accomplished for anyone must never be at the cost of another. <u>Robin Hood</u> was a story my father read aloud to me when I was"</p> <p>- Tape transcript #6, Side A, p.17; RBF to Barry Farrell; Bear Island, 16 Aug'70</p>
<p><u>Roads: Roadway Systems:</u> (1)</p> <p>See Automobile as Only Half the Invention Freeways Highways</p>	<p>RBF DEFINITIONS</p> <p><u>Robin Hood Sequence:</u> (2)</p> <p>"very young, not long before my father died. <u>Robin Hood</u> became my most influential early years' mythical hero. This meant that in my first life I had improvised methods in general to effect swift moral and romantic justice for those whom I'd found in trouble or danger. Foolishly self-confident in my first life, I had often rushed thoughtlessly to assume responsibilities beyond my physical and legal means. This rashness led me into complex dilemmas, for in an attempt to keep my assumptions of responsibility legal, I inadvertently borrowed from my unwitting family dragging them into preposterous financial sacrifices</p> <p>"In inaugurating my new life I took away <u>Robin Hood's</u> long bow and staff and gave him only scientific textbooks, microscopes, calculating machines, transits in industrialization and a network of tooling in general: I made him substitute new and inanimate forms for animate reform. I did not allow Robin any further public relations professionals or managers or agents to promote or sell him. It seemed obvious that if the new tools that the new <u>Robin Hood</u> did develop could provide valid man advantage increases, they would inevitably be adopted by society in general as the inexorable emergencies which dictate the proper rate of regenerative gestation of evolution took place."</p> <p>- Tape transcript #6, Side A, pp.17-18; RBF to Barry Farrell; Bear Island, 16 Aug'70</p>

Synergetics Dictionary

<p><u>Robin Hood Sequence:</u></p> <p style="text-align: center;">See Consideration for Others Golden Rule</p>	<p><u>Rock: Rocks:</u> (2)</p> <p style="text-align: center;">See Artifact, 26 Jan'75 Weather, Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Rock:</u></p> <p>"I begin to look at all these rocks, and it doesn't look like anything. Then I begin to pick them up, and I pick up any rock, and I find it has a beautiful face here, and then another beautiful face, another beautiful face... These are not carelessly done. You begin to study these rocks a little more, and you find face, face, face, face. Their corners have been knocked off...but all of these racks were once tetrahedrons."</p> <p style="text-align: center;">- Cite RBF to Cam Smith in RBF TO CHILDREN OF EARTH, Dec'72</p>	<p><u>Rockabye Baby:</u></p> <p style="text-align: center;">See Fear, 1938</p>
<p><u>Rocks Don't Love:</u></p> <p style="text-align: center;">See Youth, Truth & Love, 1 Apr'73 Fuller, R.B: On Christopher Morley, 22 Jun'77</p>	<p><u>Rockefeller, David:</u></p> <p style="text-align: center;">See Cosmic Accounting, 2 Jun'74</p>
<p><u>Rock: Rocks:</u> (1)</p> <p>See Pebble Roundness Stone Gibraltar: Rock Of Scenario of the Child</p>	<p><u>Rocketable Logistics:</u></p> <p style="text-align: center;">See Airspace Technology, 20 Sep'76</p>

Synergetics Dictionary

<p><u>Rockets: Steerable Rockets:</u> (1)</p> <p>See Tracer Bullet Sequence</p>	<p><u>Rods:</u></p> <p>See Closest Pcking of Rods</p>
<p><u>Rockets: Steerable Rockets:</u> (2)</p> <p>See Locality, May'71 Measurement, Jun'66</p>	<p><u>Rogers, Will:</u></p> <p>See Funambulist, 1938</p>
<p><u>Rockets: Rocketry:</u> (1)</p> <p>See Four Nosimultaneous Rocket Bursts</p>	<p>RBF DEFINITIONS</p> <p><u>Rollability of Polyhedra:</u></p> <p>"The more evenly faceted and the more uniform the radii of the respective polygonal members of the hierarchy of symmetrical polyhedra, the more closely they approach rollable sphericity. The four-facet tetrahedron, the six-faceted cube, and the eight-faceted octahedron are not very rollable, but the 12-faceted, one-sphere-containing rhombic dodecahedron, the 14-faceted vector equilibrium, and the 14-faceted tetrakaidecahedron are easily rollable."</p> <p style="text-align: right;">- Cite RBF insert at SYNERGETICS galley, Sec. 942.70, 20 Dec'73</p>
<p><u>Rockets: Rocketry:</u> (2)</p> <p>See Buildings as Machines, (2) Twelve-inch Steel World Globe, (A) General Systems Theory, (B)</p>	<p>RBF DEFINITIONS</p> <p><u>Rolls:</u></p> <p>"We want to think about production and getting then films and environments under controls, separating from outside to inside. There is no way man develops such high speed production as in rolling devices that produce sheet steel at fantastic rates coming out from those rollers-- and film which can be such barriers. And the other one is paper-making. You make a number of rollers of paper and you have two of them coming together and corrugated ones in between and gluing them together, making the corrugated paper board out of half paper is very good; it has a very high wet tensile strength-- doesn't bother it at all if it gets wet. But as you have something coming out of rolls, the roll going around, and you have another roll, and there's a printing press. So you can get some newspaper coming out. And so you can see print information. . . Any kind of shapes you want, any picture. So I find then you can do any complex kind of work you want and print it right out on your paper-board as it comes out at fantastic high speed, and not only print it, you can put a little groove in it. You press the paper down, and that's the way you want it to fold. And paperboard domes can really be produced at a fantastic rate."</p> <p style="text-align: right;">- Cite Univ. of Alaska Address, pp.39-40, 20 Apr '72</p>

Synergetics Dictionary

RBF DEFINITIONS

Rolls:

"Of all the materials that man can produce fast the things that come out of rolls are the fastest. Newsprint is the fastest thing he can produce."

- Cite RBF tape of CHAIAS Script
14 March 1971

Romance of History in the Making:

See New York City, (5)

Roll: Rolls:

(1)

See Cleave-roll
Log: Fireplace Log

RBF DEFINITIONS

Romantic:

"I find that universe has not lost one iota of its romance for me. I find living now quite as satisfactory as ever."

- RBF to EJA in mid fast stride at corner of 44th and Vanderbilt, New York City 12 March 1971

Roll: Rolls: Rolling:

(2)

See Invention Sequence (B)
Evaginating, 22 Jun'75
TetraScroll, (1)
Hex-pent Sphere: Transformation into Geodesic Spiral Tube, (1)(2)
Four Intergear Mobility Freedoms, 2 Nov'73
Membranes, 21 Jun'77

RBF DEFINITIONS

Romantic:

"Over a very large period of time, I think that the total data recorded by Charles Fort from around the world may prove of great scientific worth. Above all this there is something extremely inspiring about Fort's interest in his Universe. His interest is very romantic. It isn't written in romantic terms at all, but man is full of dreams-- dreams of significance. Fort was in love with the world that jilted him. Fort, ^{and} humanity was looking for significance in experience. Fort is becoming increasingly popular with the university students who all around the world are looking for significance. Billions of young people are in love with a world whose complexity seems to be trying to jilt them. I don't think their love will be unrequited. Fort's superb humor and tenderness are communicated with economically telling skill is rarely equalled."

- Cite RBF, "Charles Fort Introduction," p. 11. Draft 1969

RBF DEFINITIONS

Romance:

"There's nothing you have to do that isn't fascinating. Whether you're a plumber's helper and have to wipe a joint or whatever it is."

- Cite RBF at Penn Bell videotaping, Philadelphia, 30 Jan'75

Romance: Romantic:

See Fuller, R.B: Crisis of 1927, 14 Apr'70
Robin Hood Sequence, (1)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Rootless:</u></p> <p>"I don't like the word 'rootless' because it shouldn't suggest running away from things. I'm not leaving town. My backyard is just getting bigger."</p> <p style="text-align: right;">- Cite RBF to Elizabeth Drew, WETA-TV, Wash. DC, 19 Oct '72</p>	<p>RBF DEFINITIONS</p> <p><u>Roots:</u></p> <p>"Man is born with legs, not roots."</p> <p style="text-align: right;">- Citation at <u>Legs</u>, 26 Aug '66</p> <p style="text-align: right;">- Cite <u>Edw. C. Higbee</u> introduction, 26 Aug '66, quoting RBF.</p>
<p>RBF DEFINITIONS</p> <p><u>Roots:</u></p> <p>"Biological life... would be dehydrated were it not osmotically watercooled by its root-connected hydraulic circuitry of Earth waters' atomization for return into the sky-distributed, fresh-water-regenerating biological support system, which rooting frustrates integral procreation of the vegetation..."</p> <p style="text-align: right;">- Citation and context at <u>bumblebees</u>, 6 Nov '72</p>	<p><u>Roots vs. Blossoms:</u></p> <p style="text-align: right;">See Good & Evil Sequence (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Roots:</u></p> <p>"At one time people thought of themselves as having roots. Why? Because in order to survive they had to be near the vegetation. And the vegetation had to have roots so it could be water-cooled, and the animals fought the people for it. But now we have the refrigeration which preserves the food, we have the canning and the other processes, and nobody has to be near the roots anymore. They can live anywhere they want. They do have legs and they can go round this world, and the food will be brought to them and none of us has to perish. We can free ourselves from these other kinds of roots just as simply, merely by recognizing that the necessity no longer exists."</p> <p style="text-align: right;">- Cite RBF tape transcript for Barry Farrel Playboy Interview Feb '72. Above passage omitted from final text. See transcript p. 61.</p>	<p>RBF DEFINITIONS</p> <p><u>Roots: (In Mathematics)</u></p> <p>"In synergetics 'square' roots and 'cube' roots are treated as triangular and tetrahedral roots. Therefore, we do not lose the radical. The root becomes rational, as $\sqrt{4}$. The fractions will come out rationally with triangular and tetrahedral roots."</p> <p style="text-align: right;">- Cite RBF to EJA, Beverly Hotel, New York, 14 Sept. 1971.</p>
<p>RBF DEFINITIONS</p> <p><u>Roots:</u></p> <p>"As the prime energy impounder, The vegetation on the land has to have roots in order to get enough water to cool itself so that it will not be dehydrated while it photosynthesizes the radiation energy of the Sun into the beautiful molecular structures that provide the metabolic energy exchange functions of terrestrial life support."</p> <p style="text-align: right;">- Cite BRAIN & MIND, p.110 May '72</p>	<p><u>Roots: Rooted:</u> (1)</p> <p style="text-align: right;">See <u>Roots vs. Blossoms</u> Trees Legs: Man Born with Legs not Roots</p>

Synergetics Dictionary

Roots: Rooted:

(2)

See Bumblebee, 6 Nov '72*
Ecology Sequence, (G); (A)
Lags, (1)
Legs, 26 Aug '66*
Manifesta (1)
Organic Model, Oct '66
Sovereignty: Elimination Of, 29 Jun '72
United States: One of the Most Difficult Sovereignties
To Break Up, 28 Jun '72
Redundancy: Reduction Of, 22 Apr '71
Human Unsettlement, (4)

RBF DEFINITIONS

Rope:

"I started out our brain-mind differentiation
By saying, 'I take a piece of rope.'
I've done this before many audiences,
And no audience has ever said,
'You don't have a piece of rope.'
But the fact is I didn't have a piece of rope.
Nor has anybody ever said,
'Is it nylon, manila or cotton?'
Or, 'What is its diameter?'

- Cite BRAIN & MIND, p.136 May '72

RBF DEFINITIONS

Rope:

"There is much within the critical proximity environment
which demonstrates the normal-- where the disparate mass
relativities are not operating, as, for instance, when a rope
is tensed and reacting at 90° to the direction of the
tensing and thus becomes tauter. Compression members
precess to bend."

- Citation and context at Normal, 6 Mar '73

RBF DEFINITIONS

Rope:

"Each fiber in the rope is randomly spiral. The larger
braided strands are also spiral together into three final
spiral bundles which, in turn, spiral together as a piece
of rope, clearly the rope is an aggregate non-straight lines
of many varieties of spiraling curvatures. The design final
twisting of the rope, when its ends are spliced together,
will expose a unique number of profile humps. If the twist
of the rope has 1/16th inch humps per quarter-inch of rope
length, and 64 profile humps per inch, and 768 per foot;
then there will be 768 times 64, or 49,152 humps in its
total peripheral horizon, inside or outside: that 's a
great complex of wavelinear integrations."

- Cite RBF dictation to Alexandra Snyder, Ashoka Hotel, New
Delhi, India, Dec. '71

RBF DEFINITIONS

Rope:

"To present my scientific differentiation
Of brain and mind
I proceed as follows--
First I say:
'I take a piece of rope and tense it.'
As I purposely tense it
I inadvertently make it tauter.
But I was not tensing the rope
For the purpose of making it tauter,
I was only trying to aggregate the rope.
Its girth is inadvertently contracting and
The rope is also inadvertently getting harder.

"In contracting and getting harder
The rope is going into radial compression
In a plane at ninety degrees to the axis of
My consciously purposeful tensing..."

- Cite BRAIN & MIND, p.124 May '72

RBF DEFINITIONS

Rope:

"Physicists have never discovered any straight lines in
Universes. They have discovered only waves which are inherently
curvilinear, that is, they are corkscrew or spiral traceries
between covariable events, such as You and Me, with our
relationship identified by a rope stretched between us with
two reels at each end to pay out as we move independently
with varying lags in the rate of the rope's response to other
forces acting upon it than those of our two independent pulls,
as for instance the effect of wind on the rope; or the Earth's
gravitational heated expansion of the rope; and the lag or
inertia of the rope in changing the rope's shapes given it
progressively by You, Me, the wind, gravity, Sun, and atoms
of which the rope itself is composed, whose behaviors are
very directionally discrete in order to give the rope its
unique recognizability."

- Cite RBF dictation to Alexandra Snyder, Ashoka Hotel, New
Delhi, Dec. '71.

RBF DEFINITIONS

Rope:

"As recounted before,
Saying, 'Let us take a piece of rope...'
To demonstrate the generalized rope concept--
I am drawing on
A multiplicity of special-case rope experiences
As a brain-stored resource of that audience,
Probably amounting to over a hundred experiences each:
With different kinds of pieces of rope,
Ergo-- I am drawing upon a memory resource
Of more than one hundred thousand experiences
With as many different pieces of rope,
When I speak to an audience of one thousand."

- Cite BRAIN & MIND, p.146 May '72

RBF DEFINITIONS

Rope:

"I take a piece of rope and I tense this piece of rope as
vigorously as I know how. And the more I tense it the tauter
it becomes. When it becomes taut, it means it is contracting
in its girth. This means that while I am purposely tensing
it in its linear axis, it is going into compression at 90
degrees to my purposeful tensing. Compression is occurring,
though I am only applying tension. You understand that? The
rope is contracting, going into compression, as a consequence
of my pulling it."

- Cite RBF at Students International Meditation Seminar,
U. Mass., Amherst, 22 July '71, p. 8

Synergetics Dictionary

RBF DEFINITIONS

Rope:

"Parallel lines can be torqued. So may the parallel lines of a cylinder be twisted as we see them in a rope. A rope and a cone are both forms of simple curvature."

~~- Cite I&I, p. 217, Preview of Building, 1 Apr'49~~
 - Citation at Torque, 1 Apr'49

Rope:

(2)

See Abstraction, 10 Dec'64
 Civil War, (2)
 Intellect: Equation Of, (1)
 Normal, 6 Mar'73*
 Pull, 2 Jul'62
 Tension, (1)(2)
 Pattern Integrity, 22 Jan'75
 Tidal, May'72
 Torque, 1 Apr'49
 Hex-pent Sphere: Transformation into Geodesic
 Spiral Tube, (1)

Rope: Knots vs. Coils:

See Matter vs. Radiation, 7 Nov'73

RBF DEFINITIONS

Rosa:

"... Packages consist of complexly interrelated and not as-yet differentially analyzed phenomena which, as initially unit cognitions, are potentially re-experienciable. A rose for instance, grows, has thorns, blossoms, and fragrance, but often is stored in the brain only under the single word -- 'rose.'

"As Korzybski, the founder of general semantics, pointed out, the consequence of its single-tagging is that the 'rose' becomes reflexively considered by man only as a red, white, or pink device for paying tribute to a beautiful girl, a thoughtful hostess, or last night's deceased acquaintance. Thetagging if the complex biological process under the single title 'rose' tends to detour human curiosity from further differentiation of its integral organic operations as well as consideration of its interecological functionings aboard our planet. We don't know what a rose is, nor what may be its essential and unique cosmic function. Thus for long have we inadvertently deferred potential discovery of the essential roles in Universe which are performed complementarily by many, if not most, of the phenomena we experience..."

- Cite SYNERGETICS draft, Chronicle, pp.3-4, from Nehru Speech, as rewritten by RBF 3 Jun'72

TEXT CITATIONS

Rope:

Univ. of Alaska Address, p.11ff, 20 Apr '72
 Approaching the Benign Environment, p. 82. 1970 (also p.86-cited)
 506.01-506.15
 522.04-522.09 sj26.22
 640.60 s535.22
 644.01 s936.11
 711.01-711.04
 1005.30
 1054.61

RBF DEFINITIONS

Rose:

"Biology, chemistry, and physics can explain some of the characteristics of the mechanics and processes that constitute the composite, constantly changing living-machine rose, but neither Julia nor the scientist could presume to tell little Jim what a rose is."

- Cite NINE CHAINS TO THE MOON, p.10, 1938

Rope:

(1)

See Deliberately Nonstraight Line
 Dog Pulling on a Belt
 Funambulist
 Generalizations: First Degree
 Knot
 Metaphysical Disconnect
 Pattern Integrity
 Waterspout

Rose Bushes:

See Privacy, 22 Apr'61

Synergetics Dictionary

Ross:

See Brain, 3 Jun'72*
 Design, (1); 1938
 Reproducible, 1968
 Aesthetics of Uniformity, (1)

Rotation of Night as a Shadow:

See Sleep, 1963

RBF DEFINITIONS

Rotate:

"One thing we have learned about all systems when isolated from other systems, is that they have the ability to be rotated or for things to rotate around them."

- Citation and context at Axis of Spin (1), 11 Mar'69

RBF DEFINITIONS

Rotation of Spheres:

"A single sphere is free to rotate in any direction.

"Two spheres although free to rotate in any direction must do so cooperatively, assuming no slippage between the touching spheres.

"Three spheres can only rotate cooperatively about respective axes which are parallel to the edges of the equilateral triangle defined by joining the sphere centers, that is, each sphere rotates toward the center of the triangle.

"Four spheres lock together. No rotation is possible, making the minimum stable system: the tetrahedron."

(See Illustration #8.)

Cite SYNERGETICS ILLUSTRATIONS caption #8, 1967

RBF DEFINITIONS

Rotate:

"Radii must grow from point to surface. . . . therefore, spherical irregular tetrahedra (irretetra), therefore as spheres are interacting and spinning and energy is both local and remote as radius expands it, or generates unfolding leaves. . . . Because man rotates he has fingers and toes. Maybe hen rotates around egg with a nuclear gyro."

- Cite RBF holograph, 6 May'48

Rotative Systems:

See Associability, 21 Mar'73

Rotational Aberrating Limit:

See Basic Triangle: Basic Equilibrium 48 LCD Triangle, 17 Dec'73

Rotation: Rotatability:

(1)

See Axis of Inherent Rotatability
 Co-rotation
 Wind Power: Effect of Earth's Rotation
 Vertex-vortex Rotations

Synergetics Dictionary

<p><u>Rotation: Rotatability:</u> (2)</p> <p>See Axis of Spin, (1)* Omnidirectional, 2 Jul'62 Radiation: Speed Of, (D) Cybernetics, 7 Nov'75</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Rowing Needles:</u> (1)</p> <p>"I'd like to make good rowing available to the average man. He'd soon get tired then of having an outboard motor and just putt-putting from here to there. But the average rowing boat is a very awkward affair, so you can't blame people for staying away from them. But with rowing needles it's easy. Three good pulls, and I'm out of the harbor. The satisfaction is enormous.</p> <p>"The bows are domed. With a sharp point you've got a plow pushing the water out ahead of you. This does exactly the opposite: the molecules roll off and they roll off in all directions and because they're rolling in all directions they exhaust the cone of entry and it builds up a vacuum.</p> <p>"Watch a little, tiny guppy in a great tank. He gives a kick of his tail and it builds up low pressure on his nose and it sails right across the tank without any more effort at all. It opens its mouth and builds up that low pressure a little higher and it pulls it right across. I want to really exploit that capability. The bows on atomic submarines are also spherical for the same reasons. As the molecules roll, they take up more"</p> <p>- Cite transcript of RBF tape to Barry Farrell, Tape #1, pp.5-6; Bear Island, 10 Aug'70</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Roundness:</u></p> <p>Imagination "means man's communication of what he thinks it is that he thinks his brain is doing with the objects of his experience. His discovery of general conceptual principles characterizing all of his several experiences-- as the rock, having insiderness and outsiderness, the many pebbles, having their corners knocked off and developing <u>roundness</u>: the thinks there could be pure '<u>roundness</u>' and thus imagined a perfect sphere."</p> <p style="text-align: center;">- Cite RBF to Ed Summerer Club, Boston, 22 Apr'71</p> <p>- Citation at <u>Sphere</u>, 22 Apr'71</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Rowing Needles:</u> (2)</p> <p>"and more of their own medium and the vacuum builds up and just pulls you forward. Today, if you want to punch through steel, you don't use a sharp point. This form is it. Atoms are discontinuous and you want to push between them, not obliterate them. You can't obliterate them."</p> <p>- Cite transcript of RBF tape to Barry Farrell, Tape #1, p.6; Bear Island, 10 Aug'70</p>
<p><u>Round: Roundness:</u></p> <p>See Experience in the Round Omnidirectional Pebble Rock Sphere Sphericity Stone</p>	<p><u>Rowing:</u></p> <p>See Lever, (b)</p>
<p><u>Round Trip:</u></p> <p>See Circuit One Way vs. Round Trip Two-way Feedback</p>	<p><u>Royal:</u></p> <p>See Realm: Real: Royal</p>

Synergetics Dictionary

RBF DEFINITIONS

Rubber Glove:

"Entropic dispersal . . . and syntropic association. . . . Between the two they work very much like the rubber glove. There really is an annihilation into eternity with no time and dimensioning-- these are only in our temporal relativity."

- Citation and context at Eternity (1), 23 May'72

RBF DEFINITIONS

Rubber Glove Sequence:

"So we find that complementarity is even more complex; that there had to be not only the keyhole, but that the keyhole had to be in something. The keyhole that was in something had to be related to the rest of the Universe. So then we had a rubber glove which was stripped off this hand, which we called the left hand, fairly ignorantly, and now it fits the other hand. So where has the other one gone? Then I strip it off here and there goes the other hand."

"Quite clearly, both were there all the time, but only one of them could we detect. So there is not only the glove, which could have a keyhole, and we could put the key in that, but it would have to be in something of the rest of the Universe as well as the system we can see by. There's always a conceptual system, and there's the rest of the Universe which is nonconceptual because it's a scenario Universe and not a single frame Universe."

- Cite RBF to world game at NY Studio School, 12 Jun-31 Jul'69, Saturn Film transcript #327, pp.2-3.

RBF DEFINITIONS

Rubber Glove:

"The glove is seeability, experienceability-- we go through the invisible. The annihilation is the invisible and the timeless."

"There is no geometry of space-- only of local aggregates of principles, of special cases."

"The lag is the whole of life. It is lag and aberration."

- Cite RBF to BU'R, Kent, Ohio, 23 May'72

Rubber Glove:

(1)

See Annihilation
Key-keyhole Sequence
Novent
Parity
Other Side of the Universe

RBF DEFINITIONS

Rubber Glove:

"If you have a rubber glove on your left hand and strip it off, it now fits your right hand. There's only one rubber glove. The left hand has been annihilated. That's the way our Universe is. There are the visibles and the invisibles of the inside-outing nonsimultaneity."

- Cite Museums Keynote Address Denver, p. 10. 2 Jun'71
CONCEPTUALITY- PARITY- SEC 507.01

Rubber Glove; ■

(2)

See Equilibrium, 25 Feb'69
Eternity, (1)*
Invisible Hole, 16 Jun'72
Irreversibility, 4 May'57
Superatomics Sequence, (1)-(5)
Nuclear Domain & Elementality, (1)(2)
Human Beings & Complex Universe, (4)

RBF DEFINITIONS

Rubber Glove:

"The rubber glove stripped inside-outingly from off the left hand now fits only the right hand. First the left had was conceptual and the right hand was nonconceptual. Then the process of stripping off inside-outingly seemingly annihilated the left hand and created the right hand-- then vice versa as the next strip off occurred. When physics finds experimentally that a unique energy pattern-- erroneously referred to in archaic terms as a particle-- is annihilated, that annihilation is only of the Rubber glove kind. The positive becomes the negative and the positive only seems to have been annihilated. We begin to realize conceptually the finite, yet nonsensorial out-ness which can be converted into sensorial in-ness by the inside-outing process. Novent, Novent is the finite but nonsensorial continuum."

CONCEPTUALITY- PARITY- SEC 507.01

MINIATURE AUTOMOBILE

SEE ONLY AT THE EXPENSE OF LOSING AFFIRMANCE OF THE PREVIOUS SENSE- EXPERIENCED CONCEPTUAL FIXATION

INSERT FROM RBF MARCONIUM ON SYNERGETICS DRAFT

CONCEPTUALITY
PARITY
SEC 507

- Cite NEHRU SPEECH, p. 12. 13 Nov'69

RBF DEFINITIONS

Rubber Tire:

"Miniature rubber automobile tires may be substituted for the triangles of the vector equilibrium to provide a model of reciprocating toruses. The eight wheels should be independently journaled but touching one another with sufficient friction so that when you move any one of them all of the eight will rotate reciprocally. We can also consider each rubber tire as a torus and we can see how they can involute and evolve at the same time the wheels are reciprocatingly rotating. This provide a model of what turbulence really is."

- Cite RBF at Penn Bell studios videotaping marathon, Philadelphia, PA., 24 Jan'75

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Rubber Tires:</u> (1)</p> <p>"You can make this model out of little automobile tires and you can run them up on the shaft and use tape to act as a thrust bearing to keep them from coming outwardly. You brought them in until each of these tires are barely touching the other tires in three points-- so it really is a triangle.</p> <p>"Remember how gears work. We have a train of gears where around any hole there are always four gears, so as this wheel goes one way the other wheel can go that way very comfortably. And since there are four we find that the trains reciprocate. There is no blocking anywhere. All of the holes are four-sided so it is an even-numbered train of gears. When I rotate one wheel in this whole system all the other wheels move very neatly. They are in friction to one another. I can also hold on to one of the wheels and turn the system around it. If I do that, a very interesting thing happens.</p> <p>A rubber tire can be mounted like a torus, or can be rotated outwardly like the big atomic bomb mushroom cloud-- opening in the center and coming in at the bottom. That is what we call an involuting or involuting torus. These rubber tires could do that-- and not only could they rotate around on each other this way, but it is quite possible to make</p> <p>- Cite Oregon Lecture, #7, p. 262, 11 Jul'62</p>	<p><u>Rubber Tires:</u></p> <p style="text-align: center;">See Gear Train</p>
<p>RBF DEFINITIONS</p> <p><u>Rubber Tires:</u> (2)</p> <p>this wheel in such a way that it has little roller bearings along its rim and each of these roller bearings allows the rubber tire to rotate in the rim so that the tire could be involuting and evolving. Therefore, if any one tire started to evolve all the other tires reciprocate."</p> <p>- Cite Oregon Lecture #7, pp. 262-263, 11 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Rudder:</u></p> <p>"The interesting thing about a rudder is that the ship has already gone by, all but the stern, and you throw the rudder over, and what you're really doing is to make a little longer distance for the water to go round; in other words, you're putting a low pressure on the other side, and the low pressure pulls the whole stern over and she takes a new direction. The same in an airplane-- you have this great big rudder up there, with a little tiny trim tab on the trailing edge, and by moving that little trim tab to one side or the other you throw a low pressure that moves the whole airplane. The last thing, after the airplane has gone by, you just move that little tab."</p> <p>- Cite Calvin Tomkins, The New Yorker, 8 Jan 66, p. 64.</p>
<p>RBF DEFINITIONS</p> <p><u>Rubber Tires:</u> (3)</p> <p>"... It is quite possible to make an automobile tire and mount it in such a way that it looks triangular. That is, it gets to a very small radius on its corners. I can simply take the same rubber tire and stretch it onto a triangular frame and also have the same little roller bearings so it can involute and evolve. . . . The triangular tires pump from being the vector equilibrium into being the octahedron, the way we saw it before, in and out again. If I were then to immobilize one part of it, if I were just holding it with one finger like this, doing this means that I won't let this one involute and evolve-- but the rest of the system, due to the rotation, is contracting to become an octahedron so it makes all the others reciprocate-- involuting and evolving so that I am able to immobilize one axis and the rest of the system can work comfortably."</p> <p>- Cite Oregon Lecture #7, p. 264, 11 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Ruddering: Rudder Concept:</u></p> <p>"Order is achieved through positive and negative, magnitude and frequency-controlled alteration of the successive steering angle. We move by zigzagging control from one phase of physical universe evolution to another. The rudder concept of social law is most apt. Norbert Wiener chose the word 'cybernetics,' derived from the Greek roots of 'rudder,' because Wiener, Shannon and others in communication theory were exploring human behaviors and their brain-controlled 'feedback,' and the like, as a basis for the design of computers, and it became evident that the human brain steers man through constant change."</p> <div style="border: 1px solid black; border-radius: 50%; padding: 5px; width: fit-content; margin: 10px auto;"> <p>The identical text to the above appears in blank verso form in "How Little I Know." Page 71, 1966.</p> </div> <p>- Cite AAUW JOURNAL, May 1965, P. 176</p>
<p>RBF DEFINITIONS</p> <p><u>Rubber Tires:</u> (4)</p> <p>"What we are learning here is something very fascinating and it means the following: That in an omnimotional Universe it is possible for me to take two moving systems-- if you have two systems-- which move four dimensionally, comfortably, the way you see those four sets of wheels, eight wheels altogether moving perfectly comfortably, but I can fasten one vector equilibrium to another by a pair of wheels, immobilizing one of them and getting one of these axes-- the axis which is immobilized but on which the rest of the system can keep right on rolling around. By fastening one such part of the Universe literally, you don't stop the rest of the motion of Universe. That is what we are learning here.</p> <p>"In all the other kinds of mechanical systems that you will ever run into on a three-dimensional basis, if anything is blocked then everything is blocked. In a four-dimensional system this is not true at all. You are able then to have one local thing occur. You can have two atoms join one another perfectly well and the rest of Universe can go right on in its motion. Nothing is frustrated but they themselves do certain polarized things in relation to one another, which begins to explain a lot of the basic joinings."</p> <p>- Cite Oregon Lecture #7, pp. 264-265, 11 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Ruddering Sequence:</u> (11)</p> <p>"Within the grand strategy of anticipatory problem solving to be accomplished exclusively through design transformations of human ecology's physical environment apparatus, the design strategems range from powerful to subtle. For instance, instead of attempting to push the bow of an ocean liner from one side to the other in order to steer it (as we do the front ends of automobiles, as well as of social trend fronts) inasmuch as the great seas also try to push the bows to one side or the other thus tending to throw the ship out of control, the naval architect must design in such a way that the ship's course will not tend to be diverted by heavy seas, yet will be steerable. To do this he designs a ship's hull with the hinge or pivot point of the ship occurring forwardly under the step of the bow. This makes a long lever arm aft and a very short lever arm forward of the pivot, and the long lever overpowers the short one as in a weathervane 'ship.' Thus the naval architect makes the stern of the ship (rather than the bow) swing to one side or the other of the course. The course tends to be held steadily by the bow. The stern tries to follow the bow in a straight course. The keel then makes the stern follow the"</p> <p>- Cite NEW FOLIOS VS. REFOLIOS, WISD.#1, p.52, 1963</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Ruddering Sequence:</u> (2)</p> <p>"bow when the ship is in motion. In order to change course, the stern is deliberately swung to one side or the other. This is done by the rudder at the stern which is so small as to be easily manipulated. The rudder, by making a small drag angle, creates a partial vacuum on the side of the rudder opposite to that of the direction in which the rudder is moved. This partial vacuum starts to pull the stern of the boat, which causes a much larger partial vacuum to build up on the stern quarter of the ship on the side toward which the stern swings as the ship moves through the water in this askew attitude. This vacuum is built up for the same reason that the horizontal askew attitude of a wing foil in motion through the air creates the lifting vacuum on its cambered or top surface. The reason is that it is a longer distance around the cambered askew side for the parted water to reach, as suddenly displaced by the ship's motion, which makes the longer-way-reach tense the air-interspersed water molecules creating a partial vacuum. So powerful is this partial vacuum, or negative pressure, chain reaction buildup that it can, for instance, suck-pull the 30-knot speeding hull of the \$5,000 ton, Empire State Building-sized Queen Mary into a new angle in respect to the directionally fixed"</p> <p>- Cite NEW FORMS VS REFORMS, WDSU Doc. #1, p.52, 1963</p>	<p>RBF DEFINITIONS</p> <p><u>Ruddering Sequence:</u> (6)</p> <p>"everything is all over. But that final steering has to be done from 'on board.' Just having the last word from way back in the wake of the ship is futile. Scientists have often said that the most important part of their great discoveries occurred at the outset in the proper formulation of the project's objectives, forgetting that those enlightened formulations were really the afterimage inducements of tail-end events of earlier and seeming failures of experimentation."</p> <p>- Cite NEW FORMS VS. REFORMS, WDSU Doc. #1, p.53, 1963</p>
<p>RBF DEFINITIONS</p> <p><u>Ruddering Sequence:</u> (3)</p> <p>"momentum of her bow-pivot center, which thus hinges the Queen Mary into a new course attitude, which is fixed when the rudder is returned past, 'midship' to 'meet her,' or break the vacuum buildup, and then returned to midship position.</p> <p>This principle of creating vacuums with minimum effort that will self-regenerate to build up large vacuums to govern very large pattern-transforming work is even more dramatically emphasized in the case of the giant jet airliners where, literally, postage-stamp size trim tabs in the trailing edges of the large vertical and horizontal ruddering surfaces are all that are used by the automatic gyro-pilot servomechanisms to keep these 100-ton sky giants hurtling along at 600 miles per hour on accurate multidimensional course despite invisible atmospheric turbulences far greater in size and velocity magnitude than those of the water ocean.</p> <p>"My philosophy takes primary heed of the fact that all in Universe is in constant transformative complex motion and all transform in patterns of least resistance. Therefore, philosophically, it became evident that by subtly designed"</p> <p>- Cite NEW FORMS VS. REFORMS, WDSU Doc.#1, p.53, 1963</p>	<p><u>Rudder: Ruddering:</u> (1)</p> <p>See Cybernetics Trim Tab Servomechanism Zigzag: Right-left: Halfway Averaging</p>
<p>RBF DEFINITIONS</p> <p><u>Ruddering Sequence:</u> (4)</p> <p>"trim-tab' size inventions we could, with least physical effort, control the least resistant directions of various fundamental transformings. This could be done by devices which would so control the angle and frequency occurrences of little vacuums and tension which could cause man's ecological patterning to evolve in preferred patterns. Designs could also detect and discretely vitiate specific subtle vacuums chain-reacting into largevacuums and thereby holding certain transforming systems on socially deleterious courses.</p> <p>"How much more powerful is the minuscule ship's rudder when in good order than a squadron of ships trying to move a rudderless ship in a heaving sea by attempting to push the rudderless one with their plunging bows in preferred directions as do tugs maneuver a big ship in still water when the ship is moving too slowly to have steerage way! AAjo how futile are shouted words of warning and exhortations in such situations! Only the rudder and the brain that directs the rudder are effective. No wonder Norbert Wiener included the Greek name for rudder in coining his 'cybernetics' to identify the newly emergent computer's"</p> <p>- Cite NEW FORMS VS. REFORMS, WDSU Doc #1, p.53, 1963</p>	<p><u>Rudder: Ruddering:</u> (2)</p> <p>See Omnimedium Transport Sequence, [3] Feedback, 7 Nov'75</p>
<p>RBF DEFINITIONS</p> <p><u>Ruddering Sequence:</u> (5)</p> <p>"feedback system science. No wonder the early Egyptian and Greek shipmasters stood in the stern of their ships facing forwardly alongside the single-car-steering slave as the crew of backwards-facing slaves tensed at the banks of vacuum fulcrumed oars. Here is the picture of society straining at its slavishly accepted work, backing up blindly into its future as an, often nearsighted, excursion captain cons the course.</p> <p>"My philosophy also takes heed of the approximately unlimited ratio of length to girth of tensional controls which always tend to pull true, versus the very limited length-to-girth ratio of pushing devices which, when pushed, tend to break bend and break.</p> <p>"Philosophically it is clear that trim tabs^{OC.S.R} in the trailing edge of trailing devices-- in the tail-end of tail-end events-- at the stern of the ship as the last event and not at the bow as the first event. The bow is important to keep the ship on a chosen course but the stern rudder puts and holds it on the chosen courses. The real steering takes place when the non-scientificallly informed observer thinks"</p> <p>- Cite NEW FORMS VS. REFORMS, WDSU Doc. #1, p.53, 1963</p>	<p><u>Ruler:</u> (1)</p> <p>See Straightedge</p>

Synergetics Dictionary

<p><u>Ruler:</u> (2)</p> <p style="text-align: center;">See Resolution, 5 Jul'62</p>	<p><u>Rule of Communication:</u> (2)</p> <p style="text-align: center;">See Comprehension, Sep'72</p>
<p>RULES</p> <p><u>Rule of Communication:</u></p> <p>"At this time I developed a thought which has been very powerful in my theory of communication ever since. I said, 'I don't care if I am not understood as long as I am not <u>misunderstood</u>. For if I am misunderstood the captain of a ship may do the wrong thing with fatal consequences, but if he does not understand me, he queries the message and you give it to him again until he gets it right.' This principle became absolutely fundamental in my life from then on."</p> <p style="text-align: center;">- Cite RBF to Alden Hatch in "RBF: At Home in the Universe," p.65. From Hatch's 1972 tape recapitulating RBF formulation of 1918.</p>	<p><u>Rules of Interval:</u> (1)</p> <p style="text-align: center;">See Orbiting Magnitudes Vertexial Connections: Rules of Never-quite-touching</p>
<p>RBF DEFINITIONS</p> <p><u>Rule of Communication:</u></p> <p>"I made up my mind as a Rule of Communication that I wouldn't care if I was not understood -- so long as I was not <u>misunderstood</u>."</p> <p style="text-align: center;">- RBF to EJA and assembled company, Carbondale, Illinois 2 April 1971. See also Intro, to Gene Youngblood</p>	<p><u>Rules of Interval:</u> (2)</p> <p style="text-align: center;">See Coherence, 10 Feb'73</p>
<p><u>Rule of Communication:</u> (1)</p> <p style="text-align: center;">See Misunderstanding, i.e., Being Misunderstood</p>	<p><u>Rules of Operational Procedure:</u></p> <p style="text-align: center;">See Whole System, 28 May'72</p>

Synergetics Dictionary

<p><u>Rules of No Actual Particulate Solids:</u></p> <p style="text-align: center;">See Coherence, 10 Feb'73</p>	<p><u>Rules of Universe:</u></p> <p style="text-align: center;">See Individuality & Degrees of Freedom, (4) Fuller, R.B: On Drinking Liquor, 22 Jun'77</p>
<p><u>Rules of Never-quite-touching:</u> (1)</p> <p style="text-align: center;">See Vertexial Connections: Rules of Never-quite-touching</p>	<p><u>Rule: Regulation:</u> (1)</p> <p style="text-align: center;">See Conformity Law: Laws</p>
<p><u>Rules of Never-quite-touching:</u> (2)</p> <p style="text-align: center;">See Coherence, 10 Feb'73</p>	<p><u>Rule: Regulation:</u> (2)</p> <p style="text-align: center;">See Technology, 13 Mar'73</p>
<p>RBF DEFINITIONS</p> <p><u>The Rules of Universe:</u></p> <p>"It's not an either/or condition/ever-- so much is permitted by the rules of Universe."</p> <p style="text-align: center; margin-top: 20px;">- Citation and context at <u>Degrees of Freedom</u>, 9 Dec'73</p>	<p><u>Rule: Regulation:</u> (3)</p> <p style="text-align: center;">See Rule of Communication Rules of Interval Rules of No Actual Particulate Solids Rules of Never-quite-touching Rules of Operational Procedure Rules of Universe</p>

Synergetics Dictionary

Rule: Ruler:

See Realm
Religion: Related to "Reglio" or Rule

Runaway of Ignorance:

See Problem: Statement Of, Feb'72

Russia:

See Soviet
USSR

ss

Synergetics Dictionary

<p>S:</p> <p>See Structuralism in Language, 1 Feb'75</p>	<p>TEXT CITATIONS</p> <p><u>S Quanta Module:</u></p> <p>s100.322</p> <p>s100.105</p> <p>sTable 987.121</p> <p>s987.413</p> <p>s987.988.00-112</p>
<p>RBF DEFINITIONS</p> <p><u>S Quanta Module:</u></p> <p>"When the icosahedron is extracted from the octahedron the remaining corners fractionate into 24 S Modules."</p> <p>- Cite RBF to EJA, by telephone from Philadelphia; 3 Oct'77</p>	<p>RBF DEFINITIONS</p> <p><u>S-Curve:</u></p> <p>"Our S-curve is a very interesting kind of form. I have two S-curves and one could get in a critical proximity at one end and we would call it a triangle. . . We know triangles can be open-ended, as there has never been a closed triangle; it has always been a spiral"</p> <p>"The middle positive sector of the S-curve is opposite the middle negative vector, each with its axis rotated at 90° to the other by inter-precession."</p> <p style="text-align: right;">- Cite CARBONDALE DRAFT Pp. IV.32 + IV.36</p> <p>- Cite Nasa Speech, pp.53+56, Jun'66</p>
<p><u>S Quanta Module:</u></p> <p>See T Quanta Module</p>	<p><u>S Curve:</u> (1)</p> <p>See Z Cobras</p>
<p>RBF DEFINITIONS</p> <p><u>S Quanta Module:</u></p> <p>"The A and B Quanta Modules also have their volumetric counterparts in the nonnucleated icosahedron in the form of the S Quanta Modules--each of which is 1/20th tetrahedron of which the triacontahedron is composed. This makes the S Quanta Modules probable electron complements of the nucleated system-halvings fractionated 459 times, i.e., $4 \times 459 = 1836$."</p> <p>- Citation & context at <u>Mites & Quarks as Basic Notes</u>, (1); 4 Jun'77</p>	<p><u>S Curve:</u> (2)</p> <p>See Yin-yang, (2) Propeller, Dec'71</p>

Synergetics Dictionary

S: Six S's:

See Architectural Aesthetics: Six S's

Safety:

See Scaffolding, 20 Apr'72

RBF DEFINITIONS

Safety Factor:

" . . . The big geodesic domes thus far erected have been way overbuilt by many times their logically desirable ~~two-to-one~~ two-to-one safety factor.

"While the building business uses safety factors of four, five, or six-to-one, aircraft-building employs only two-to-one or even less because it knows what it is doing. The greater the ignorance in the art, the greater the safety factor that must be applied. And the greater the safety factor, the greater the redundancy and the less the freedom of load distribution."

- Cite SYNERGETICS draft at Secs. 703.07 +.08, 25 Sep'72

Sailing with the Wind: Sailing into the Wind:

See Social Sciences: Analogue to Physical Sciences, (1)(2)

Safety Factor:

See Fail-safe: Fail-safe Advantage

Sailing Ship: Sailboats:

(1)

See Geodesic Spinnaker
Intuition: RBF Sailing Yacht "Intuition"
Water: Trend toward Living on Water
Boats
Fleet of Sailboats
Beating to Windward

Safety Valve:

See Dome: Rationale For (III)

Sailing Ship: Sailboats:

(2)

See Pull, 2 Jul'62
Octahedron: Eighth-octahedra, (2)-(4)

Synergetics Dictionary

Saint:

See Engineer-saint

Sand:

See Sixty Degreeness, 1965

Salmon:

See Social Breakout from Barnacle to Salmon

Sandwich:

See Earth as a Sandwich

Salvation vs. Self-discipline:

See Macro-micro, 1964

Sanity:

See Human Beings & Complex Universe, (4)

Sameness:

See Aesthetics of Uniformity, May'28

Santa Sophia:

See Pneumatic Structures, (3)

Synergetics Dictionary

<p><u>Saran:</u></p> <p>See Hex-pent Sphere: Transformation into Geodesic Spiral Tube, (2)</p>	<p><u>Satellite:</u> <u>Telescopes mounted on around-Earth, fixedly-Hovering photo-satellites:</u></p> <p>See Twenty-foot Earth Globe & 200-foot Celestial Sphere, (1)(2)</p>
<p><u>Satellite-linked Computers:</u></p> <p>See Cosmic Accounting, 20 Sep'76</p>	<p>RBF DEFINITIONS</p> <p><u>Satellite:</u> <u>World Satellite Sensing:</u></p> <p>"With omnidirectional complex computerised world satellite sensing, comprehensive resources inventorying and inter-routing, the triangular geodesics transformational projection can alone bring visual comprehending and schematic network elucidation."</p> <p style="text-align: center;">- Citation and context at <u>Twenty-Foot Earth Globe and 200-Foot Celestial Sphere</u> (11), 25 Jan'73</p>
<p><u>Satellite Environment Controls:</u> (1)</p> <p>See Floating City Space Structures Habitable Satellites</p>	<p><u>Satellites:</u> <u>Satellite Sensing:</u> (1)</p> <p>See Communications Satellites Habitable Satellites Space Structures Telemtion: Satellite-relayed</p>
<p><u>Satellite Environment Controls:</u> (2)</p> <p>See Balloon, (2) Tensegrity: Unlimited Frequency of Geodesic Tensegritis, (1)</p>	<p><u>Satellites:</u> <u>Satellite Sensing:</u> (2) ■</p> <p>See Sovereignty, (20) Planetary Democracy, (6)(7) Communications Hierarchy, (3)</p>

Synergetics Dictionary

<p><u>Satisfaction:</u> (1)</p> <p>See Performance: Equation Of</p>	<p>RBF DEFINITIONS</p> <p><u>Savings:</u></p> <p>"During each one-second heartbeat of time humans were making and 'saying' \$1 net. They were in fact saving memories of experiences, which ever multiply, from which accumulate metaphysical know-how that has <u>never</u> been entered into the ledgers of world-wealth accounting..."</p> <p style="text-align: right;">(Adapted)</p> <p style="text-align: center;">- Citation and context at <u>Cross World Product Sequence (1)</u>, 13 Mar'73</p>
<p><u>Satisfaction:</u> (2)</p> <p>See Inventions as Lifeways of Human Behaviors, 1965 Life, 22 Apr'68 Performance Per Pound, 30 Apr'74 Survival, May'65</p>	<p>RBF DEFINITIONS</p> <p><u>Scaffolding:</u></p> <p>"I like to give you components to go out into the field where no man has to wait for any other man to help him-- where any part ought to be so light that one man has the other hand free to fasten it into place. You must do things in such a way that nobody is going to get hurt. Make it possible then to work from the ground up. You make a structure where you keep climbing on to it and adding to it-- being absolutely safe in making its own <u>scaffolding</u>."</p> <p style="text-align: center;">- Cite Univ. of Alaska Address, p.39, 20 Apr '72</p>
<p>(To) <u>Save Time, Tape, & Type:</u></p> <p>See Creativity, May'65</p>	<p><u>Scaffold:</u> <u>Scaffolding:</u> (1)</p> <p>See Cube as Scaffold Four-square Scaffold</p>
<p><u>Savings Account:</u></p> <p>See Energy Capital Energy Savings Account</p>	<p><u>Scaffold:</u> <u>Scaffolding:</u> (2)</p> <p>See Pyramid Technology, Dec'71</p>

Synergetics Dictionary

<p><u>Scale:</u> (1)</p> <p>See Uniform Boundary Scale Chords & Notes</p>	<p><u>Scan-transmission of Pattern Integrities:</u></p> <p>See Electromagnetic Transmission: Subjective & Conscious Atomic Computer Complex Billboard Model Pattern Processing Machines Man: Interstellar Transmission of Man Information Control System</p>
<p><u>Scale:</u> (2)</p> <p>See Invisibility of Macro- and Micro- Resolutions, (1)</p>	<p><u>Scanning:</u></p> <p>See Electromagnetic Transmission Billboard Model</p>
<p><u>Scalens:</u></p> <p>See Proton & Neutron, (p.134) May'72 Semisymmetry, 15 Oct'72 Dynamic Symmetry, (1)(2)</p>	<p>RBF DEFINITIONS</p> <p><u>Scarcity:</u></p> <p>"We have millions of people who no longer have anything to do on farms. We keep plowing it under. We run only eight hours on the machinery instead of 24, when it could perfectly well run 24 hours. We are doing everything we can to keep scarcity because the only thing we are familiar with is scarcity. I simply say to you that we're in an absolutely inadequate accounting system, which did relate to yesterday's agricultural perishability. The agricultural did automatically depreciate. We are now in an entirely new economy where the wealth consists of energy, the metaphysical and the physical. . . . They are not on the books of any of the corporations anywhere."</p> <p style="text-align: right;">- Cite RBF at DSI Press Conference, p.9, 28 Jun'72</p>
<p>RBF DEFINITIONS</p> <p><u>Scan-transmission of Pattern Integrities:</u></p> <p>Q. "What is the connection between synergetics and teleportation?"</p> <p>RBF: I know of no connection between such phenomena and synergetics. Synergetics is a frame of reference for the intertransformings—I don't connect it with the metaphysical. We can identify synergetics with the electromagnetic wave propagation and that may turn out to have something to do with the physical. It's a good question. No, since I don't use 'good' or 'bad', we'll say an interesting question.</p> <p>"We can scan. We have pattern integrities. The patterns can be recognized. You might be scannable like the Broadway electric light signs--in which each of the closest packed spheres might be a lightable light. It might scan your organisms but I wouldn't expect the physical body to be moved--just the events."</p> <p style="text-align: right;">- Cite RBF in reply to question by Dr. Michael Bruwer at World Game Workshop'77; Phila., PA; 22 Jun'77</p>	<p>RBF DEFINITIONS</p> <p><u>Scarcity:</u></p> <p>"All economics is committed to a fundamental formula of scarcity-- even to the point where it may be necessary to invent scarcity."</p> <p style="text-align: right;">- Cite RBF to Henry Liberman, NY Times, 22 Jun'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Scarcity:

"Scarcity, the fundamental thesis of all our statecraft, in invalid."

- Cite RBF at Corcoran Gallery Address, Washington, DC, 23 Feb '72

Scarcity: Not Enough to go Around:

(2)

See Design Science, 8 May'71
 Fuller, R.B: Crisis of 1927 (1)
 Nonproduction, 12 Jun'69
 Politics (1)(2)
 World Game (II)*
 Thinking, 10 Dec'73
 Young World (1)(2)
 War, 13 Dec'73
 Lying, 22 Jan'75
 Humane City, (2)(3)
 Doing What Needs to Be Done, (2)
 Selfishness, 20 Sep'76
 Building Industry, (11)(12)
 Culture, 27 Jan'77
 No Energy Crisis, (2)
 Man as a Function of Universe, 30 Apr'78

RBF DEFINITIONS

Scarcity: Not Enough To Go Around:

"It is very logical that man should fight to the death when he thinks that there's not enough to go around. In a fire, he loses all reason, goes mad, and tramples his fellow men to death as he competes for air. It is also very logical that man won't fight when he knows there's enough to go around. It is logical. It is logical. It is logical."

- Cite I SEEM TO BE A VERB, Queen, May '70

Scarcity: Economy of Scarcity:

See Economic Accounting System, 29 Jun'72
 Marx, Karl, 7 Aug'70
 Obsolescence, Apr'72
 Political Revolution, 10 Oct'73
 Politics, 4 Jan'70
 World Game, (II)

RBF DEFINITIONS

Scarcity: Not Enough to Go Around:

"We are not educatable fast enough to realize that scientists could bring us enough to go around."

- Citation and context at World Game (II), 25 Feb'69

Scarcity as an Invention:

See Economics, 22 Jun'72

Scarcity: Not Enough to go Around:

See Design Revolution: Pulling the Bottom Up
 Earning a Living
 Inadequacy of Life Support
 Making the World Work
 Resource Inadequacy
 Watergate
 You or Me
 Human Tolerance Limits

Scavage: Scavaging:

See Self-scavenging

Synergetics Dictionary

<p>RbF DeFINITIONS</p> <p><u>Scenario:</u></p> <p>Q. How can an event be a finite energy package?</p> <p>RbF: "Say quanta instead of package. Events discontinue. Scenarios stop and go. The continually flowing reality is not end-to-end but a partially overlapping continuity."</p> <p style="text-align: right;">- Cite RbF in videotaping session, Philadelphia, Pa., 1 Feb'75</p>	<p>RbF DeFINITIONS</p> <p><u>Scenario:</u></p> <p>"An aggregate of non-simultaneous And partially overlapping Ever complexly transforming experience, Is an evolutionary sequence Which is defined as a <u>scenario</u>.</p> <p>"The totality of experience Which is scenario Universe As a serially transformative cognition Of individually different And scenically static individual pictures, Conceptual frames, Is inherently non-unitarily Or momentarily conceptual."</p> <p style="text-align: right;">- Cite RbF Draft, BRAIN & MIND, pencil 1970</p>
<p>RbF DEFINITIONS</p> <p><u>Scenario:</u></p> <p>"Yesterdays and now Are neither simultaneous Nor mirror-imaged; But through them run themes As overlappingly woven threads, Which though multiplied individualized Sum-totally comprise a <u>scenario</u>."</p> <p style="text-align: right;">• Cite BRAIN & MIND, p.131 May '72</p>	<p><u>Scenario of the Child:</u> (1)</p> <p style="text-align: center;">See Children as Only Pure Scientists Goldilocks</p>
<p>RbF DEFINITIONS</p> <p><u>Scenario:</u></p> <p>"In <u>scenarios</u> you have to have a pretty long sequence run in order to get any clue at all to what is going on. You cannot learn what it is all about from a single picture. You cannot understand life without much experience."</p> <p style="text-align: right;">- Cite Museums Keynote Address Denver, p. 10.2 Jun'71</p> <p><u>CITE SYNERGETICS- SCENARIO UNIVERSE SEC 322.2</u></p>	<p><u>Scenario of the Child:</u> (2)</p> <p style="text-align: center;">See Six Motion Freedoms & Degrees of Freedom, (1)-(6)</p>
<p>RbF DEFINITIONS</p> <p><u>Scenario:</u></p> <p>"We can clarify the accurate but formidably complex definition of scenario Universe. A moving picture scenario is an aggregate of nonsimultaneous and only partially overlapping events. One single picture-- one 'frame'-- does not tell the story. The single picture of a caterpillar does not tell or imply the transformation of the creature first into the chrysalis stage and much later into the butterfly phase of its life.</p> <p>"When people say of Universe, 'I wonder what is outside of outside?' they are trying to conjure a unitary conception and are asking for a single picture of an infinitely transforming nonsimultaneous scenario. Therefore their question is not only unanswerable but unrealistic and indicates that they have not listened seriously to Einstein and are only disclosing their ignorance of its significance when they boastfully tell you that the speed of light is 186,000 miles per second."</p> <p style="text-align: right;">- Cite WHAT QUALITY ENVIRONMENT, 24 Apr'67</p> <p><u>SCENARIO UNIVERSE - SEC 322.1</u></p>	<p><u>Scenario Model:</u> (1)</p> <p style="text-align: center;">See Pendulum Model vs. Scenario Model</p>

Synergetics Dictionary

Scenario Model:

(2)

See Truth, 10 Nov'72

RBF DEFINITIONS

Scenario Universe:

"Universe is a scenario. Uni-verse is a static takeout. . . what we do when we start with wholes. When we start with wholes we have to deal with the scenario--like the frog the snake was swallowing.

"Time is only now. Time and size and [redacted] special case are now, as referenced to the cosmic hierarchy of geometries through which they pulsate and never stop. The rest is shapeless: not tuned in."

- Cite RBF to EJA, 3200 Idaho, Wash. DC: 18 Jul'76

RBF DEFINITIONS

Scenario Principle:

"I have found a general law of total synergetical structuring which we may call the scenario principle. This law discloses that 'Universe' of total man experience may not be simultaneously recollected and reconsidered but may be subdivided into a plurality of locally tunable event foci or 'points' of which a minimum of four positive and four negative points are required as a 'considerable set'; that is, as a first finite subdivision of finite Universe."

- Cite INTRODUCTION TO OMNIDIRECTIONAL HALO, p.125, 1959; the above passage described the general law as "The Law of Structure," the same title given to a second law on the same page. To anticipate SYNERGETICS the caption was changed to "Scenario Principle" in the 1971 Doubleday edition of NO MORE SECONDHAND GOD with approval of RBF.--EJA.

SYNERGETICS - SEC. 228.01

RBF DEFINITIONS

Scenario Universe:

"We are dealing with the Universe and the difference between conceptual thought (see System) and nonunitarily conceptual Universe (see Scenario Universe). We cannot make a model of the latter but we can show it as a scenario of conceptual frames."

(s1007.21)

- Cite RBF rewrite of SYNERGETICS, 2nd. Ed. at Sec. 1007.21; 18 Sep'74

RBF DEFINITIONS

Scenario vs. Absolute Symmetry:

"Symmetry is systemic. Symmetry has nothing to do with the scenario series; it has nothing to do with local, special case realizations. You can find balances in series--positive and negative energies--but absolute symmetry is characteristic only of generalized systems."

(Sec. 532.17)

- Citation & context at Symmetry & Asymmetry, 11 Dec'75

RBF DEFINITIONS

Scenario Universe:

"... The integrity of Scenario Universe's Never exactly identical recyclings."

- Citation and Context at Metaphysical, p.152 May '72

RBF DEFINITIONS

Scenario Universe:

"Universe is a scenario. Scenario Universe is the finite but nonunitarily conceptual aggregate of only partially overlapping and communicated experiences of humanity.

"Uni-verse is a momentarily glimpsed, special case, systemic episode takeout.

"When we start synergetically with wholes we have to deal with the scenario within which we discover episodes--like the frog the snake is swallowing.

"Time is only now. Time and size are always special case asymmetric episodes of now whose systemic aberrations are referenced to the cosmic hierarchy of primitive and symmetrical geometries through which they pulsate actively and passively but at which they never stop. The rest of Scenario Universe is shapeless: untuned-in."

- Cite RBF rewrite of 19 Jul'76; incorporated in SYNERGETICS, 2nd. Ed. at Sec. 321.04 and 321.05.

RBF DEFINITIONS

Scenario Universe:

"Einstein started Holistically With the concept of Scenario Universe As an aggregate Of nonsimultaneous, Complexedly frequenced, And only partially overlapping Ever and everywhere Methodically intertransforming events Which conceptioning Is superbly illustrated by an evening Of overlappingly frequenced fireworks."

- Cite INTUITION, p.48 May '72

- Citation & context at Fireworks (1), May'72

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Scenario Universe:</u></p> <p>"The definition of Universe as a Scenario of nonsimultaneous and only partially overlapping events, all the physical components of which are ever transforming, and all the generalized metaphysical discoveries of which ever clarify more economically as eternally changeless."</p> <p>- Citation at <u>Metaphysical & Physical</u>, 26 Jan'72 - Cite RBF - Metaphysics, 26 Jan '72, incorporated in SYNERGETICS draft at Sec. 251.17, Feb '72.</p>	<p>RBF DEFINITIONS</p> <p><u>Scenario Universe:</u></p> <p>"Einstein's adoption as normal speed, the adoption of electromagnetic radiation expansion-- omnidirectionally in vacuo-- because the speeds of all the known different phases of measured radiation are apparently identical, despite vast differences in wavelength and frequencies, suggests a top speed of omnidirectional entropic disorder increase accommodation at which radiant speed reaches highest velocity when the last of the eternally regenerative universe cyclic frequencies of multi-billions of years have been accommodated, all of which complex of nonsimultaneous transforming multivarieted frequency synchronizations is complementarily balanced to equate as zero by the sum-totality of locally converging orderly and synchronously concentrating energy phases of scenario universe's eternally pulsative and only sum-totally synchronous, disintegrative, divergent, omnidirectionally exporting and only sum-totally synchronous integrative, convergent and discretely directional individual importings."</p> <p>- Cite RBF to EJA in response to a request to repeat his 'brief sentence' on the aphere as a meeting of convergences. See SYNERGETICS draft, 'Tension and Compression,' Sec. 614.08. 1971</p> <p><u>SYNERGETICS - SCENARIO UNIVERSE - SEC. 325</u></p>
<p>RBF DEFINITIONS</p> <p><u>Scenario Universe:</u></p> <p>". . . the cosmically eternal totality Of interminable Scenario Universe."</p> <p>- Citation & context at <u>Entropy</u>, Jan'72 - Cite EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH, Jan 172, p. 7.</p>	<p>RBF DEFINITIONS</p> <p><u>Scenario Universe:</u></p> <p>"The Heisenberg indeterminism implies eternity to be persistent within the physical and metaphysical ever-evolving continuity-finiteness of scenario Universe, in which the myriads of nonsimultaneously shaken kaleidoscopes are never either simultaneous or identically repetitious."</p> <p>- Citation and context at <u>Measurement (I)</u>, Dec '69</p>
<p>RBF DEFINITIONS</p> <p><u>Scenario Universe:</u></p> <p>"Beginningless and endless scenario Universe With its vast frequency ranges Of omni-interpulsative Yes-no, give-and-take Radial expansions and circumferential contractions."</p> <p>- Cite EVOLUTIONARY 1972-1975 ABOARD SPACE VEHICLE EARTH, Jan. '72.</p>	<p>RBF DEFINITIONS</p> <p><u>Scenario Universe:</u></p> <p>"In the endless, but finite and never exactly repeating (Heisenberged) 'film strip' scenario of Evolutionary Universe after the film strip has been projected it goes through a 'molten' phase and congeals again to receive the ever latest self-intertransforming patterning just before being again projected. The rate of change and numbers of special case self-retransformings of physical evolution tend ever to accelerate, differentiate and multiply; while the rate of change and numbers of self-modifying of generalized law conceptualings of metaphysical evolution tend ever to decelerate, simplify, consolidate and ultimately unify."</p> <p>- Cite Generalized Laws of Design, p. 2, 22 Apr'68 - Citation at <u>Metaphysical</u>, 22 Apr'68</p> <p><u>SYNERGETICS - SCENARIO UNIVERSE SEC. 323</u></p>
<p>RBF DEFINITIONS</p> <p><u>Scenario Universe:</u></p> <p>"The Universe can only be thought of competently in terms of a great unending but finite scenario whose as-yet unfilled film strip is constantly self-regenerating."</p> <p>- Cite Museums Keynote Address Denver, p. 10, 2 Jun'71</p>	<p><u>Scenario Universe vs. Big Bang Theory:</u></p> <p>See Black Holes & Synergetics, 1 Mar'77</p>

SYNERGETICS - SCENARIO UNIVERSE - SEC. 322.1

Synergetics Dictionary

RBF DEFINITIONS

Scenario Universe: Physical Evolution Scenario:

(Mind enables humans to discover and employ generalized principles brought from Eternal Universe...)

"Brought into

Time and energy synchronized consciousness

Of the physical evolution scenario. . . "

- Citation and context at [redacted] Brain & Mind (3), Feb'72

Scenario:

(1)

See Afterimage
 Allspace Filling - Scenario
 Brain's TV Studio
 Continuity-finiteness
 Finite Event Scenario
 Improve the Scenario
 Moving Picture Continuity
 Overlapping
 Model vs. Scenario
 Periodic-continuity
 Pre-Scenario
 System vs. Scenario
 Visual Symphony

RBF DEFINITIONS

Scenario Universe:

(1)

See Afterimage
 Brain's TV Studio
 Continuous Man
 Nonunitarily Conceptual
 Moving Pictures
 Conservation of Scenario Universe
 Universe as a Kaleidoscope
 Serial Universe
 Overlapping

Scenario:

(2)

See Packaged, Jun'66
 We-Me Awareness, 31 May'74
 World Game: Grand Strategy, 2 Jun'74
 Tetraacroll, (1)

Scenario Universe:

(2A)

See Allspace Filling, 2 Nov'72
 A Priori Intellect, (1)
 Communication, Oct'70
 Conceptuality, 1965; 22 Oct'72
 Education, May'72
 Einstein, 23 May'72
 Entropy, Jan'72*
 Fireworks, (1)*
 Future of Synergetics, 23 Dec'68
 Key-Keyhole Sequence, (2)
 Measurement, (1)
 Metaphysical, May'72*; 22 Apr'68*
 Metaphysical & Physical, 26 Jan'72*
 Motion, 4 Mar'69
 Omninteraccommodation, May'72
 Spherical Field, Aug'73
 Invisible Tetrahedron, 13 Nov'69
 Time-sizing, 13 Nov'72
 Two Kinds of Twoness, (B)
 Vacuum, 19 Feb'72

Scenery: Rearrange the Scenery:

See Rearrange

Scenario Universe:

(2B)

See Spheres & Spaces, 14 May'75
 Words & Coping, 7 Nov'75
 Space, 9 Feb'76
 Tunability, 24 Apr'76
 Human Beings & Complex Universe, (4)(5)

Scenery:

See Finite Event Scenario, 23 Jan'77

Synergetics Dictionary

RBF DEFINITIONS

Scheherazade Number:

"I think the Arabian priest-mathematicians and their Indian ocean navigator ancestors knew that the binomial effect of 1001 upon the first four prime numbers 1, 2, 3, and 5, did indeed provide comprehensive quotient accommodation of all the permutative possibilities of all the possible 'story-telling-taling-tallying,' or computational systems of the octave system of integers.... Suffice it to say that the functions of the Grand Visier to the ruler was that of the mathematical wizard, the wis of wisdom; and the wiz-ards kept their mathematical navigational ability to go to faraway strange places and to bring back strange miracle objects, was here involved."

[230.50]

- Cite SYNERGETICS draft at Sec. ~~1210.05~~, 18 Jul'72

RBF DEFINITIONS

Scheherazade Numbers: Declining Powers Of:

"The recurrence of the prime number two is very frequent. The number of operational occasions in which we need the prime number 43 is very less frequent than the occasions in which the prime numbers 2, 3, 5, 7, and 11 occur. This Scheherazade Number provides an abundance of repowerings of the lesser prime numbers characterizing the topological and vectorial aspects of synergetics' hierarchy of prime systems and their seven prime unique symmetrical aspects (see Sec. 1040) adequate to take care of all the topological and trigonometric computations and permutations governing all the associations and disassociations of the atoms."

"We find that we can get along without multirepowerings after the second repowering of the prime number 17. The prime number 17 is all that is needed to accommodate both the positive and negative octave systems and their additional zero-nineness. You have to have the zero-nine to accommodate the noninterfered passage between octave waves by waves of the same frequency."

- Cite SYNERGETICS, 2nd. Ed. at Secs. 1238.41-.42, 22 May'75

RBF DEFINITIONS

Scheherazade Number:

"It is probable that this fifth power comprehensive quotient number can also accommodate all the interpermutations of all atomic structuring (stable integration) or destructuring (unstable disintegration)."

- Cite SYNERGETICS text at Sec. ~~1210.82~~, 18 Jul'72

RBF DEFINITIONS

Scheherazade Numbers: Declining Powers Of:

"My intuition about the declining powers of the primes factorial is that they reflect the way the patterns appear in nature. From my early hand and pencil calculations it is clear that you have to use the prime number five and the prime number three more often in your calculations than you use the higher number primes. And you use the three more than you would the five. Hence 3 to the 8th power and 5 to the 5th power to work out all the possible nuances within the 45-degree limit. This might be the pattern of reducing from Universe in a binary way."

"The higher powers for the first primes are to accommodate the very large numbers of calculations necessary to come up really sharp! You have tetra = 4; and octa = 8; and 5 is both the vector equilibrium and the icosahedron. This relates to the rate at which the outer shells accumulate: the prime number times two plus two. By providing enough moves for each of the low number primes you should be able to work it out by biting with sharp results. Such a discrete method would be more elegant than a probability approach."

- Cite RBF to EJA by telephone from Miami, 17 Mar'75

RBF DEFINITIONS

Scheherazade Number:

"The Scheherazade Number is the product of three prime numbers: $7 \times 11 \times 13 = 1001$.

" $1001 \times 1001 = 1002001$." It is palindromic.

- Cite RBF to EJA, Beverly Hotel, NYC, 22 Jun'72

RBF DEFINITIONS

Scheherazade Numbers: Declining Powers Of:

Q: (EJA) In the factorial primes of the Scheherazade Numbers why do you have high, but declining, powers in the first primes and no powers in the higher primes at the end of the series?

RBF: "Well the recurrence of the number two is very frequent. We have to provide a lot of powers for 3, 5, and 7 to take care of all the computations and permutations. But the number of times you need 43 is very low compared to the number of times you need the number 11. The powering really stops at 17, which is all you need to accommodate the octave system from 0 through 9. You have the zero to accommodate the waves. But 17 gives you all the primes up to 18 which accommodates the two nines."

- Incorporated in SYNERGETICS, 2nd. Edition draft at Sec. ~~1238.50~~, Cite RBF to EJA in videotaping session, Philadelphia, PA, 1 Feb'75

RBF DEFINITIONS

Scheherazade Number: Geometrical Manifestations:

Ten-illion Manifestation - Manifest in the spherical Octahedron.

Eight-illion Squatillion - Manifest in the vector equilibrium

RBF DEFINITIONS

Scheherazade Numbers: Declining Powers Of:

~~11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th~~

~~11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th~~

This descending order of powers embraces the first eight primes (seven positive and seven negative primes.) These represent the spaces between the spheres.

"These powers have to do with the number nucleations required to accommodate 17. Seventeen is the outer shell. There are seven different magnitudes of powers involved.

"45° is the limit."

(Above relates to Ten-illion SSRCD-- which did not survive in SYNERGETICS : It is 48,521,045,268,603,838,698,691,521,290,000)

- Cite RBF to EJA, Beverly Hotel, NY, 22 June'72

Synergetics Dictionary

Scheherazade Numbers:

See SSRCD

RBF DEFINITIONS

Scheme of Reference:

"I do not like the word frame. What we are talking about is the multi-optioned omni-orderly scheme of behavioral reference; simply the most economic pattern of evolvment. Pattern of evolvment has many, many equieconomical intertransformability options. There are many transformation patterns, but tetrahedron is the absolute minimum limit case of structural system interself-stabilizing. A tetrahedron is an omnitriangulated, four-entity, six-vector interrelationship with a system-defining insiderness and outsiderness independent of size; it is not a rigid frame and can be any size. 'Rigid' means 'sized'-- arbitrarily sized. 'Rigid' is always special case. Synergetics is sizeless generalization."

- Cite SYNERGETICS draft at Sec. 540.04, 24 Sep'73

Scheme of Behavioral Reference:

See Scheme of Reference, 24 Sep'73; 26 Sep'73

RBF DEFINITIONS

Scheme of Reference:

"Synergetics is not a frame at all but a pattern of most omnieconomic (ergo, spontaneous) interaccommodation of all observed self-and-otherness interexperiencing (ergo, geodesic--geodesic being the most economical interrelationships of a plurality of events)."

- Cite SYNERGETICS draft at Sec. 540.05, 24 Sep'73

RBF DEFINITIONS

Schematic of the Principles:

"Conceptual systems like that of the vector equilibrium are subsize and pretime and yet provide a schematic of the constant interrelationship of all the principles involved which may be treated mathematically as topology."

- Citation & context at Synergetic vs. Model (D), 10 Sep'74

Scheme of Reference: Schemata: Scheme:

See Field
Frame of Reference
Frame of Reference: Six Schemata

RBF DEFINITIONS

Scheme of Reference:

"'Multioptioned, omniorderly scheme of behavioral reference.'
That's what we should say instead of 'frame of reference.'"

- Cite RBF to EJA, 3200 Idaho, DC, 26 Sep'73

Schizophrenia:

See Equilibrium & Disequilibrium, (1)(2)

Synergetics Dictionary

<p><u>Scholarships:</u></p> <p style="text-align: center;">See Fellowships</p>	<p>RBF DEFINITIONS</p> <p><u>Schoolroom:</u></p> <p>"The least favorable environment for study is the schoolroom and closely-packed desk prisons. The real schoolhouse is in the home and outdoors."</p> <p style="text-align: right;">- Cite I SEEM TO BE A VERB, Bantam, 1970</p>
<p><u>School:</u> <u>Schoolroom:</u> (1)</p> <p style="padding-left: 20px;">See Education Kindergarten Teaching</p>	<p><u>Schoolroom:</u></p> <p style="text-align: center;">See Study, May'70</p>
<p><u>School:</u> <u>Schoolroom:</u> (2)</p> <p style="padding-left: 20px;">See Fuller, R,B: Moratorium on Speech, (1)</p>	<p><u>School:</u> (1)</p> <p style="padding-left: 20px;">See Architectural Schools Education Learning University</p>
<p><u>Schools:</u> <u>Shoals:</u></p> <p style="padding-left: 20px;">See Cosmic Fish, 8 Feb'73</p>	<p><u>School:</u> <u>Schooling:</u> (2)</p> <p style="padding-left: 20px;">See Self-education, 1974 Convergence & Divergence, 1 May'77</p>

Synergetics Dictionary

RBF DEFINITIONS

Science:

"Science begins with the awareness of the absolute mystery of Universe."

- Cite RBF in Barry Farrell Playboy Interview, 1972 - Draft. p. 21.

RBF DEFINITIONS

Science:

"Science is metaphysical.

"My definition of universe embraces both the physical and the metaphysical, the latter being all the weightless experiences of thought which include all the mathematics and the organization of the data regarding all physical experiments, science, both first and last, being metaphysical.

- Cite DOXIADIS, P. 309, 20 Jun'66

RBF DEFINITIONS

Science:

"Science identifies as subjective and objective, respectively, the inadvertently experienced stimulations of life, on the one hand, and the deliberately initiated and experimentally instituted responses to the subjective stimulations..."

- Citation and context at Subjective and Objective, 14 Sep'71

RBF DEFINITIONS

Science:

"Many years ago I developed a system of question asking in which I ruled that I must always answer the questions from experience. My answers must not be based on hearsays, beliefs, axioms, or seeming self-evidence.

"It has been part of my experience that there are others who, while experiencing what I was experiencing, were able to describe what we mutually were experiencing equally, well, or better than I could. Therefore, my experience taught me that I could trust the reporting of some others as reliable data to be included in my 'answering' resources. For instance, I could include the experimentally derived data of scientists."

- Cite NASA Speech, p. 31, Jun'66

RBF DEFINITIONS

Science:

"Experience is the raw material of science."

- Cite RBF Lecture
Town Hall, New York
12 March 1971

- Citation at Experience, 12 Mar'71

RBF DEFINITIONS

Science:

"Science has always been a complex of independent and subjective economic slave disciplines, primarily concerned with the harvesting of information, rather than with the practical application of that information."

- Citation and context at Space Technology (6), 10 Oct'63

RBF DEFINITIONS

Science:

"Everything that constitutes science is unteachable. And we recall that Edington said: 'Science is the earnest attempt of individual initiative to set in order the facts of experience.' Scientific routines for specialized technicians and scientific formulas for their reference alone are teachable."

- Cite HOW LITTLE I KNOW, Oct. '66, p. 65

RBF DEFINITIONS

Science:

"The function of science is to prospect for total society by taking the universe apart, that is, resolve it into primary factors and elements by progressive isolation and subsequently to obtain precise measurements of the behavior characteristics of the isolated events or components.

"For example, science isolated the phenomenon fire from extraneous factors, and by isolating the constituent events and the product of events discovered that fire is not in itself an element but an accelerated combining process of a newly recognized primary element, that is, oxygen, combining with carbohydrates in ever-constant arithmetical proportion. Thus the isolation of the fire caused the subsequent isolation, recognition and naming of the new elements oxygen and hydrogen, and provided behavior measurements of the latter, by which man could predict events of combustion in such a way as to make combustion an accurate tool of technical advantage.

- Cite DESIGN FOR SURVIVAL; I&I, pp.188-189, Jan'49

(1)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Science:</u> (2)</p> <p>"As water and vapor are H₂O events, the comprehensive event was a precise mathematical process. This was the beginning of purposefully produced steam as a tool. The steam engine was a victory of chemical science, not of mechanics as we have popularly supposed. However the functions of science ended with the separating out of the newly discovered elements from the universal matrix and with the measurement of the unique behavior characteristics of the respective elements (it being the unique behavior that constitutes elementality). It is readily seen that the present invocation of science to put together again the world it has taken apart, is futile in principle. Summarizing, it is the essential function of science to take the Universe apart and measure the parts and sort them into usable categories. The functioning of science is exclusive."</p> <p>- Cite DESIGN FOR SURVIVAL, I&I, pp.188-189, Jan'49</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Cause of Science for Man:</u></p> <p>"Science really hasn't done anything about looking out for man. Science has found out how to make great explosives and great guns calibrated with little control instruments so any ignoramus could learn to fire it and hit pretty well in a couple of days experience. But science didn't have to do anything about the man/because the air was waiting there to be breathed and water was pretty handy. . . going out into space for the first time you have to really know what a man needs."</p> <p style="text-align: right;">- Cite RBF taping CHARAS Script 14 March 1971</p>
<p>RBF DEFINITIONS</p> <p><u>Science:</u></p> <p>"Unlike inventions, pure science events are absolute and irrevocable. Pure science events represent openings of windows through the walls of ignorance and fiction, to reveal the only reality: the behavior of the naked universe that always was, is, and will be. True it is that the first glimpses may be hazy and imperfect, but the behavior itself is absolute and is progressively clarified. Therefore, this comprehensive curve of the chronological rate of acquisition of knowledge concerning the pure science absolutes separated out from all other events of history may be inspected as the basic means of prediction of inherent technical and social events-- immediate or somewhat distant."</p> <p style="text-align: right;">- Cite Part II of Earth, Inc. Fuller Research Foundation Yellow paper draft, p. 7 1947</p>	<p>RBF DEFINITIONS</p> <p><u>Science: The Cause of Science for Man:</u></p> <p>"I figure that when the environment is scientifically conceived and rendered, that the human occupants can then divest themselves of the necessity of onerous and puritanic hardship of conduct and yet accomplish successful and happy living in naturally engendered sanity."</p> <p style="text-align: right;">(N.B. Christopher Morley's phrase for the Dymaxion philosophy was "Pleading the cause of Science for Man.")</p> <p style="text-align: right;">- Cite extract from RBF writings submitted by EJA to Morley -- Wichita, Kansas 1946</p>
<p>RBF DEFINITIONS</p> <p><u>Science:</u></p> <p>"Science works equally well under private or public subsidy . . . " while "industry is the pure product of free enterprise, imagination and personal risk of the individual or small groups of individuals."</p> <p style="text-align: right;">- Cite Part II, Earth, Inc. Fuller Research Foundation Yellow typescript, p. 8, 1947</p> <p>- Citation at <u>Industrialization</u>, 1947</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Comprehensive Integration of the Sciences:</u></p> <p>". . . The vastly increasing genetic knowledge and the omni-integration at the virology level of cross discipline teams of physicists, geneticists, chemists, biologists, mathematicians, each and any one of whom may broaden the scope of his interests to include all or some of the others' logic."</p> <p style="text-align: right;">- Cite HYPER, World Mag., 4 Apr'73</p>
<p>RBF DEFINITIONS</p> <p><u>Science:</u></p> <p>"Science has hooked up the everyday economic plumbing to the cosmic reservoir . . . "</p> <p>"Science continually does more with less each time it obsolesces and scraps old inventions."</p> <p style="text-align: right;">- Cite Part II., Earth, Inc. Fuller Research Foundation Yellow typescript, p. 10, 1947</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Comprehensive Integration of the Sciences:</u></p> <p>"Many scientists of Darwin's time felt there were many parts and aspects of the Universe which had nothing to do scientifically with other parts of the Universe. In contrast to that century-ago viewpoint, the overlap of the once separate sciences now is so great that, for instance, both chemists and physicists are now primarily concerned with atoms. World War II witnessed the introduction of hyphens between the scientific categories-- bio-chemistry, for example. Now the trend to comprehensive integration is far advanced. . . "</p> <p>"The trend to specialization is being abruptly reversed. We are coming to a comprehensive reintegration of our knowledge. That is why suddenly the most advanced scientists are becoming comprehensivists. This will overnight make obsolete 90 percent of the overspecialized professional teachers."</p> <p style="text-align: right;">- Cite RBF in AAUW Journal, p. 175, May '65</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Science: Comprehensive Integration of the Sciences:</u></p> <p>"Scientists, having developed double names for their overlapping work (biochemistry, biophysics, etc.), are now finding their total field interconnected and unitary. This is a general trend of science. And so many scientists are now being educated that it may be forecasted that within the next half century, not only all science but much of what educated society will have come naturally through its own explorations and experiences to discover the comprehensive order of the Universe."</p> <p style="text-align: right;">- Citation and context at <u>Einstein: Cosmic Religious Sense</u>, (3), 19 Sep'64</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Gap Between Science and the Humanities:</u> (1)</p> <p>"There is excitement in the air as we undertake this last phase of a fifty-year search for the re-bridging of the <u>gap between Science and the Humanities</u>-- created when science, abandoning fundamental conceptual modeling, started a century ago to 'fly' exclusively 'on instruments.' We have, I am confident, the new conceptual bridge between the sciences and the humanities. Because the instrument- and mathematical-symbol-conditioned world of science has great momentum and competence in 'blind flight,' it is not going to take quickly to our new tools-- so you are the bridge builder from me to the rest of science.</p> <p>"I would like you to say what I say-- in my explorer's half-century-developed, experimentally formulated language-- to the scientists, in their language. Our terms often coincide but are ambiguous and, at times, contradictory. I think you can easily smooth out the differences.</p> <p>"I am confident that I can talk lucidly to the public and particularly to the young world. I know that you and I can talk lucidly to one another. I am therefore confident that"</p> <p style="text-align: right;">- Cite RBF Ltr. to Dr. Arthur Loeb, 6 Jan'67</p>
<p><u>Science: Comprehensive Integration of the Sciences:</u> (1)</p> <p style="text-align: center;">See Hyphenated Sciences</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Gap Between Science and the Humanities:</u> (2)</p> <p>"We have not only discovered the comprehensive, omnirational, omni-intertransforming coordinate system most economically employed by physical energy Universe, but also that we have developed a communications relay system of high integrity with which most effectively to speed the realization by society of the advantages accruing to the <u>reweaving of the Sciences and Humanities</u> which, Lord Snow agreed with me, is accomplishable by our Synergetics and its omniconceptuality."</p> <p style="text-align: right;">- Cite RBF Ltr. to Dr. Arthur Loeb, 6 Jan'67</p>
<p><u>Science: Comprehensive Integration of the Sciences:</u> (2)</p> <p style="text-align: center;">See Twenty Questions, (2)</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Gap Between Science & the Humanities:</u></p> <p>"With the return to valid, rationally computable conceptuality of nature's dynamic formulating, there returns to literary man the ability to re-establish the communication integrity of science and world society. The rate of re-establishment of conceptual comprehension of scientific frontiers and its technical, ergo economic, ergo practical significance, will be painfully slow to those who now have discovered nature's sublimely rational comprehensibility. It may take a whole new generation but that is an historically short period for so vital a recovery from world society's present intellectual comprehension tail-spinning."</p> <p style="text-align: right;">- Cite MEPES, p. 81, 1965</p>
<p><u>Science: "Foreign-hieroglyphicking" Science:</u></p> <p style="text-align: center;">See Tetrahedral Coordination of Nature, 1965</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Gap Between Science and the Humanities:</u> (A)</p> <p>"... There has been the thought of nonconceptuality in the area you explored and it seemed to be just purely mathematical. It didn't seem to be easy to communicate between science and the general public and the literary man has been the man who was supposed to explain what is going on to the public. He is the fellow who communicates but he couldn't understand. The scientist said: you can't follow, and that in a sense, is what Snow is writing about-- about the real chasms that have grown up between the scientist and the people. He speaks about it in the terms of the literary man because he is a literary man and there is nothing he can explain to people of what is going on in science. I will make a prediction to you that in this next half century you will see a development of comprehension of science by everybody. Science is comprehending in the terms of conceptuality..."</p> <p>"In the period we speak of as the sixties, about that era of time, the physics was moving ahead rapidly and we are coming out of the time of Clerk Maxwell and Hertz and the development of the electromagnetic wave, the phenomenon electricity is beginning to come along, and this is the beginning of the era of dynamos, and so forth. Principles are being"</p> <p style="text-align: right;">- Cite Oregon Lecture #4, pp.130-131, 6 Jul'62</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Science: Gap Between Science and the Humanities:</u> (B)</p> <p>"discovered that are operative in the electricity. There is electrical engineering. In the mathematics, the the coordinate system of XYZ coordinates we had identified what we call powering, the development of dimensions that required a unique perpendicularity to a plane not already in the system.</p> <p>"We had the first dimension all right, and the second and third dimension. But we couldn't seem to find any fourth dimension. The trouble was that in the ray nineties fourth power relationships were beginning to show up in the physics and in relation to electromagnetic phenomena. But you couldn't make a model of it. What the mathematicians found you could do was fairly nifty because in dealing with 90-degree-ness you just think about your XYZ coordinates; you think about your 90-degree angle and you have lines going out so many units from the centers. In XYZ coordinates, they were also called the quadrants; 90-degrees four times, you might call it a clock with four hours.</p> <p>"One of the things the mathematicians found you could do to accommodate the seeming phenomena that was going on in electro-magnetics where physical Universe seemd to be using the fourth power-- you could handle the fourth power simply by borrowing"</p> <p>- Cite Oregon Lecture #4, p.131, 6 Jul'62</p>	<p><u>Science: Gap Between Science & the Humanities:</u> (2)</p> <p>See Algebra, 28 Oct'64 Artist, Sep'71 Conceptuality, 1965 Fourth Dimension: Borrowing from Tomorrow's Clock, 22 Jul'71 Joyce, James, 1965 Modelability, Jun'66 Synergetics, Dec'72; (B) Wealth, (E) XYZ Coordinate System, 6 Jul'62 Synergetics, 7 Apr'75</p>
<p>RBF DEFINITIONS</p> <p><u>Science: Gap Between Science and the Humanities:</u> (C)</p> <p>"a little from the clock. You could go around the clock and borrow a little from tomorrow or you could go backwards on the clock and borrow a little from yesterday. It is kind of like going to the bank and you accommodate it on a time payment affair. This is called imaginary number, complex number, where the square root of minus one is going into yesterday one quadrant. They found they could accommodate the fourth power mathematically but they couldn't make a model of it.</p> <p>"In the nineties, then, it began to happen thatthe scientists said: We are sorry. We have had models up to now, and you asked me to explain what we are doing in science, and there was a model but suddenly models seemed to be invalid. Mathematics could carry on so you gave us models. That is what happened in the nineties. Not everybody knew this right away. This was not such a big fashionable thing. There were no decrees along these lines but it gradually became known that the scientists were carrying on with purely with mathematical notation and were getting along very well and they could handle invisible phenomena. They simply said: all this stuff that's invisible here is also nonconceptual. There are no models."</p> <p>- Cite Oregon Lecture #4, pp.131-132, 6 Jul'62</p>	<p>RBF DEFINITIONS</p> <p><u>Science: The Great Design:</u></p> <p>"Contact with the great design: this is the most mysterious of all experiences we know. I find the design of a regenerative Universe most inherently have very complex problems, local problems. And I think that the human has been given access to the great eternal mind in order to be able to cope with the extremely difficult local problems of the regeneration of the Universe. It becomes a very thrilling realization of our responsibility. . .</p> <p>"Science, at its beginnings, starts with a priori, absolute mystery, within which there loom these beautiful behavior patterns of the physical Universe where the reliabilities are eternal."</p> <p>- Cite RBF at SIMS Conference, U. Mass., Amherst, 22 July '71 As quoted in Symposium publication, Ed. by Mylo Housen</p>
<p>RBF DEFINITIONS</p> <p><u>Science: Gap Between Science and the Humanities:</u> (D)</p> <p>"This irritated a great many other human beings, as for instance, artists who are philosophers in cry. They may not have had very much mathematics, but they are human beings-- who possibly may not have done very well in school-- but they really are full of a sense of importance of the Universe. And there were many principles to be discovered so they could persist. The artist said: I could deal in abstracts, and so they felt they could deal in principles. So we have the leaving to the nonrepresentational art. That is a move that comes along with the invalidity of models in science. It is something we call abstraction. It really wasn't very abstract; many times it was a principle. An artist really did learn it was a principle and there would be inversions of equations and things like that. They were intuitive that conceptuality was there all the time. They had felt that there was something inadequate in the mathematics, that's all... l'v e found time and again that artists have very powerful intuitions. They hadn't quite learned their way around well enough in the languages of the various sciences, but I am sure they have been intuiting that there was conceptual validity so they insisted on trying to make conceptual arrangements"</p> <p>- Cite Oregon Lecture #4, pp.131,132, 6 Jul'62</p>	<p><u>Science: The Great Design:</u></p> <p>See A Priori Great Design Eternal Designing Capability</p>
<p><u>Science: Gap Between Science & the Humanities:</u></p> <p>See Blind Man's Bluff Generalizations: Mathematical vs. Literary Return to Modelability Snow, C.P. Technology: Enchantment vs. Disenchantment Instruments: Science Blind-flying "On Instruments"</p>	<p>RBF DEFINITIONS</p> <p><u>Science Opened the Wrong Door:</u></p> <p>"Now we suddenly find elegant field modelability and conceptuality returning. We have learned that all local systems are conceptual. Because science had a fixation on the 'square,' the 'cube,' and the 90-degree angle as the exclusive forms of unity, most of its constants are irrational. This is only because they entered nature's structural system by the wrong portal. If we use the cube as volumetric unity, the tetrahedron and octahedron have irrational volume numbers."</p> <p>- Cite RBF on the 4th SYNERGETICS gallery at SIMS, 29 Dec'73, 30 Dec'73 - Citation & context at Synergetics, 30 Dec'73</p>

Synergetics Dictionary

<p><u>Science Opened the Wrong Door:</u> (1)</p> <p>See Oversight Starting with Parts: The Nonradial Line Attic Window Earth Fault: Society is Living in a Sort of Earth Fault</p>	<p><u>Science: History Of:</u> (2)</p> <p>See Modelability, (3)(4) Teaching, 2 Apr'71</p>
<p><u>Science Opened the Wrong Door:</u> (2)</p> <p>See Flatland, 1 Oct'71 Synergetics, 30 Dec'73* XYZ Coordinate System, (p.96) Jun'66 Quantum Sequence, (2) Fourth-dimensional Synergetics Mathematics, 14 Dec'76</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Left Hand and Right Hand Sciences:</u></p> <p>"To adopt themselves to change has now been pronounced in Washington as 'creativity.' Philip Morrison, Cornell's head of the department of nuclear physics, talks about what he calls 'left hand' and 'right hand' sciences. Right hand science deals in all the <u>proven</u> scientific formulas and experiments. Left hand science deals in the <u>unknown</u> and <u>unproven</u>, and the intellect, intuition, and imagination required in man to make it known.</p> <p>"The great scientists were great because they dealt successfully with the unknown: They were left-behind scientists. Morrison says that we have been extending only the right-hand science, making it bigger and sharper. How could Congress justify appropriation of billions for dreams? For the billions went only for the swiftly obsoleting bigger, faster, and more incisive modifications of yesterday's certainties."</p> <p style="text-align: right;">- Cite RBF transcribed in AAUW Journal, p. 173, May '65</p>
<p>RBF DEFINITIONS</p> <p><u>Science: History of Science:</u></p> <p>"This explains why The history of science Is a history of Unpredicted discoveries And will continue So to be."</p> <p style="text-align: right;">- Cite INTUITION, p.39 May '72</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Pure & Applied:</u></p> <p>"My chart of the isolation of the isolation of the 92 chemical elements shows" that innovation and discovery require aesthetically motivated curiosity, "in re scientific breakthroughs which always slow down in war and accelerate in nonwartime."</p> <p style="text-align: right;">- Cite RBF marginals at Cyril Stanley Smith Article, NY Times, 24 Aug'75; done by RBF, Wash. DC, 8 Sep'75</p>
<p><u>Science: History Of:</u> (1)</p> <p>See Babylonian Mathematics Navigators: Early Navigators</p>	<p>RBF DEFINITIONS</p> <p><u>Science: Pure and Applied Science:</u></p> <p>"When science discovers order subjectively it is pure science, when the order discovered by science is objectively employed it is called applied science."</p> <p style="text-align: right;">- Citation and context at Order, 13 Mar'73</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Science: Pure & Applied:</u></p> <p>"Pure science seeks to find mathematical order permeating the subjectively acquired data; and applied science employs objectively the mathematical orders discovered in formulating them into special design uses.</p> <p>"Both the pure science analysis of the subjectively acquired data and the applied science employment of the relationships involves mathematically patterned identification of the pertinent special-case use data in respect to a universally coordinate dimensioning system and a transformational frame of reference."</p> <p style="text-align: right;">- Cite RBF holograph (edited), Beverly Hotel, NYC 14 Sep'71</p>	<p><u>Science: Pure & Applied:</u> (2)</p> <p>See Metaphysical & Physical, 1967 Universe as Energy & Information, 11 Nov'74 Communications Hierarchy, (3)</p>
<p>RBF DEFINITIONS</p> <p><u>Science: Pure and Applied Science:</u></p> <p>"Applied science is physical. Theoretical science is metaphysical."</p> <p style="text-align: right;">- Cite Peter Patera checklist for RBF foreword, 1967 - Citation & context at Metaphysical & Physical, May'67</p>	<p>RBF DEFINITIONS</p> <p>Discovery <u>Science-Technology-Economics-Politics Sequence:</u></p> <p>"The rate at which man found chemical elements seems to be the key controlling the development of the application of science to <u>technology</u>, and, following from this, the application and effect of that technology on economics and, ultimately, the effect of the new technology on society itself."</p> <p style="text-align: right;">- Cite THE YEAR 2000, San Jose State College, Mar'66</p>
<p>RBF DEFINITIONS</p> <p><u>Science: Pure & Applied Science:</u></p> <p>"Pure science does not prosper in time of war-- which is contrary to all popular notions. Scientists are made to apply science in wartime, rather than to look for fundamental information."</p> <p style="text-align: right;">- Cite THE YEAR 2000, San Jose State College, Mar'66</p>	<p>RBF DEFINITIONS</p> <p><u>Science-Technology-Industry-Economics-Politics Sequence:</u> (1)</p> <p>"My philosophy... requires the attempt to solve problems by inanimate invention of comprehensive anticipatory design science, rather than yielding to the easier behavior of problem discovery and the exhortation of others to solve these problems. Ideas come readily to all. Translation of ideas into theoretically effective physical design takes considerable self-disciplining to be effective. Reduction of such theoretically effective designs into physically operating structural and mechanical advantages requires even greater self-disciplining. Reduction of the physical mechanical advantage into timely and spontaneous inhabitability by our contemporarily evolving society requires patience as well as self-discipline.</p> <p>"These coordinate self-disciplines are inherent in the inventory of faculties with which we are endowed and are potential of realizations in the inventory of reported experiences that we have inherited from all men before us. The individual <u>intellect</u> disciplinedly <u>paces</u> the human individual.</p> <p>"The <u>individual</u> disciplinedly <u>paces</u> science.</p> <p>"<u>Science</u> disciplinedly <u>paces</u> <u>technology</u> by opening up both"</p> <p style="text-align: right;">- Cite Intro. to NO MORE SECONDHAND GOD, p.ix, 9 May'62</p>
<p><u>Science: Pure & Applied:</u> (1)</p> <p>See Know-how & Know-what</p>	<p>RBF DEFINITIONS</p> <p><u>Science-Technology- Industry-Economics-Politics Sequence:</u> (2)</p> <p>"Widened and refined limits of technical-advantage <u>generating</u> knowledge.</p> <p>"<u>Technology</u> <u>paces</u> <u>industry</u> by progressively increasing the range and velocity inventory of technical capabilities.</p> <p>"<u>Industry</u> in turn <u>paces</u> <u>economics</u> by continually altering and accelerating the total complex of environment controlling capabilities of man.</p> <p>"<u>Economics</u> in turn <u>paces</u> the everyday <u>evolution</u> acceleration of man's affairs. The everyday patterning evolution in turn poses progressively accelerating problems regarding the understanding of the new relative significance of our extraordinarily changing and improving degrees of relative advantage in respect to controlling our physical survival and harmonic satisfaction. Happily realized augmentation of forward capability is all that we mean by wealth.</p> <p>"The unfamiliar complex of the new wealth accounting requirements of the evolving human experiences emerges as an aggregate of unique and popularly discerned everyday 'news' problems."</p> <p style="text-align: right;">- Cite. Intro. to NO MORE SECONDHAND GOD, pp. ix-x, 9 May'62</p>

Synergetics Dictionary

RBF DEFINITIONS

Science-Technology-Industry-Economics-Politics Sequence: (3)

"In turn the popularly discerned inventory of problems altogether provides the raw material to be processed by the machinery of politics. It is the purpose of politics to digest the problems and to provide adequate accounting and readjustments to the unexpected and often disconcerting changes in the patterns of technical advantage realizations. Politics must thus implement life's continually increasing sweepout and penetration of Universe with a continually changing set of operational rules and accounting conventions."

- Cite Intro. to NO MORE SECONDHAND GOD, p.x, 9 May'62

RBF DEFINITIONS

Science as a Tool:

"... Science and technology are only manipulative tools like inanimate and cut-of-fable hands which may be turned to structuring or de-structuring. How it is to be employed is not a function of the tool but of human choice. The crisis is one of the loving and longing impulse to understand and be understood which results as informed comprehension. It is the will to structure versus ignorant yielding to fear impuled reflexive conditioning resultant to being born utterly helpless. Intellectual information accumulating processing is necessary and anticipatory faculties to be only slowly discovered as exclusively able to overcome the ignorantly feared frustrating experiences of the past. Science must be seen as a tool of fundamental advantage for all, which Universe requires that man understand and use exclusively for the positive advantage of all humanity, or humanity itself will be discarded by Universe as a viable evolutionary agent."

- Cite SYNERGETICS at Sec.826.05, Sept'72

EJA COMMENT

Science-Technology-Industry-Economics-Politics Sequence:

The total sequence involved is approximately as follows:
 Man's participation in evolution (individual intellect) paces design pattern strategies for survival;
 Ideas pace physical design;
 Self-disciplining paces structural and mechanical advantage;
 Intellect paces the individual;
 The individual paces science;
 Science paces technology
 Technology paces industry;
 Industry paces economics;
 Economics paces wealth; wealth paces politics; politics paces accounting readjustments for increasing sweepout of Universe.

Science:

(1)

See Applied Science
 Exact Sciences
 Experimental Demonstrability
 Hyphenated Sciences
 Inexact Sciences
 Invention vs. Pure Science Events
 Operational Science
 Physical Science
 Science-Technology-Industry-Economics-Politics-Sequence
 Social Sciences
 Source of All Scientific Knowledge
 Hierarchy of Patterns
 Generalizations: Mathematical vs. Literary
 Instruments: Science Blind-flying "On Instruments"
 Overspecialization of the Sciences, █
 Children as Only Pure Scientists

Science-Technology-Industry-Economics- Politics Sequence: (1)

See Making the World Work

Science:

(2)

See Mathematics, undated
 Ninety-two Elements: Chart of Rate of Acquisition (2)
 Experience, 12 Mar'71*
 Industrialization, 1947*
 Subjective & Objective, 14 Sep'71*
 Space Technology (6)*
 Tenure, 28 Jun'72
 XYZ Coordinate System (A)
 Unknown: All the Unknown, 13 May'73
 Nothing, 11 Sep'75
 Closed System, 10 Nov'75
 Metaphysical & Physical, 22 Jun'77

Science-Technology-Industry-Economics-Politics Sequence: (2)

See Industrial Lag, 5 Jul'62
 Politics, Jan'62; May'68
 Technology, 1960
 Mutual Survival Principles, (3)

Science: Scientific:

(3)

See Science: Cause of Science for Man
 Sciences: Comprehensive Integration Or
 Science: "Foreign-hieroglyphicking" Science
 Science: Gap Between Science & the Humanities
 Science: The Great Design
 Science Opened the Wrong Door
 Science: History Of
 Sciences: Left Hand & Right Hand
 Science: Pure & Applied
 Science: Science-Technology-Economics-Politics Sequence
 Science as a Tool
 Scientific Events Appearing in Fun & Play
 Scientific Generalization
 Scientific Laws
 Scientific Words

Synergetics Dictionary

<p><u>Scientific Events Appearing in Fun & Play:</u></p> <p>See Funambulist, 1938</p>	<p>RBF DEFINITIONS</p> <p><u>Scientist:</u></p> <p>"The pure scientist is just like an egg-laying hen. Take the egg away-- and no matter. That's just it."</p> <p style="text-align: right;">- Cite RBF to EJA Beverly Hotel, New York 14 March 1971</p>		
<p>RBF DEFINITIONS</p> <p><u>Scientific Generalization:</u></p> <p>"The scientific generalizations are always mathematically stable as equations with one term on one side of the equation and a plurality of at least two terms on the other side of the equation."</p> <p style="text-align: center;">- Citation and context at <u>Order</u>, 13 Mar'73</p>	<p>RBF DEFINITIONS</p> <p><u>Scientists:</u></p> <p>"Scientists differ from people who just make lists by trying to set them in order."</p> <p style="text-align: center;">- Cite OREGON Lecture #2 - p. 69 " 2 Jul'62</p>		
<p><u>Scientific Laws:</u></p> <p>See Synergetics Principles</p>	<p>RBF DEFINITIONS FILE INDICATORS</p> <p><u>Scientists: Scientists Cited in RBF Works:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> Avogadro. Democritus Euler Euclid Newton Copernicus Kepler Heisenberg Einstein Pythagoras Eddington Waddington Darwin Galileo Dalton Boole Mach Teller, Edward </td> <td style="width: 50%; vertical-align: top;"> Percival Bridgeman Frankland, Edward van't Hoff, Jacobus Henricus Pauling, Linus Grebe, Dr. John Hilbert, David Poisson Brouwer, L.E.J. Eccles, J.C. Pauli Jeans Planck Aston Lavoisier Bernouilli Dirac Smith, Cyril Stanley </td> </tr> </table>	Avogadro. Democritus Euler Euclid Newton Copernicus Kepler Heisenberg Einstein Pythagoras Eddington Waddington Darwin Galileo Dalton Boole Mach Teller, Edward	Percival Bridgeman Frankland, Edward van't Hoff, Jacobus Henricus Pauling, Linus Grebe, Dr. John Hilbert, David Poisson Brouwer, L.E.J. Eccles, J.C. Pauli Jeans Planck Aston Lavoisier Bernouilli Dirac Smith, Cyril Stanley
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<p><u>Scientific Words:</u></p> <p>See Energetic Words</p>	<p><u>Scientists:</u> (1)</p> <p>See Artist-scientists Chaos: Myth that Scientists Wrest Order from Chaos Leonardo Type Eggs: You Just Lay Eggs</p>		

Synergetics Dictionary

<p><u>Scientists:</u> (2)</p> <p>See Dwelling Service Industry (5) Generalization Sequence (3) Industrial Lag, 5 Jul'62 Integrity of Universe, Feb'72 Retirement, 28 Jan'75 Child Sequence, (1) Wright, Frank Lloyd, 4 Oct'75 Universe is Technology, (1) Cosmic Fishing, (8)</p>	<p>RBF DEFINITIONS</p> <p><u>Scrap Sorting & Mongering:</u> (1)</p> <p>"We are going to have to keep track of the 92 regenerative chemical elements but not just as elements because we have them in literally thousands of millions of compounds and different complex structures as they are used in various industrial processes. We won't be using the elements by themselves; we'll be using the various compounds. I am interested in the concentrates. And I see buildings as high and low grade. I see my 92 chemical elements rarely in the pure condition; in a more complex way they are in practical dissociability for further realignment.</p> <p>"When we talk about all the aluminum or the bauxite some is below grade in the mines and some is already in use and recirculating. There are really two classes. There is a recirculating group. When they're pulling a building down there's part of the steel that's no longer in the building holding it together, but it may not have been put on the market yet as scrap. But it's what they call high melting scrap and should go right into the furnace; it will command a much bigger price than the small stuff."</p> <p>- Tape transcript #4, pp.8-9; RBF to W. Wolf; Phila. PA., 15 Jun'74</p>
<p><u>Scissors Held in Fixed Opening:</u> (1)</p> <p>See Scribing</p>	<p>RBF DEFINITIONS</p> <p><u>Scrap Sorting & Mongering:</u> (2)</p> <p>"Scrap sorting is going to be one of the great sciences now. It is one of the typical social changes from the linear patterns of the honey-bee to the precessional circulatory patterns. To man's old way of thinking he was going to build this building and it's going to stay there forever. All the architects are that way. It was like a one-way street. But nature found that the metal didn't get destroyed and so it resulted in the <u>monger</u>.</p> <p>"The monger was sort of a low-grade character because everybody thought the materials had deteriorated, that the iron was all rusting and that everything would really rust and go away. But the monger was sitting in there and society found that things were not getting eaten up. Now the mongers are getting all their dung and really turning it into something. There's a scandal now in Philadelphia about their sewage and waste removal because some of these guys are beginning to turn some of this tonnage into money. They had been throwing out the dung but now they are beginning to process it and they find that it really pays them.</p> <p>"One of the big changes around here is when the monger is no longer a low calling. But the mongers tend to sit on it and"</p> <p>- Tape transcript #4, pp.9-10; RBF to W. Wolf, Phila. PA., 15 Jun'74</p>
<p><u>Scissors Held in Fixed Opening:</u> (2)</p> <p>See Necklace, (1)(2)</p>	<p>RBF DEFINITIONS</p> <p><u>Scrap Sorting & Mongering:</u> (3)</p> <p>wait for a good market. That keeps enormous powerful heaps of junk in sight. We don't have to have those unsightly places. This is where the government should start to take over the function of recirculation. That's what society is not doing; it's not taking care of any of its recirculation. Everybody is trying to disconnect and make their money. So one of the big functions of government is going to be changing the scrap sorting from a one-way street into the circulatory system. I don't think anything could be more visible from the World Game point of view.</p> <p>"I am going to account for everything. There are going to be some priorities. Because there are a number of these materials that are so relatively scarce they have to be of absolutely high priority. If there is so little of it it must be used in a broad sense. I must never have helium in a retail pub; it must be in the tools that serve the tools.</p> <p>"Incidentally, I see tools having a hierarchy just like our own guts: things that are glandular, there are energy secretions, there are pumping stations, and so forth. Purifying things like the lungs and livers are all big recirculatory systems:</p> <p>- Tape transcript #4, pp.10-11; RBF to W. Wolf; Phila. PA, 15 Jun'74</p>
<p><u>Scoring: Score-guessing:</u></p> <p>See Brain's TV Studio, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Scrap Sorting & Mongering:</u> (4)</p> <p>"Nature takes great pains to separate the liquid from the solid matter. When nature takes the great trouble to separate things like that it's a very expensive matter. But then we, as people, put them right back together again. It's incredible. Nature has its little dogs pissing on the tree groups that need the water and crapping over there for the fertilizer."</p> <p>- Tape transcript #4, p.11; RBF to W. Wolf, Phila., PA, 15 Jun'74</p>

Synergetics Dictionary

<p><u>Scrap Sorting & Mongering:</u></p> <p style="text-align: center;">See Metals: Recirculation of Metals Junkyard Pollution Control</p>	<p><u>Screen:</u></p> <p style="text-align: center;">See Benday Screen Membrane Walls</p>
<p><u>Scratch-chorded:</u></p> <p style="text-align: center;">See Light on Scratched Metal, 9 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Screwing:</u></p> <p style="text-align: center;">"People who listen to me say, 'Here's a man who's selling screwdrivers... they don't realize how mysterious screwing is.'"</p> <p style="text-align: center;">- Citation and context at <u>Fuller, R.B.:</u> <u>RBF Modus Operandi,</u> Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Scratched Surface:</u></p> <p>"You look at any scratched surface and you will always see circles. Where there is light present there are lines that get lit up since they are precessional to the direction of the light. This gives you the sunburst effect in a hubcap or fender."</p> <p style="text-align: center;">- Citation & context at <u>Vectorial & Vertexial Geometry, (2),</u> 27 Jan'75</p>	<p><u>Scribing:</u> (1)</p> <p style="text-align: center;">See Drawing Spherical Reality Scribing Scissors Held in Fixed Opening Tools of Geometry Severance-tracing</p>
<p><u>Scratched:</u> <u>S@ratched Surface:</u></p> <p style="text-align: center;">See Light on Scratched Metal</p>	<p><u>Scribing:</u> (2)</p> <p style="text-align: center;">See Otherness, 8 Feb'76</p>

Synergetics Dictionary

Scroll:

See Tetrascroll

Sculpture: Sculptor:

(1)

See Sculptor vs. Engineer

Scrutability: Magnitude Of:

See Twenty-foot Earth Globe & 200-foot Celestial Sphere,
(2)

Sculpture: Sculptor:

(2)

See Design, 23 Jan'72
Fuller, R.B: His Writing Style, 22 Jan'75; 26 Apr'77
News & Evolution, (2)

RBF DEFINITIONS

Sculpture as Single Frame:

"I'd then like to point out that if you say I wonder what's outside outside, you're asking a single frame picture. You have a sculpture in mind. The Universe is a sculpture. These are where the stars are in sculptural array. So that question is a single frame. . . and we realize that no single frame gives the meaning."

- Cite RBF to SISE, U.Mass., Amherst, 22 July '71, p. 27

RBF DEFINITIONS

Sea:

"In 1961... three jet airplanes in one year outperformed the Queen Mary and the steamship United States at a very much less cost; and suddenly the sea became obsolete as a way in which human beings would get from here to there."

- Citation & context at North-south Mobility of World Man, (1), 10 Sep'75

Sculptor vs. Engineer:

See Soleri, Paolo, 10 Sep'75

RBF DEFINITIONS

Sea: The Sea:

"The sea's curvature enabled her to keep her secrets."

- Cite RBF videotaping, Penn Bell Studios, Phila., PA, 23 Jan'75

Synergetics Dictionary

RBF DEFINITIONS

Sea: The Sea:

"Playboy: It seems a very melodramatic kind of evolution that would have man verge so close to extinction before discovering his function. Do you think that risking extinction may be part of the process of discovery?"

"RBF: He's done it all the time. He kept going to sea, kept going after those fish, and his boat was inadequate and he was lost. Of all the people who have gone to sea historically, I imagine that very few returned. There was such loss in the beginning. But out of it man began gradually to learn his engineering, to learn how to anticipate the enormous stresses, the constant peril. And he began to develop beautiful fibers, better ropes, better sails. I think our breakthroughs always come to the people who were risking themselves very close to the brink."

- Cite RBF in Barry Farrell Playboy Interview, 1972 - Draft. p. 15.

RBF DEFINITIONS

Sea Power:

"The British Isles were used as unsinkable flagships.... Sea power was determined in the first few seconds of contact: after the first or second salvo you knew who was going to run the world for the next 25 years.

"Blitzkrieg was just sea warfare brought up onto the land.

"There is no such thing as a secondhand navy."

- Cite RBF videotaping, Penn Bell Studios, Phila., PA, 23 Jan'75

RBF DEFINITIONS

Sea: The Sea:

"Laws are not extendable over the surface of the water.

The sea offered secrecy because its curvature meant

that you only had to get 14 miles away to be out of sight.

. . . to disappear over the horizon and then reappear. . .

only the navigators could do it."

- Cite RBF to EJA, Fairfield, Conn., Ches Wolf.
18 Jun '71

Searchlight:

See Octahedron: Eighth-octahedra, (3)(4)

Sea Gulls:

See Feeding a Flock of Sea Gulls

RBF DEFINITIONS

Sea Technology:

"You get at least twice as much experience at sea because you're at work 24 hours a day. On the sea it's a flood all the time and you have to stay on top of it."

- Cite RBF at Penn Bell videotaping session, Philadelphia, 23 Jan'75

Seaports:

See Unsettling vs. Settlements, 20 Sep'76

Sea Technology Conversion to Land Technology:

See Dymaxion Airocean World, (I) Tank, 23 Jan'75
Electric Lights, 15 Oct'64
Health, (C)
Bicycle Wheel, 29 Jan'75
Sea Power, 23 Jan'75

Synergetics Dictionary

<p><u>Sea Technology:</u> (1)</p> <p>See Battleship Displacement of Ships and Buildings Electric Lights More With Less: Sea Technology Navigation Navy Sequence Refrigerator Sea Technology Conversion to Land Technology Weapons Technology Air Delivery & Submarine Cities</p>	<p>RBF DEFINITIONS</p> <p>vs. <u>Search</u> vs. <u>Research</u>:</p> <p>"In the early 1930s, in my Saturday Review and three-hours-for-lunch-club days, I introduced a deprefixing logue and logue dialogue. Chris Morley, Bill Benet, Don Marquis and others were intrigued with its revealed, vealed trigues which are tri- or triangular involvements.</p> <p>"You had to search before you could research. Search pioneers: research is routine exploitation.</p> <p>"You must view before you can review, overview a powerful world geoview... copyrightable, trademarkable, markably remarkable."</p> <p style="text-align: right;">- Cite RBF holograph initiating "Eccles Piece" on Barclay Hotel, Phila, writing paper, 14 Feb'72</p>
<p><u>Sea Technology:</u> (2)</p> <p>See Civil War, (2) Engineering, 9 Dec'73 Size, (A)(B) Dome House Grand Strategy: 1927-1977, (2) Human Unsettlement, (2)(3)</p>	<p>RBF DEFINITIONS</p> <p><u>Second:</u></p> <p>"Minimal consciousness evokes time, As a nonsimultaneous sequence of experiences. Consciousness dawns With the <u>second</u> experience. This is why consciousness Identified the basic increment of time As being a <u>second</u>.</p> <p>Not until the <u>second</u> experience Did time and consciousness Combine as human life.</p> <p>Time, relativity and consciousness Are always and only coexistent functions Of an a priori Universe, Which, beginning with the twoness of <u>secondness</u>, Is inherently plural."</p> <p style="text-align: right;">- Cite INTUITION, p. 12, May '72</p>
<p><u>Sea:</u> (1)</p> <p>See Ocean S.O.S. Waterocean Naga Swim: Dynamic Sea Where Man Must Swim</p>	<p>RBF DEFINITIONS</p> <p><u>Second:</u></p> <p>Consciousness Identified the basic increment of time As being a <u>second</u>. Not until the <u>second</u> experience Did time, consciousness-- Which is human life-- Begin. Time, relativity and consciousness Are always and only coexistent functions Of an a priori universe Which beginning with the twoness of <u>secondness</u> is inherently plural."</p> <p style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> "As a nonsimultaneous sequence of experiences, Consciousness begins at minimum As a second experience. This is why"</p> <p style="text-align: right;">- Cite INTUITION, Draft Feb '71, p. 1-2.</p>
<p><u>Sea:</u> (2)</p> <p>See Male & Female, 12 Jan'74 North-south Nobility of World Man, (1)*</p>	<p>RBF DEFINITIONS</p> <p><u>Second:</u></p> <p>"Early humanity's concept of the minimum increment of time was the <u>second</u>, because time and awareness begin with the <u>second</u> experience after the other."</p> <p style="text-align: right;">- Cite RBF Marginalia on Synergetics draft, See 223; 19 Jun '74.</p> <p style="text-align: right;">- Citation & context at <u>Time</u>, 19 Jun'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Secondhand:</u></p> <p>"I... had had mechanical training and was very much impressed with the wonderful equipment that was put at the disposal of the Navy. It was a world in which there was no such thing as a secondhand battleship. You cannot win a war on secondhand equipment; we have had this well demonstrated recently. It was equally impressive to me later when I left the Navy and went into the building world and discovered how unscientific and secondhand most of the approach to housing was-- how people really drifted from one old house to another, and the few new houses that were built were without any benefit of engineering."</p> <p style="text-align: right;">- DESIGNING A NEW INDUSTRY, (RBF Reader, p.149), 1946</p>	<p style="text-align: right;"><u>Secondhand:</u> (1)</p> <p style="text-align: center;">See No Secondhand Battleship No Secondhand God</p>
<p>RBF DEFINITIONS</p> <p><u>Secondhand Gadgetry:</u></p> <p>"We find ourselves continually advancing in domestic technology, but only as the second-hand gadgetry, by-produced by the cast-off segments of the weapons industry."</p> <p style="text-align: right;">- For sitation and context see <u>Weapons Technology</u>, 10 Oct '63</p>	<p style="text-align: right;"><u>Secondhand:</u> <u>Second Hand:</u> (2)</p> <p style="text-align: center;">See Copper, 9 Dec'73 Lags, (1) Sea Power, 23 Jan'75</p>
<p><u>Secondhand Gadgetry:</u></p> <p style="text-align: center;">See Electric Lights, 15 Oct'64</p>	<p style="text-align: right;"><u>Second Hand:</u></p> <p style="text-align: center;">See Lags (1)</p>
<p><u>Secondhand God:</u></p> <p style="text-align: center;">See Religion, (1)</p>	<p style="text-align: right;"><u>Second Layer:</u></p> <p style="text-align: center;">See Icosahedron: Inside-outing Of, 10 Jan'50 Primary Structure, 10 Jan'50</p>

Synergetics Dictionary

<p><u>Secondness - Otherness:</u></p> <p>See Somethingness & Nothingness, 7 Oct'75</p>	<p>RBF DEFINITIONS</p> <p><u>Secrecy of the Artist:</u></p> <p>See Artist, May'65, Jun'66, 2 Jun'71</p>
<p><u>Second Power: Second Dimension:</u></p> <p>See Powering: Second Powering Two-dimensionality</p>	<p>RBF DEFINITIONS</p> <p><u>Secrecy: Secrecy of Mathematical Knowledge:</u></p> <p>"I am quite confident that the early navigators knew a great deal about the Earth and that they were doing just what navigators and others were doing in my day in the Navy when the Navy instructions were when I was Commanding Officer, that if anybody was about to take my ship the first thing I would do would be to go to the rail and take all the leaded books, anything of importance was covered in lead, and throw them overboard. Men had been hiding their secrets in the sea for great ages, so I felt that many people carrying on their navigation could remember some of the principles in their head but much of the important record could get lost."</p> <p style="text-align: right;">- Cite Oregon Lecture #7, p. 251. 11 Jul'62</p>
<p><u>Second:</u> (1)</p> <p>See Intuition: Second Intuition Vector: One-second Vector Length</p>	<p>RBF DEFINITIONS (1)</p> <p><u>Secrecy: Secrecy of Mathematical Knowledge: Navigation:</u></p> <p>"I said to myself, I think that the first mathematics which related to a plurality of stars, and where you are, the first triangulation, occurred in relation to the navigators. I think then that the people who sailed into the windward, who started going into the prevailing winds westward, became the first inventors of the navigation. You cannot invent navigation unless you have something that you became familiar with. I think then that the people who invented the navigation invented the first really important kinds of mathematics dealing in triangulation, in major patterns. And so I think that mathematics and navigation developed in a very high way on the sea, and later on came up onto the land. But people who knew their way about the sea knew how to get to very important resources, and there were great premiums paid for what they could bring in a very secret kind of a mind-- and they began to guard their secret of navigation very carefully. I think that the great mathematical secrets were really very progressively hidden. When the navigators were going westward out of the Straits Settlements areas, and so forth, and finally negotiated across westward of the Indian Ocean to the eastern shores of Africa and the southern shores of</p>
<p><u>Second:</u> (2)</p> <p>See Awareness, 24 Apr'72 Heartbeat, 13 Mar'73 Time, 19 Jun'71* Time-sizing, 30 Nov'72</p>	<p>RBF DEFINITIONS (2)</p> <p><u>Secrecy: Secrecy of Mathematical Knowledge: Navigation: (Cont.)</u></p> <p>Mesopotamia. And they began to memorialize their navigational capabilities upon the land. They go up on the land and using the same kind of navigational capabilities they navigate across the land to get to the Mediterranean. Then they go northward down the Nile and they come to the Mediterranean. And there they build the same kind of boats built out of the patterns they can carry in their head. And they go on with what we call this lateen sailing in the Indian Ocean and it gets into the Mediterranean. We find, then, this navigating moving westward, and the men who became the great secret priests are the men who are monopolizing this very secret information which makes it possible to do this very powerful wealth making through trade which is controlled through navigation. You can take a load of sailors to sea with you but they don't know where they have been-- just in a lot of water. So it is very easy to keep your secret. So these navigators began to make pyramids and other forms. You will find them in India and we find in Babylon, the beginnings of our very important kind of mathematics: of the 60-degree angles, of the 360 degree concept, of the 60-minute seconds, and so forth. The first real handling of time and angles-- which are the very</p>

Synergetics Dictionary

<p>RBF DEFINITIONS (3)</p> <p><u>Secrecy</u>: <u>Secrecy of Mathematical Knowledge</u>: <u>Navigation</u>: (Cont.)</p> <p>essence of the navigation. I think that these secrets were deliberately hidden by the priests and kept from the people, even possibly from the kings.</p> <p>"At any rate the priests of the Roman Catholic Church began to tell me that this is a hierarchy of Heavenly Host . . . we have all kinds of legends mixed up here, but I think that this is one way that the priesthood found a way of carrying very important mathematical information."</p> <p style="text-align: right;">- Cite Oregon Lecture #7, pp. 252-253. 11 Jul'62</p>	<p><u>Secrets</u>: <u>Secretion</u>:</p> <p style="text-align: center;">See Cyclic Bundling of Experiences, May'49 Duality of Universe, May'49</p>
<p><u>Secrecy of Mathematical Knowledge</u>: (1)</p> <p>See Vizier: Grand Vizier Wizard</p>	<p>RBF DEFINITIONS (1)</p> <p><u>Sectionless Tensioning</u>:</p> <p style="text-align: center;">See Length-to-Girth Ratio Co-orbiting of Earth & Moon Around Sun</p>
<p><u>Secrecy of Mathematical Knowledge</u>: (2)</p> <p>See Malthus, 23 Feb'72 More with Less: Sea Technology, (1)(2) Pythagoras, 18 Jun'71 Sea, 18 Jun'71 Yin-yang, (2)</p>	<p>RBF DEFINITIONS (2)</p> <p><u>Sectionless Tensioning</u>:</p> <p style="text-align: center;">See Chemical Bonds (2) Coherence, 9 Jul'62</p>
<p><u>Secrecy</u>:</p> <p>See Chronofile, (1) Dymaxion House, 13 Jul'74 Navy Sequence, (3)-(6) Sea, 18 Jun'71; 23 Jan'75 Ship, (3) Spaceship Earth, (c) Understanding, 1 Apr'49</p>	<p>RBF DEFINITIONS</p> <p><u>Seeability</u>:</p> <p>"Our <u>seeability</u> is so inherently local that we never see anything but the asymmetries."</p> <p style="text-align: right;">- Cite RBF to Bill, Blackstone Hotel, Chicago, 31 May'71 - Citation and context at <u>Asymmetry</u>, 31 May'71</p>

Synergetics Dictionary

HBF DEFINITIONS

Seeability:

"That's what I've been gibing you all the time, with the positive and the negative: I've been giving you the visible and the invisible. That's exactly what we've been accounting. So you can only see the locally asymmetrical. You can't see the total. . . . You'll never see anything but the asymmetrical, because we are so local. Our seeability is inherently local."

- Cite tape transcript RBF to EJA and RO'R, Chicago, 31 May '71.

RBF DEFINITIONS

Seed:

"Nature is always shipping tension by seeds. The compression comes in locally."

- Cite RBF to EJA, 3200 Idaho, 30 Oct'72

See: Seeability:

(1)

See Seeing
Sight
Unseeable: Unseeability
Visibility: Vision: Visual

RBF DEFINITIONS

Seed:

(1)

"Nature makes many potential 'starts.'
As for instance
All the vegetation which impounds the Sun's energy
Must be regenerated and multiplied.
But it cannot have its progeny
Within its immediate vicinity,
As the trees shadow
would prevent its young
From impounding the Sun's radiant energy.

"Wherefore all the trees
Launch their seeds
Into the air or upon the waters
To drift to chance landings,
Where the seeds may be favorably nourished
And grow.
The chances of such auspicious landing
Are so unfavorable
That Nature must send
Billions times billions of seeds away
From the parent vegetation,
Which, though potential of complete success,"

- Cite BRAIN & MIND, pp.153-154 May '72

See: Seeability:

(2)

See Asymmetry, 31 May'71*
Rubber Glove, 23 May'72
Symmetry & Asymmetry, Dec'71

RBF DEFINITIONS

Seed:

(2)

"May never germinate and prosper.
The airs and waters
Of the planet Earth
Are filled with the aimlessly migrating seeds."

- Cite BRAIN & MIND, p.154 May '72

RBF DEFINITIONS

Seed:

"...The vegetation impounds the Sun radiation by exquisitely orderly photosynthesis and produces beautiful orderly molecular structures, thus converting very random, cloud-interrupted radiation into orderly molecular growths as little seeds, transforming into trees, lambs, and a myriad of other highly regular organic species."

- Citation and context at Boltzmann Sequence (5), Dec'72

RBF DEFINITIONS

Seed:

"We find that in the seed nature provides a blueprint pattern tightly folded up in a triangular tension grid."

- Cite CONCEPTUALITY OF FUNDAMENTAL STRUCTURES, Ed. Kepes, 1965, p. 85.

Synergetics Dictionary

<p><u>Seeds:</u> (1)</p> <p>See Ecology Sequence Tensile Blueprints Gestating Seed Nature Ships Tension</p>	<p><u>Seeing the Whole World at Once:</u> (1)</p> <p>See World Looks at Itself</p>
<p><u>Seeds: Seed:</u> (2)</p> <p>See Boltzmann Sequence (5)* Trees (c) Fire (A) Regenerative, 1960 Shadow, 1970 Male & Female, 1 Feb'75</p>	<p><u>Seeing the Whole World at Once:</u> (2)</p> <p>See Dymaxion Afrocean World Map, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Seeing:</u></p> <p>"...Man has sensorial tunability and is sensorially aware of only one-millionth of physical reality. The little rainbow color band of human 'seeing' is less than one-millionth of the stretched-out reality of the invisible colors of all the 92 regenerative chemical elements of associative energy or of the various radiations."</p> <p>- Citation and context at <u>Optical Motion Spectrum</u> (1), 4 Mar'69</p>	<p><u>Seeing:</u> (1)</p> <p>See Optical Seeability Seeing vs. Hearing Sight Vision</p>
<p>RBF DEFINITIONS</p> <p><u>Seeing vs. Hearing:</u></p> <p>"Seeing is universal vs. hearing which is ethnic, like languages. Hearing is 700 m.p.h. and seeing is 700 million m.p.h. Television is a million times greater than radio."</p> <p>- Cite RBF at Penn Bell videotaping session, Philadelphia, 22 Jan'75</p>	<p><u>Seeing:</u> (2)</p> <p>See Moving Picture Continuity, Jun'66 Perception, Jun'66 Picture, 1938</p>

Synergetics Dictionary

Segment of Inclusion: Segment of Conclusion:

See Teleology: Bow Tie Symbol, 1938

RBF DEFINITIONS

Self:

"To ~~an~~^{the} human environment is everything that isn't me.
And universe is 'everything that isn't me' and me--
environment and me."

- Cite RBF to EJA
Beverly Hotel, New York
45 March 1971

- Citation at Environment, 15 Mar'71

Selectable: Selectiva:

(1)

See Electable
Elective
Options
Size-selective
Tunability

RBF DEFINITIONS

Self:

"Am self which is entirely metaphysical
Is not the metaphysically observable
Biological organism
With which it is intimate
Any more than is the telephone
The self of those who communicate
With one another
By means of the telephone's observable
Frequency differentiating capability
As it relays its tunable patterning
To the physical nervous system's tuning
To be arrayed for consideration
By the metaphysical self, the mind."

- Cite RBF Draft BRAIN & MIND, pencil, 1971

Selectable: Selective:

(2)

See Resonance Field, 13 May'73
Spherics, 30 Nov'72
Modulations, 17 Jun'75

Self-annihilation:

See Economists, Jun'66
Television: Third Parent, May'65

RBF DEFINITIONS

Self:


"Self is not a priori evident."

Self-awareness:

See Complementary, May'72

- Context and citation at Synergetic Strategy of Commensuring
With Totality, 28 May'72

Synergetics Dictionary

<p><u>Self-balancing:</u></p> <p style="text-align: center;">See Humans as Machines, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Self-communicate:</u></p> <p>"Communication will probably be accomplished by thinking alone, ergo more swiftly and realistically than by sound and words."</p> <p style="text-align: right;">- Citation & context at <u>Individuality</u>, 9 Jan'75</p>
<p><u>Self-bounding System:</u></p> <p style="text-align: center;">See Tetrahedron as Conceptual Model, 28 Jan'73</p>	<p>RBF DEFINITIONS</p> <p><u>Self-Communicate:</u></p> <p>N.Y. Times, 15 May'72, H.M. Schreck, Jr. "Immunology: A Code Spelling Life or Death": "The populations of cells <u>communicate</u> with one another and trigger into activity any of several kinds of immune response."</p> <p>R.B.F. Marginalia: "Only number can self-communicate as structural or destructural associabilities. "</p> <p style="text-align: right;">- Cite RBF Marginalia presumably 15 May'72</p>
<p><u>Self-chilling:</u></p> <p style="text-align: center;">See Ghana Dome: Self-chilling Machine</p>	<p><u>Self-communicate:</u> (1)</p> <p style="text-align: center;">See Communication to Self or Others</p>
<p>RBF DEFINITIONS</p> <p><u>Self-communicate:</u></p> <p>EJA: "How can you communicate without culture? How can you have language without culture?"</p> <p>RBF: "You don't need language to communicate with self. It can be nonverbal; that's the point. We may not know the name for a 'circle' but we would recognize it absolutely every time.</p> <p>"Children self-communicate putting blocks in slots with no words about it at all."</p> <p style="text-align: right;">- Cite RBF to EJA, 3200 Idaho, Wash. DC., 8 Apr'75</p>	<p><u>Self-communicate:</u> (2)</p> <p style="text-align: center;">See Zoned System: Zone Limits, 1954 Individuality, 9 Jan'75"</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Self-Congruence Packing:</u></p> <p>"The openmost condition or single bonding corresponds in flexibility or mutability with the behavior of gases. The medium packed condition or double bonded hinged arrangement corresponds to the behaviors of liquid aggregates. The closest packing triple bonded fixed-end arrangement corresponds with rigid structural molecular compounds; the closest packing concept which was developed in respect to spherical aggregates only with their concave octa and vector equilibrium spaces between spheres, overlooks a much closer packed condition of energy structures, which however had been comprehended in organic chemistry, that of quadrivalence and four-fold bonding which corresponds to outright congruence of the octahedra or tetrahedra with themselves. When carbon transforms from its soft, pressed cake, carbon-black, powder, or charcoal arrangement to its diamond arrangement it converts from triple bonding or so-called closest arrangement to quadrivalence. We might call this <u>self-congruence packing</u>, as a single tetrahedron arrangement in contradistinction to closest packing as a neighboring group arrangement of spheres."</p> <p>- Cite RBF Ltr. to Prof. Von Hochstetter, 28 Oct '64, p. 2.</p>	<p><u>Self-consciousness:</u></p> <p>See Life, (pp.8-9) Jan'72</p>
<p><u>Self-congruence Packing:</u></p> <p>See Self-packability Clear Space Polyhedra Multiple Self-congruence</p>	<p><u>Self-considerate Society:</u></p> <p>See Austronesia, 10 Aug'75</p>
<p><u>Self-congruence:</u> (1)</p> <p>See Multiple Self-congruence Self-packability</p>	<p><u>RBF DEFINITIONS</u></p> <p><u>Self-consideration:</u> (1)</p> <p>See Tetrahedron Discovers Itself and the Universe Universe Considers Itself World Looks at Itself Parts: Each Part in View of the Others Self-considerate Society</p>
<p><u>Self-congruence: Self-congruent:</u> (2)</p> <p>See Octahedron, 10 Dec'75</p>	<p><u>Self-consideration:</u> (2)</p> <p>See Plane, 19 Feb'72</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Self-Debiasing:</u></p> <p>"First your members can develop an effective anticipation of the things that are to happen. Though it is impossible to anticipate the precise set of transitional events, you can be in the vicinity of important event occurrences. Your most important task is to help your members become comprehensive by intellectual conviction and self-debiasing, not as an ignorant yielding, but as a progressively informed displacement of invalid assumptions and dogma by discovery of the valid data. In this development the young will lead the old in swiftly increasing degree."</p> <p style="text-align: right;">- Cite RBF in AAUW Journal, Pp. 177-8, May '65</p>	<p><u>Self-definition:</u></p> <p style="text-align: center;">SEE MIT Sequence, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Self-Deception:</u></p> <p>"The degree of self deception is proportional to the width of the angle of disagreement."</p> <p style="text-align: right;">- Cite RBF in "The Listener" transcript by John Donat, 26 Sep'68</p>	<p><u>Self-development:</u></p> <p style="text-align: center;">See Man as a Function of Universe, (2)</p>
<p><u>Self-deception:</u> (1)</p> <p style="text-align: center;">See Omission vs. Admission</p>	<p><u>Self-dichotomizing:</u></p> <p style="text-align: center;">See Star Tetrahedron & VE, 9 Nov'73</p>
<p><u>Self-deception:</u> (2)</p> <p>See Possession, 10 Jun'74 Life is a Sumtotal of Mistakes, (1) Mistake, 7 Nov'75 Sin, 7 Nov'75 Crowd-reflexing, 7 Nov'75</p>	<p>RBF DEFINITIONS</p> <p><u>Self-discipline:</u></p> <p>Q. "Which of the disciplines do you think are the most critical for our current problems?"</p> <p>RBF: "The only important one of all the disciplines is self-discipline. At the front of one of my books I have said 'Dare to be naive.' That is what we must all dare to be--to make our own choices from all the shams around us.</p> <p>"Each of us must dare to go along with the truth as experience teaches us and as our own intellect realizes its significance only in relation to the welfare of all humans around their local Universe functioning as information apprehenders and articulators in relation to the integrity of eternal regeneration."</p> <p style="text-align: right;">- Cite RBF to White House Fellow Anspacher; Watergate Hotel, Wash, DC: 28 Mar'77</p>

Synergetics Dictionary

RBF DEFINITIONS

Self-Discipline:

"Today I see many engaging in yoga. I am sympathetic with what they're trying to do, but I don't think you have to be coached by yoga or anything else to learn self-discipline. You've got to discover yourself. I don't think you can get it from somebody else. I don't think you can get it by having somebody else psychoanalyze you. I see many of my students who go to psychoanalysts getting in more and more trouble rather than getting out of it. And the ones who don't go in for being psychoanalyzed I see learning to understand themselves and consciously disciplining themselves. Self-discipline is the key-- and we've all got it if we want to use it. . . . At the time I was going through this self-discipline process I evolved a philosophy which assumed that most problems of humanity can be solved."

- Cite RBF quoted in HOUSE & GARDEN Interview by Beverly Russel, p. 199, May '72

Self-discipline: Self-disciplining:

(2)

See Conceptioning, 1960*
 General Systems Theory, Jun'66
 Periodic Experience, (8)
 Plumbing, (1)(2)
 Thinking, 1960; (A)(B)
 World Game, Jun'66
 God, 7 Nov'75
 Anger, (1)-(3)

RBF DEFINITIONS

Self-Discipline:

"The fundamental self-discipline conceptioning . . . is the only real educational process."

- Cite NEHRU SPEECH, p. 22, 13 Nov '69

Self-discovery:

(1)

See Tetrahedron Discovers Itself
 Universe Considers Itself

RBF DEFINITIONS

Self-Discipline:

"Systematic conceptioning and recollected conceptioning, both universal and local, which progressively traces, relates, and compares nonsimultaneously observable locally functioning entities, is self-disciplined."

~~- Cite OMNIDIRECTIONAL HALO, p. 135, 1960~~

- Citation at Conceptioning, 1960

Self-discovery:

(2)

See Synergetic Strategy of Commencing with Totality,
 28 May'72

Self-discipline:

(1)

See Salvation vs. Self-discipline

Self-divisioning:

See Triaconrahedron, 31 Jul'77

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Self-education:</u></p> <p>"The highest priority of education should be to accommodate humanity's innate, chromosomically programmed, intellectual appetite for comprehending the interrelationships between all the events of which their senses progressively inform them. Our schools have failed to adequately satisfy those appetites. They have failed to inspire because inspiration springs from realization of the interrelated significances...."</p> <p>"Alternative education provides opportunities for the spontaneous learner to apprehend the whole picture and thus to become a comprehensivist. This is what young people instinctively desire...."</p> <p>"One of the most important events of the education revolution now under way is the discovery that each of us is born comprehensively competent and spontaneously coordinate, quite capable of treating large quantities of data and families of variables from the start. A child spontaneously integrates total information. It craves to understand and be understood.... For half a century I have explored self-educating ways for making the world work for everyone. It is exciting to witness groups of dedicated young people... peeling of and investing their time in alternative routes... which hold high promise for them."</p> <p>- Cite RBF Introduction to Guide to Alternative Colleges, 1974</p>	<p><u>Self-entrapment:</u></p> <p style="text-align: center;">See Word Trends, May'44</p>
<p><u>Self-education:</u> (1)</p> <p style="text-align: center;">See Self-teaching</p>	<p>RBF DEFINITIONS</p> <p><u>Self-Evident:</u></p> <p>"Self is not a priori evident."</p> <p style="text-align: center;">- Citation and context at <u>Synergetic Strategy of Commencing With Totality</u>, 28 May'72</p>
<p><u>Self-education:</u> (2)</p> <p style="text-align: center;">See Education, 20 Jan'75 Conceptual Mathematics, (2) Learning, 18 Jul'76</p>	<p><u>Self-evident:</u></p> <p style="text-align: center;">See Axiomatic Obvious</p>
<p><u>Self-embracement:</u></p> <p style="text-align: center;">See Vectc. Equilibrium, 22 Jun'72</p>	<p><u>Self-expansive:</u></p> <p style="text-align: center;">See Randomness, Dec'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Self-experience:

"So the strategy I was employing, and the tiny little capital you and I have, which is just our experience. Self-experience. Beautiful equipment. . . . And how it can really be turned to the powerful advantage of the many."

- Citation and context at Individual Economic Initiative, 19 Feb'73

Self-halving:

See Triacontrahedron, 31 Jul'77

RBF DEFINITIONS

Self-experience:

"...Experience is the vital factor... since one can think and feel consciously only in terms of experience, one can be hurt only in terms of experience. When one is hurt, then somewhere in the linkage of his experience can be discovered the parting of the strands that led to the hurt. Therefore it follows that strict adherence to rationalization, within the limits of self-experience, will provide corrections to performance obviating not only for one's self, but for others, the pitfalls that occasion self-hurt...."

- Citation and context at Nationalization Sequence (3), 1938

Self's Honey-seeking Preoccupation:

See Bee, 9 Nov'72

RBF DEFINITIONS

Self-experience:

See Time Vector, 24 Sep'73

Self-hurt:

See Self-experience, 1938

Self-expression:

See Architecture, May'70

Self-inexplicable:

See Progressions, May'49

Synergetics Dictionary

<p><u>Self-inside-outable:</u> <u>Self-inside-cutting:</u></p> <p>See Octahedron Model of Doubleness of Unity, (1)(2) Octave Wave, 5 Mar'73</p>	<p><u>Self-interstabilizing:</u></p> <p>See Prime Otherness, 24 Sep'73 Tetrahedron, Aug'72; 24 Sep'73</p>
<p><u>Self-interdeterioration:</u></p> <p>See Tensegrity: Miniature Vasts: Positive & Negative, Dec'61</p>	<p><u>Self-invertable:</u></p> <p>See Octave Wave, 5 Mar'73</p>
<p><u>Self-interference:</u> (1)</p> <p>See Non-self-interference Pattern Integrity: Atomic Knots Tensegrity Model of Self-interference of Energy</p>	<p>RBF DEFINITIONS</p> <p><u>Self-ish:</u></p> <p>"If one wishes to obtain a definite answer from Nature one must attack the question from a more general and less <u>self-ish</u> point of view."</p> <p>- Cite RBF holograph, undated, in Max Planck's "Survey of Physics," London & NY.</p>
<p><u>Self-interference:</u> <u>Self-interfering:</u> (2)</p> <p>See Design Covariables: Principle Of, 1959 Mass, 1959 Matter vs. Radiation, 7 Nov'73 Ninety-two Elements, 25 Aug'71 Pattern Integrity, 25 Aug'71 Pattern Strip Aggregate Wrapabilities, 19 Dec'73 Tetrahedral Dynamics, (2) Touch, 29 Dec'58 Unique Frequencies, 9 Jul'62 Structure, 3 Oct'72 Object, 9 Nov'73 Einstein Equation: $E = Mc^2$, 1959</p>	<p>RBF DEFINITIONS</p> <p><u>Selfishness:</u></p> <p>"...Vastly wealthy interests... were continuing to do what money had done in the past: i.e., to rationalize selfishness. Assuming the political concept of fundamental inadequacy of life-support for all the humans around our planet, selfishness had been able to say, 'I have those for whom I'm responsible and because there is not enough life-support for all, I am obliged to do various things that are utterly and completely selfish,'"</p> <p>"I felt that the Club of Rome's pronouncement of the 'Limits to Growth' represented history's last attempt on the part of organized capitalists' selfishness to justify to the world public why their wealth should be unable to do anything about the third world."</p> <p>- Citation & context at Club of Rome: <u>Limits to Growth</u>, (A); (B), 20 Sep'76</p>

Synergetics Dictionary

RBF DEFINITIONS

Selfishness:

"My greatest discovery-- besides my mathematics-- is in sociology: the realization that selfishness can no longer be rationalized. The fears of resource inadequacy are no longer valid. Probably only several hundred thousand people know this. Nothing could be more critical than the fact that the individual is now unbuttoned from his selfishness."

- Cite RBF to EJA in Pagano's Rest., Phila. PA., 22 Jun'75

Selfishness:

(2)

See Antisynergetic, Jan'72
 Club of Rome: Limits to Growth, (A)(B)*
 Economics, 16 Feb'73
 Inflation, Sep'73
 Invisible Architecture, (F)
 Obvious, Jan'72
 Pirates: Great Pirates, (4)

RBF DEFINITIONS

Selfishness:

"Selfishness is a drive so that we'll be sure to regenerate. It has nothing to do with morals."

- Citation and context at Economics, 16 Feb'73

RBF DEFINITIONS

Selfist:

". . . all the short-sighted, expedient 'things' applauded by the most powerfully advantaged selfists, so swiftly consigning man to extinction as 'unfit' for survival. . . "

- Citation and context at Up and Down Sequence (2), 13 Nov'69

RBF DEFINITIONS

Selfishness:

"Selfishness (self-preoccupation pursued until self loses its way and self-generates fear and spontaneous random surging, i.e., panic, the plural of which is mob outburst in unpremeditated wave synchronizations of the individually random components.?)"

- Cite NO MORE SECONDHAND GOD, "Universal Requirements of a Dwelling Advantage." p. 49. (Anchor.) 1960

Self-knotting:

See Ninety-two Elements, 9 Apr'40
 Pattern Integrity, 25 Aug'71

Selfishness:

(1)

See Anonymity
 Enlightened Selfishness
 Idea Stealing
 Monofocus Upon Self
 Pollution: Infinite Room to Pollute
 Unselfishness
 Rationalization of Selfishness

Self: I Would Like to Be Myself:

See Identity, May'70

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p>Self & Nonself:</p> <p>"Self is metaphysical and All that self observes is physical Which is not to say That the environment Which is also all the non-self Is all physical For all the non-observable experiences Of abstract cognition, Which consider and re-consider The observable experiences,-- Are metaphysical."</p> <p style="text-align: right;">- Cite RBF Draft, BRAIN & MIND, pencil 1971</p>	<p><u>Self-Now:</u></p> <p style="text-align: right;">See Now Hourglass: Cross Section of Teleological Bow Tie</p>
<p>RBF DEFINITIONS</p> <p><u>Self-Now:</u></p> <p>"...Genius has the ability to fix events by the convergent angle of two or more sight lines, not only in time (or space) past, but also, in time (or space) ahead, from the central perspective of <u>self-now</u>. Resultantly it becomes possible for genius first to analyze teleologically such 'fixed' phenomena, and then to objectify them in a precise time-energy composition. Genius's dual or multiple personalities may be said to be representative of a breadth of viewpoint, more-than-average, highly worldly, and having an exquisite sense of Timeliness."</p> <p style="text-align: center;">_ Citation and context at <u>Genius</u>, 1938</p>	<p><u>Self-organizing Principle:</u></p> <p style="text-align: right;">See Conceptuality, 19 Feb'72</p>
<p>RBF DEFINITIONS</p> <p><u>Self-Now:</u></p> <p>"Macro-exquisite speed-of-light self-interfering radiation patterns energetic self-tying into concentric knots of relative mass in a mathematically idealized variety of symmetrical-asymmetrical atomic assemblages whose local micro-orbiting induces</p> <p style="text-align: center;">N O W</p> <p style="text-align: center;">which multiplies by progressive subdividing into microscopically ever greater speeds of transformation through insectine phase magnitudes dividing into the micro-organisms phase, and then dividing progressively into molecular and atomic phases; then phasing into radiativity at 586,000 m.p.s, expanding once more to micro-eternity of no-time.</p> <p style="text-align: right;">- Cite RBF holograph, 3200 Idaho, Wash DC, Mar'72</p>	<p>RBF DEFINITIONS</p> <p><u>Self & Otherness:</u></p> <p>"Awareness = the otherness saying 'See Me' to the observer. Awareness = the observer saying to self, 'I see the otherness.' Otherness induces awareness of self. Awareness is always otherness inductive. The total complex of otherness is the environment.</p> <p style="text-align: right;">- Cite SYNERGETICS 2 draft at Sec. 100,011; 28 Apr'77</p>
<p>RBF DEFINITIONS</p> <p><u>Self-Now:</u></p> <p>"The macro-microcosm of minimum frequency of omnidirectional interference restraint exquisite speed of light 700 million m.p.h. self-interfering radiation patterns energetic self-tying into concentric knots of relative mass in a mathematically idealized variety of symmetrical-asymmetrical atomic assemblages whose local subvisibly resolvable micro-orbiting induces the superficially deceptive motionless thingness of</p> <p style="text-align: center;">mini-micro-microcosm of NOW which</p> <p style="text-align: center;">progressive experience-won knowledge multiplies by progressive intellectually contrived instrumentally implemented exploratory subdividing into microscopically ever greater speeds of transformation through insectine phase magnitudes dividing into the micro-organisms phase, and then dividing progressively into molecular and atomic phases; then passing into radiativity at 700 million m.p.h. expanding once more into macro's 700 million at least macrocosm . . .</p> <p style="text-align: right;">- Cite RBF Holograph, 3200 Idaho, Wash DC, Mar'72</p>	<p>RBF DEFINITIONS</p> <p><u>Self & Otherness:</u></p> <p>"Experience is inherently omnidirectional; ergo there are always a minimum of twelve 'others' in respect to the nuclear observing self."</p> <p style="text-align: right;">- Citation & context at <u>Experience</u>, 19 Nov'74</p>

Synergetics Dictionary

RBF DEFINITIONS

Self and Otherness:

"Only through relationships with otherness can self learn of principles; only by discovery of the relationships existing between self and otherness does inspiration to employ principles objectively occur. There is nothing in self per se, or in otherness per se, that predicts the interrelatedness behaviors and their successively unique characteristics. Only from realization of the significance of otherness can it be learned further that only by earnest commitment of self to otherness does self become inadvertently advantaged to effect even greater commitment to others, while on the other hand all self-seeking induces only ever greater self-loss."

behaviorally

- Cite RBF galley correction to SYNERGETICS at Sec. 411.12, 2 Nov'73

RBF DEFINITIONS

Self-and-otherness Interbehaving:

"The octet truss is the evolutionary patterning... of the ever-recurrent 12 alternative options of action, all 12 of which are equally the most economical ways of self-and-otherness interbehaving-- all of which interbehaviors we speak of as Universe."

- Citation and context at Octet Truss, 24 Sep'74

RBF DEFINITIONS

Self & Otherness: Four Minimal Aspects:

"If you use the 'area' of Euler it doesn't work. You have to convert the area to nothingness to arrive at the four minimum aspects of self and otherness."

- Cite RBF to EJA, Paganmo Restaurant, U. Penn, 22 Jun'75

Self & Otherness:

(1)

See Communication to Self & Others
Observer & Observed
Otherness: At Least One Other
Otherness: At Least Twelve Others
Minimum Awareness
Awareness
Tetrahedron Discovers Itself
Integral Otherness
Tetrasystem
Individual & Group Principle

RBF DEFINITIONS

Self & Otherness: Four Minimal Aspects:

"Life, minimally described is 'awareness,' which is inherently plural for at minimum it consists of the individual system which becomes aware and the first minimum 'otherness' of which it is aware, the otherness being integrally or separately internal or external to the observing system's 14 integral topologically componentized subsystem: $4V + 4A + 6L$.

"Together the observer and the observed constitute two points differentiated against an area of nothingness with an inherent line of 'awareness'-interrelationship running between these two points. Euler's generalized formula, which he named topology, says that the number of points plus the number of areas will always equal the number of lines plus the number two, which, Goldy finds to be at minimum $2P + 1A = 1L + 2$, which minimum set of awareness aspects of life adds to four: i.e., (a) the observer; (b) the observed; (c) the line of interrelationship; and (d) the nothingness area against which the somethingness is observed.

"There are no experimentally demonstrable, absolute maximum limits. Only the minimum limit is demonstrably absolute. The minimum limit experienceable is always a 'system-- even when it looks like a point."

- Cite GOLDBLOCKS Ms. p.A3, 9 Jun'75

Self & Otherness:

(2)

See Experience, 1971; 19 Nov'74*
Scheme of Reference, 24 Sep'73
Initial Frequency, 6 Nov'72
Orbital Escape from Critical Proximity, (1)
Love, 3 Apr'75
Background Nothingness, 2 Jun'75
Me, 26 Jan'72
Thirty Minimum Aspects of a System, (B)
Timeless, Dec'71
Modules: A & B Quanta Modules, 20 Dec'73
Awareness, 28 Apr'77
Freedom, Jan'77
Human Beings & Complex Universe, (3)

Self & Otherness: Four Minimal Aspects:

See Minimum Awareness Model
Minimum Four Awareness Aspects of Life
Tetrahedron as Primitively Central to Life

Self-packability:

See Self-congruence Packing
Clear Space Polyhedra

Synergetics Dictionary

Self-perpetuating:

See Inside, 26 Jan'73

Self-querying: Self-questioning:

(1)

See Questions: Answering Questions
Question Asking

Self-polarization: Self-polarizing:

See Three-way Great-circling: Three-way Grid, 15 Feb'66

Self-querying: Self-questioning:

(2)

See Synergetics, 1959
Universe, 1959

Self-positionability:

See Star Tetra & VE, 9 Nov'73

Self-realizing: Self-realization:

See Synergetic Strategy of Commencing with Totality,
28 May'72
Bridge, 13 Nov'69

Self-nurging:

See Hunger: Stones Do Not Have Hunger, 20 May'75

Self-reassociation:

See Carbon, Jun'72

Synergetics Dictionary

Self-rebuilding Telephones:

You & I as Pattern Integrities, 22 Jan'75

Self-regeneration: Self-regenerative:

See Irreversibility, Feb'71
 Rudder Sequence, (3)
 Success, 1972
 Omnitriangulation, 3 Oct'72
 Nuclear Domain & Elementality, (1)

RBF DEFINITIONS

Self-Regenerative:

"The significance of Einstein's radiational top speed is that there is a point of complete regeneration by which our Universe is the only and minimum perpetually self-regenerative system. It is a self-regenerative Universe of fantastic complexities and design of great integrity in which the sum total of running through the total film takes hundreds of billions of years before it accomplishes its remotest re-wow."

- Cite Museums Keynote Address Denver, p. 13. 2 Jun'71

Self-scavenging:

See Hunger: Stones Do Not Have Hunger, 20 May'75

RBF DEFINITIONS

Self-regenerative:

"Our universe is the only, and the minimum, perpetual motion machine. It is self-regenerative."

- Cite RBF address Am. Assn of Museums, Denver, 2 June 1971.

RBF DEFINITIONS

Self-seeking:

"Self-seeking brings a potential loss which engenders first caution, then fear: fear of change, change being inexorable. Fear increases and freezes. Self-seeking always eventuates in self-destruction through inability to adapt."

- Cite RBF to EJA, 3200 Idaho, 7 Nov'72; incorporated in SYNERGETICS draft at Sec. 411-24. Rewrite as of 8 Nov'72
 411.25

Self Regeneration: Self-regenerative:

(1)

See Closed System
 Ninety-two Elements
 Perpetual Motion Machine

RBF DEFINITIONS

Self-Seeking:

"Self-seeking brings a potential loss which engenders first caution, then fear: fear of change, change being inexorable. Self-seeking always eventuates in self-destruction through inability to adapt."

- Cite RBF to EJA, 3200 Idaho, 7 Nov'72 incorporated at SYNERGETICS draft at Sec. 411.24, 8 Nov'72
 23

Synergetics Dictionary

<p><u>Self-seeking:</u></p> <p>See Loss: Discovery Through Loss</p>	<p><u>Self Starter:</u> (2)</p> <p>See Biosphere, (3) Brain's TV Studio, 1960 Energy Capital, (2) Intellect: Equation Of, Dec'48 Social-Industrial Relay, 1 Apr'49 Nonstate, 11 Sep'75</p>
<p><u>Self-stabilisation:</u> (1)</p> <p>See Inter-self-stabilising Self-interstabilising Structural Self-stabilisation</p>	<p><u>Self-structuring:</u></p> <p>See Icosahedron as Electron Model, 7 Mar'73 Universal Integrity: V6 & Icosa, (1) Mites & Quarks as Basic Notes, (1)(2)</p>
<p><u>Self-stabilization:</u> (2)</p> <p>See Structure, 21 Dec'71; Nov'71; 8 Feb'71; 13 Nov'69; Mar'71 Necklace, (A)-(C) Triangle, 9 Nov'73 Stable & Unstable Structures, 7 Jun'72 Omnitriangulation, 3 Oct'72</p>	<p><u>Self System:</u></p> <p>See Extraorganic Travel, 26 May'72 Probability, 20 Feb'72</p>
<p><u>Self Starter:</u> (1)</p> <p>See Main Engines of Universe Group Starters</p>	<p><u>Self-teaching:</u> (1)</p> <p>See Self-education</p>

Synergetics Dictionary

<p><u>Self-teaching:</u> (2)</p> <p>See Learning, (1)(2) Dymaxion Artifacts, (1)(2)</p>	<p><u>Self:</u> (1A)</p> <p>See Bumblebee Comprehensive: Self-debiasing De-selfed Dualism of Self Ego Feedback: Self-accelerating Feedback History's Human Self-education I Identity Individual Loss: Discovery Through Loss Most Economical Way of Behaving Relative to Unity and Self Ninety-two Tendencies of Self-impoundment of Energy Nonsel Matrix of You & I Me, the Observer Me Other Outsideness of Self</p>
<p><u>Self-rightening:</u></p> <p>See Knot, 7 Nov'73</p>	<p><u>Self:</u> (1B)</p> <p>See Personality Sybchro-resonance Returning Upon Self Starting with Self Unselfishness Monofocus Upon Self Reciprocal Self-processor Unity & Self Universe Considers Itself World Looks at Itself</p>
<p><u>Self-triangulating:</u> (1)</p> <p>See Inter-self-triangulating</p>	<p><u>Self:</u> (2)</p> <p>See Annihilation, 22 Jun'75 Apprehension Lags, 11 Sep'75 Communication, 13 May'73 Environment, 15 Mar'71* Kissing, 1 May'77 Octet Truss, 24 Sep'73 Synergetic Strategy of Commeneing with Totality, 28 May'72* Thinking, 1938 Whole System, 28 May'72 Human Beings & Complex Universe, (3)</p>
<p><u>Self-triangulating: Self-triangulation:</u> (2)</p> <p>See Probability, (1)(2)</p>	<p><u>Self:</u> (3A)</p> <p>See Self Annihilation Self Awareness Self-bounding System Self-communicate Self-congruence Packing Self Consciousness Self-considerate Society Self Consideration Self Debiasing Self Deception Self Definition Self Development Self-dichotomizing Self Discipline Self-discovery Process Self Embraceent Self-evident Self-expansive Self Experience Self-balancing</p>

Synergetics Dictionary

<p><u>Self:</u> (3B)</p> <p>See Self Expression Self's Honey-seeking Preoccupation Self Hurt Self-inside-outable Self-interdeterioration Self Interference Self-interstabilizing Self-invertable Self-ish Selfishness Selfist Self-knotting Self: I Would Like to be Myself Self & Nonself Self-Now Self-organizing Principle Self & Otherness Self-perpetuating Self-polarizing</p>	<p><u>Semantics:</u> (1)</p> <p>See Communication Definitions Koryzbski Meaning Verbs World-around Language</p>
<p><u>Self:</u> (3C)</p> <p>See Self-positionability Self Processors Self Querying Self Realization Self-realizing Planet Self Reassociation Self-regenerative Self Seeking Self Stabilization Self Starter Self Structuring Self Saytem Self Teaching Self-triangulating Self-education Self is not A Priori Self-chilling Self-divisioning Self-halving</p>	<p><u>Semantics:</u> (2)</p> <p>See Babbling, 18 Mar'72 Realization, May'49 Sphere, 20 Feb'73* Me, 26 Jan'72; 28 Oct'73</p>
<p><u>Selling:</u> <u>Selling Anything:</u></p> <p>See Obsolescence, Apr'72 Mobile Rentability vs. Immobile Purchasing, 20 Sep'76</p>	<p><u>Semiautonomous Dwelling Facilities:</u></p> <p>See House, 1971 Inventionality Sequence, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Semantics:</u></p> <p>"If you get too semantically incisive the reader loses all connections with anything he has ever read before. That might not be a great loss. But I like to assume that the reader can cope with his reflexes and make connections between the old words and the new and better words..."</p> <p>- Citation and context at <u>Sphere</u>, 20 Feb'73</p>	<p>TEXT CITATIONS</p> <p><u>Semihelix:</u></p> <p>Synergetics text at Sec. 623,11</p>

Synergetics Dictionary

Semimetaphorical:

See Verity, 29 Dec'73

RBF DEFINITIONS

Senses:

"The nonsimultaneity and dissimilarity
Of the complementary interpatternings
Produce what we sense to be reality,
Otherwise they would cancel one another
And there would be no sensoriality."

- Cite BRAIN & MIND draft, p.13, 1971

RBF DEFINITIONS

Semisymmetry:

"Semisymmetry means that out of the six edges of a tetrahedron there are two pairs of symmetries.

"An isosceles is semisymmetric."

"Symmetry = equiangle
Semisymmetric = isosceles
Asymmetric = scalene

"People want to be either symmetric or asymmetric. They love bias, but the don't like isosceles, the fence-straddler. Real love is isosceles: inclusive but not exclusive. What people seem to mean by love is they want the other to join them: scalene. The real love includes the other; it is omni-inclusive, semisymmetric, isosceles."

- Cite RBF to EJA, 3200 Idaho, Wash DC, 15 Oct'72

RBF DEFINITIONS

Senses:

"The senses have to do with the brain. The senses, per se, are nothing. Just the brain. And it's what began the real metaphysical you-and-I, feel about what the brain is saying. . . You take the senses away, then there is no consciousness. Consciousness comes from experience."

- Cite WATTS TAPE, p. 14, 19 Oct '70

RBF DEFINITIONS

Senses:

(1)

"The range of the first three senses are so close together, and sight is so different, that we may best rank them as #1, touch, being a primary set; with both #2, olfatorial coupled with #3, aural, as a secondary set; and #4 sight, as a tertiary set: wherefore in effect, touch is the yesterday set; while the olfatorial and aural (what you are smelling, eating, saying, and hearing) are the now set; while sight (what only may be next) is the future set. (We can seem to see, but we have not yet come to it.) Whereas reality is eternally now, human apprehending demonstrates a large assortment of lags in rates of cognitions whose myriadly multivariated frequencies of myriadly multivariated, positive-negative, omnidirectional aberrations, in multivariated degrees, produce such elusively off-center effects as possibly to result in an illusionary awareness of an approximately unlimited number of individually different awareness patterns, all of whose relative imperfections induce the illusion of a reality in which 'life' is terminal, because physically imperfect; as contrasted to mind's discovery of an omni-interaccommodative complex of a variety of different a priori, cosmic, and eternal principles, which can only be"

- Cite RBF addition to SYNERGETICS galley at Sec. 801.12, 22 Nov'73 [13]

RBFDEFINITIONS

Senses:

". . . Fractional information is furnished only by those wave frequencies which are directly apprehendable exclusively within man's very limited sensorial spectrum frequency bands-- tactile, olfatorial, aural and optical-- and these sensorial frequencies in turn occur only as minuscule trace zones and only at the middle ranges of the now partially explored, obviously vast and inferentially extensible electromagnetic frequency spectrum"

- Cite NO MORE SECOND HAND GOD, pp 86,87 9 Apr'40

RBF DEFINITIONS

Senses:

(2)

"Intellectually discovered, have no weight, and apparently manifest a perfect, abstract, eternal design, the metaphysical utterly transcendent of the physical."

- Cite RBF addition to SYNERGETICS galley at Sec. 801.12, 22 Nov'73 [13]

Sense Disconnection:

See Dollar Bills: \$200 Billion One-dollar Bills Circling Around Earth, (2)

Synergetics Dictionary

Sensitive: Sensitivity:

(2)

See Artist: Histrionics (1)
Average Man (1)(2)
Intuition Sequence (6); 15 Jun'74
Reflexes, 2 Jun'71
Earning a Living, 2 Jun'71
Thinking, 10 Sep'75
Psychiatry, (2)(5)
Anger, (1)

RBF DEFINITIONS

Sensoriality:

"Sensoriality is a corporeally external phenomena--reportingly relayed inwardly to the brain and therein imaginatively scanned by the mind which conceptualized independently in generalized formulations such as the conception of a nuclear grouping around a nucleus, quite independently of size."

- Citation & context at Brain & Mind, 13 Nov'69
- ~~Cite MIND & BRAIN, p. 12, 13 Nov'69~~

RBF DEFINITIONS

Sensorial Identification of Reality:

(1)

"From physics we learn that every fundamental behavior of Universe Always and only coexists with a nonmirror-imaged complementary. The nonsimultaneity and dissimilarity Of the complementary inter patterning pulsations Integrate to produce The complex of events We sensorially identify as reality. Without the pulsative asymmetries and asynchronous lags The complementations would cancel out one another And centralize equilibrably. And there would be no sensoriality, Ergo, no self-awareness, no life; For we have also learned from physics That all the positive and negative weights Of the fundamental components of matter Balance out exactly as zero. Life may well be a dream, A comedy and tragedy Of errors of conception Inherent in the dualistic imaginary assumption Of a self differentiated From all the complex otherness
- Cite BRAIN & MIND, pp.96-97 May '72

RBF DEFINITIONS

Sensoriality:

"Size and intensity are sensorial comparing functions of the special case experiences by brain and not by mind. Mind is concerned only with principles that hold true independently of size yet govern the relative size relationships."

- ~~Cite MIND & BRAIN, p. 12, 13 Nov'69~~
- Citation at Brain and Mind, 13 Nov'69

RBF DEFINITIONS

Sensorial Identification of Reality:

(2)

"Of reasonably conceivable Universe For it must be remembered That no human has ever seen directly Outside himself. What we call seeing Is the interpretive imagining in the brain Of the significance and meaning Of the nervous system reports Of an assumed outsideness of self, All of which organic design conception May be that of a great intellect Which is inventing Universe progressively Evolving mathematically elegant Integral equations For each conceivable challenge Including the invention You and me. But you and I cannot escape And are given extraordinary faculties Which we are supposed to use. So here we go again From right where we are Now."
- Cite BRAIN & MIND, p.97 May '72

RBF DEFINITIONS

Sensoriality:

"The word 'form' implies direct sensoriality. The word 'conformity' likewise implies direct sensoriality--it means dealing only with forms."

- ~~Cite MIND, p. 104, 10 Oct'63~~
- Citation at Form, 10 Oct'63

RBF DEFINITIONS

Sensoriality:

"The omni-interactions impinge on your nervous system in all manner of frequencies-- some so high as to appear 'solid' things, some so slow as seeming to be 'absolute voids.'"

- Cite SYNERGETICS PART 2 - "Conceptuality: Doppler Effect."
~~HP magazine 26 Apr 1971~~
- Citation at Halo Concept, 25 Apr'71

RBF DEFINITIONS

Sensorial/ Model:

"Experience is always sensorial and so I can always get a sensorial base or model."

- Citation & context at Experience, 28 Apr'74

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sensorial Reflex:</u></p> <p>"Humanity's intellect and <u>sensorial reflexes</u> are completely uncoordinated. We see clouds floating by, birds flying and people moving, but we can't see plants or humans growing. We can't see the economic charts realistically: Humanity gets out of the way only when it sees the motion..."</p> <p>"Like parrots, we learn to recite numbers without any sensorial appreciation of their significance. We have yielded so completely to specialization that we disregard the comprehensive significance of information."</p> <p style="text-align: right;">- Citation and context at ████████ <u>Invisible Motion</u>, 13 Mar'73</p>	<p><u>Sensorial & Nonsensorial:</u></p> <p style="text-align: right;">See <u>Inside-outing</u>, 13 Nov'69</p>
<p>RBF DEFINITIONS</p> <p><u>Sensorial Spectrum:</u></p> <p>"Apprehension means information furnished by those wave frequencies tune-in-able within man's limited <u>sensorial spectrum</u>."</p> <p style="text-align: right;">- Cara Synthesis, "Universes," Sec. 302, 1971 - Citation at <u>Apprehension</u>, 1971</p>	<p><u>Sense: Sensoriality:</u> (1A)</p> <p style="text-align: right;">See <u>Architectural Aesthetics: Six S's</u> <u>Abstract vs. Sensorial</u> <u>Angular Sense</u> <u>Aural</u> <u>Common Sense</u> <u>Common Sense: Perceptual Peephole</u> <u>Directional Sense</u> <u>Electromagnetic Spectrum</u> <u>Extrasensoriality</u> <u>Human Sense Ranging & Information Gathering</u> <u>Local Information-sensing Devices</u> <u>Olfactorial Sense</u> <u>Optical Tuning & Scanning</u> <u>Hearing</u> <u>Pattern Sense</u> <u>Sensorial & Nonsensorial</u> <u>Smellable</u> <u>Spherical Sensation</u> <u>Seeing: Seeability</u> <u>Satellite: World Satellite Sensing</u></p>
<p><u>Sensorial-frequency-spectrum Inventory:</u></p> <p style="text-align: right;">See <u>Individual Universes</u>, 28 Oct'73</p>	<p><u>Sense: Sensoriality:</u> (1B)</p> <p style="text-align: right;">See <u>Sweepout</u> <u>Sight: No Man has ever Seen Outside of Himself</u> <u>Inventory of Sensations</u> <u>Tunability</u> <u>Form = Sensoriality</u> <u>Taste</u> <u>Integral Functions of Man</u> <u>Non-sensoriality: Infra & Supra</u> <u>Tactile</u> <u>Visual</u></p>
<p><u>Sensorial Spectrum:</u></p> <p style="text-align: right;">See <u>Invisible Reality</u>, May'72 <u>Twelve Universal Degrees of Freedom: General Systems</u>, (ii)(III)</p>	<p><u>Sense: Sensoriality:</u> (2)</p> <p style="text-align: right;">See <u>Apprehension</u>, 1971* <u>Brain & Mind</u>, 13 Nov'69* <u>Disconnect</u>, 13 Nov'69 <u>Form</u>, 10 Oct'63* <u>Halo Concept</u>, 25 Apr'71* <u>Invisible Motion</u>, 13 Mar'73* <u>Experience</u>, 28 Apr'74* <u>Communications Hierarchy</u>, (4) <u>Dynamic vs. Static</u>, 12 Nov'75</p>

Synergetics Dictionary

Sense: Sensoriality: (3)

See Sense Disconnection
 Sensibility
 Sensitive: Sensitivity
 Sensorial Identification of Reality
 Sensorial Model
 Sensorial Reflex
 Sensorial Spectrum
 Sensorial & Nonsensorial
 Sensing, Storing & Intuiting Device
 Sensings & Eventings

Sense Phrases: (D)

See Democratically Coagulating
 Distortion Massaged to the Center

SENSE PHRASES (A)

See Attraction Link-up
 Angularly Hinged Convergence

Sense Phrases: (F)

See Fibrous Crystalline Units
 Fit: Pressured or Tensed Fit
 Force-fluids

Sense Phrases: (B)

See Bounce-impel

Sense Phrases: (G)

See Girth-tensed Bonds
 Glimpse-discover
 Gear-locked

Sense Phrases: (C)

See Cleave-roll
 Coalescing Adherence
 Corkscrew Spiral Tracerics
 Contact Coincidence
 Critical Convergence & Flying Huddle
 Critical Proximity Co-orbiting
 Corner-converge

Sense Phrases: (H)

See Holding Patterns of Energy

Synergetics Dictionary

<p><u>Sense Phrases:</u> (I)</p> <p>See Impact Extrusion Invisible Trampoline Instrumental Hook-up Interface Couplings Indrinking Internestability Intergearred Mobility Freedoms</p>	<p><u>Sense Phrases:</u> (P)</p> <p>See Pattern Strip Aggregate Wrapabilities Precessional Peel-off Pumping Fraction Factors Push-pull Members Perimeter Tangent</p>
<p><u>Sense Phrases:</u> (J)</p> <p>See Jet Stilts: Jet-stilting</p>	<p><u>Sense Phrases:</u> (R)</p> <p>See Reach-miles</p>
<p><u>Sense Phrases:</u> (K)</p> <p>See Kiss: Locked Kiss</p>	<p><u>Sense Phrases:</u> (S)</p> <p>See Scratch-chorded Severance-tracing Shuttle-woven Smell-discover Spin-halving Stretch-press Swivel-moored Self-scavenging</p>
<p><u>Sense Phrases:</u> (O)</p> <p>See Omniembracing Squeeze Ovational Gearing Off-molded Offspring Omnitriangularly Oriented Evolution</p>	<p><u>Sense Phrases:</u> (T)</p> <p>See Tastebuds of Sound Tangential Avoidance Thrust-throw Touch-feel Tepees: Half-spin Tepee Twist Twist-sprung Twist-pass Torque Momentum Tendril Curve</p>

Synergetics Dictionary

Sense Phrases:

(U)

See Unpeel the Gravitational
Unwrap the Orbitals
Unbandage the Sphere

Separate: Separating Out:

(2)

See Halfway-round-the-Worlding (1)
Plus One, 9 Jul'62
Stability, 18 Mar'69
Polyhedron, 1 Jan'75
Life, 16 Aug'50
Plumbing, (1)
Boeing 747 Sequence, 22 Jun'75
Synergy, Nov'71
Human Beings & Complex Universe, (12)

Sense Phrases:

(V)

See Vacuum-fulcrumed Cars
Vectorial Near-miss
Vertex-vortex Rotations
Variable Strands Braiding
Visual Symphony

SEQUENCES: METAPHORS

(A)

See Animate & Inanimate Sequence
Agricultural Accounting System
Air is Socialized
Airocean World Map
Airplanes: Far Apart in the Sky
Airplanes: Four Airplanes in the Sky
Airplanes Stacked Up For Landing
Airplane Flight As Lift
Airplane Stalled Airplane
Action-reaction-resultant
Aesthetics of Uniformity
Atomic Computer Complex
Autonomous Living Technology Packet
Average Human Being
Acres Per Individual Human Being
Advantage: Enjoyment of All Earth Without One
Individual Being Advantaged at Expense of Another
Atoms: All the Experiences with All the Atoms
Adoption of the New Only as Last Resort

Sense Phrases:

(W)

See Wedge-spread (Sec. 981.07)
Wrapability

FILE INDICATORS

Sequences: Metaphors:

(B)

See Berry Picking
Bird's Nest as a Tool
Brain's TV Studio
Boats at Anchor Retard the River's Flow
Blind Man's Buff
Boltzmann Sequence
Brouwer's Theorem
Brownian Movement
Bubbles in the Wake of a Ship Sequence
Brain's Alarm Clocks
Bullet: Synchronization of Bullets through
Airplane Propeller Blades
Building Blocks
Buddha: Christ: Mohamed
Bottom: Pulling the Bottom Up
Brain as Library
Boeing 747 Sequence
Buggy Industry Could Never Invent Automobile

Separating Out: Separate:

(1)

See Ego: Separating Ego out of Omniscience
Time: Separating Time out of the System
Liquid vs. Solid
Differentiation: Differentiable
Dome House: Separation of Mechanical Service
Core & Structural Shell
Membranes

FILE INDICATORS

Sequences: Metaphors:

(C)

See Child As Laboratory
Child: A Little Child Shall Lead Them
Child Pushes Spoon Off Edge of Table
Children's Pictures of the Sun and the Moon
Chain Stronger than its Weakest Link
Chaos: Myth That Scientists West Order From Chaos
Collision: Ships Colliding on the Globe
Cul de Sac: Inuitively Inadvertent
Child Sequence
Coincidental Articulation Sequence
Closest Packing of Spheres Sequence
Cosmic Fish Sequence
Conversation Sequence
Cosmic Accounting Sequence
Charts: We Need Only Rotate Our Charts 90 Degrees
Computer Asks an Original Question
Continuous Man
Copper Sequence
Critical Convergence & Flying Huddle
Children as Only Pure Scientists

Synergetics Dictionary

<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (C)'</p> <p>See Crossbreeding World Man Custom: Least One Good Custom Corrupt the World Coin Toss in the Air Common Sense: Perceptual Peephole Communications Revolution Communication to Self and Others Comet: Around Comes the Comet Again Chick Breaking Out of the Egg City Management Concept of World Government Community as Unit Mechanical Organism</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (E)'</p> <p>See Epistemological Stepping Stones Eternal Designing Capability Expense: Without Any Individual Profiting at the Expense of Another Eye-beamed Thoughts Education Automation Eggs: You Just Lay Eggs Earth Model as Bundle of Nutcrackers Electronic Referendum; Electronic Voting Earth: Let's Get Down to Earth Everybody's Business Energy Involvement of 92 Chemical Elements Enough to Go Around Emergence by Emergency Electromagnetic Transmission of Human Organisms Energy-harvesting Dwelling-machine Devices Exempt: We Are Not Exempt from Universe Everyone in on the Information</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (D) 1</p> <p>See Divide & Conquer Sequence Diesel Ship at Sea Dollar Bills: \$200 Billion One-dollar Bills Circling Around Earth Death: Weighing of People as they Die Dog Pulling on a Belt Darwin: Evolution May Be Going the Other Way Dead Center of Universe Death: Slow Death by Slums Death: Weighing People as they Die Decreasing Confusion: Law Of Deficit Accounting Deliberately Nonstraight Line Departments: Nature Has No Separate Departments Design Science Revolution Diminishing Chaos: Law Of Dismissal of Irrelevancies Dominoes: Tumbling a Set of Dominoes Dwelling Service Industry Dynamion Airocean World Map</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (F)</p> <p>See Fisherman Theme Fossil Fuel Sequence False Property Illusion File Cards With Triangular Array of Holes Fountain Pattern Form Cannot Follow Function Fail-safe Advantage Failure as Norm of Yesteryears Fault: Society is Living in a Sort of Earth Fault Feedback by Eye Fellowships: Life Fellowships in Research & Development File: RBF Research File Colors Finger: Cut Your Finger Finite Furniture Fire in a Theater Fish: Playing the Fish on a Reel Flight: Fixed Formation Flight Floating City</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (D2)</p> <p>See Desovereignization Sequence Doing Right Things For Wrong Reasons Deceptiveness of Topology Doorknobs as Disease Carriers</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (F)'</p> <p>See Fluid Geography Flying Huddle Foldability of Great Circles Force Lines: Omnidirectional Lines of Force Force: Don't Oppose Forces; Use Them Football Player Metaphors Frontier: Living on the Frontier Form Cannot Follow Function</p>
<p>FILE INDICATORS:</p> <p><u>Sequences: Metaphors:</u> (E)</p> <p>See Economic Accounting System Energy Sluts Education Revolution Earning A Living Sequence Energy Income Sequence Ecology Sequence Eternal Designing Capability Sequence Eternal Slowdown Eternal Wellspring Energy Capital Sequence Earth: Let's Get Down to Earth East-is-East Theme East-to-West Trend Eddington's Proof of Irreversibility Education: Knowing Where the Bridges Are Electric Lights in Battleship Energy Has Shape Environment: Altering the Environment Environmental Events Hierarchy Epigenetic Landscape</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (G)</p> <p>See Geosocial Revolution Gross World Product Sequence Generalizations: Mathematical vs. Literary Generalization Sequence: Degrees Of Good: If All the Good People were Clever Game of Life Game of Universe Generators: Tumbling a Set of Dominoes to the Generating Station Geophysical Year: IGY Ghostly Greek Geometry Grass: Putting Aside the Grasses Group Womb Guinea Pig Genius: Children Are Born Geniuses</p>

Synergetics Dictionary

<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (H)</p> <p>See Hierarchies How Little I Know Heartbeats & Illions Sequence Heisenberg-Eliot-Pound Sequence Halo Concept Hammer Thrower House as Terminal of Community Mechanism Human Beings at the Center Humanity's Final Cosmic Exam</p>	<p>FILE INDICATORS:</p> <p><u>Sequences:</u> <u>Metaphors:</u> (K)</p> <p>See Knight's Move in Chess Key-Keyhole Sequence Kindergarten Level of Comprehension Knot Sequence Kepler Alone with the Stars Kleptomaniac: Intellectual Kleptomaniac Know-how Knowing More and More about Less and Less</p>
<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (I)</p> <p>See Individual Economic Initiative Inventability Sequence Invention Sequence Immunology Series Intuition of the Child Impossible: Only the Impossible Happens In & Out: Go In to Go Out Individual Economic Initiative Individual Life as One Way Universe Could Have Turned Out Individual Universes Industrial Lag Industrial Man Industrial Revolution: Profile Of Industrialization: Successive Halving and Time of National Industrialization Infinity: Letting Infinity into the System Instant Universe Intellect: Equation Of Intellectual Kleptomaniac Intellect: Speed Of</p>	<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (L1)</p> <p>See Leaders: Take Away the Leaders Lever Sequence Leaders Can Yield to the Computer Lever: Fallen Tree as a Lever Lag Rates Land Technology Law: Crisscross, Right-angle Grid in Civil & Agrarian Law Life is not Physical Lifetime: Personal Lifetime Experience for Elective Investment Life's Temporary Vehicles Light Side vs. Serious Side Local Holding Patterns Locked Kiss Longing: Fear & Longing Loss: Discovery Through Loss Legs: Man Born with Legs Not Roots Life is a Sumtotal of Mistakes Live Show Reaching Us Took Place Billions Of Years Ago</p>
<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (I)'</p> <p>See Interference as a Social Model Interference: Two Lines Cannot Go Through the Same Point at the Same Time Intuition: Hot Line Of Intuition Intuition: Second Intuition Inventability Sequence Inventories Invisible Aesthetics Invisible Architecture Invisibility: Trends To Irrelevancies: Dismissal Of Irreversibility: Principle Of Isotropic Vector Matrix Industrial Accounting vs. Agricultural Internal Control of Distortion Improve: You Can't Improve on the Middle</p>	<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (L2)</p> <p>See Light on Scratched Metal Learning: You Can't Learn Less</p>
<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (J)</p> <p>See Jitterbug Jump in the River Jump: Man Jumping From a Boat</p>	<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (M)</p> <p>See Madonna Theme Might Makes Right Man as a Function of Universe MIT Sequence Meek Have Inherited the Earth Macro→ Micro: Synergetic Advantage Magic Numbers: Isotopal Magic Numbers Main Engines of Universe Making the World Work Mammalian-vegetation Interchange of Gases Man as a Function of Universe Man: Automated Metabolism of Man Man as Halfway in Range of Size of All Creatures Man: Interstellar Transmission of Man Man as an Invention Man as Local Problem Solver Man as Local Universe Technology Man: Relative Abundance of Chemical Elements in Man and Universe Man as One Way Universe Might Have Come Out Manifest: One through Eight</p>

Synergetics Dictionary

<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (M)'</p> <p>See Mars: No Country Doctor on Mars Mast in the Earth Matchstick Thickness at which Objects go into Orbit Matter Over Mindist Meaning: Decease of Meaning Mechanical Extensions of Man Mental Moutfuls Metabolic Flow Metals: Recirculation of Metals Metaphysical Disconnect Mind-over-Mattering Mind Over Muscle Mines Above the Earth Miniature Earth Minimum Knot Mini Earth Mole: Industrial Man as Universal Mole Money Metaphors More With Less Morley Christopher: The Greatest Poem Ever Known</p>	<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (O)</p> <p>See Objective Design Obnoxious Obsolete: Inventory of Obsolete Concepts Octave Limits of Variation Odd Ball Official Reality Official War Old Life Informing the New Old Man's River's Project Old Words Omnidirectional Closest Packing of Spheres Omnidirectional Halo Omniscience Transcendent of Omnipotence One-Town World Onerousness of Ownership Operating Manual for Spaceship Earth Optimism: I Am Not an Optimist Options: Discovering What the Options Are Orderliness Operative in Nature Organic Model: Biological World as Model for Society Outlaw Area</p>
<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (M)''</p> <p>See Motion Freedom from Rest of Universe Muchness of the Unfamiliar Multiplication Only by Division Myself: I Would Like to be Myself Musical Chairs Mark Your Paper: Nobody to Mark Your Paper Mutual Survival Principles Motion Economics Marine Life Analogy of Humans Mobile Rentability vs. Immobile Purchasing Mite as Model for Quark Money: Making Sense vs. Making Money Model of Toothpicks & Semi-dried Peas</p>	<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (O)'</p> <p>See Overspecialization of Biological Species & Nations Outside: What's Outside Outside? Outbound Packaging of Human Food Waste Office Buildings: Conversion to Apartments Only the Whole Big System Works</p>
<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (N) ;</p> <p>See Nature Has No Separate Departments Naga Theme Narcotics as a Political Strategy Nature Always Comes Back on Itself Nature Has So Many Options Nature: What Nature Needs to be Done Navigational Ability to go to Farway Strange Places And Bring Back Strange Miracle Objects Navigators: Early Navigators Necklace New Life Newton's Cosmic Norm of "At Rest" Nine Chains to the Moon Nucleus = Mine = Nothing Ninety-two Elements: Chart of Rate of Acquisition Norm of Einstein as Absolute Speed Now Hourglass: Cross Section of Teleological Bow Tie Nuclear Computer Design Number: Tetrahedral Number</p>	<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (P)</p> <p>See Piano Top Population Sequence Probability Model of Three Cars on a Highway Prestressed Concrete Sequence Packaged Concept Pass: And It Came to Pass Panic: Official Panic Parallelogram of Forces Partially Overlapping Parting the Strands Parts: Fallacy of "Basic Building Parts" Parting the Strands Pattern Conservation Pattern Integrity: Equation Of Pattern Processing Machines Peashooter Pendulum Model vs. Scenario Model Perceptual Peephole as Fraction of Reality Performance Per Pound Permanent Symbolic Communication Devices</p>
<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (N2)</p> <p>See Nature Trying To Make Man a Success Nature Permits it Sequence Nature's Subvisible Order Navy Sequence Nozzle: Harvesting Pollution at the Nuzzle Nature is Neither Good nor Bad North-south Mobility of World Man Nature in a Corner Nature's Technology vs. Humans' Technology</p>	<p>FILE INDICATORS</p> <p><u>Sequences:</u> <u>Metaphors:</u> (P)'</p> <p>See Permeative Topology Permitted Ignorance Perpetual Motion Machine Petals: Tetrahedron as Three-petaled Flower Bud Petroleum: It Costs a Billion Dollars to Make A Gallon Phantom Captain Pharaoh: Only the Pharaoh Was Informed Phobia of Imprisonment Physical Is Always the Imperfect Physical Ingredient Recalls Physics: Difference Between Physics & Chemistry Physics as Internal Affairs of the Atom Piaget: Child's Spontaneous Geometry Picasso Duo-face Painting Pine-tree and Palm-tree Belts Pirates: Great Pirates Planarity of Civil & Agrarian Law Plastic Call-girl Angels Plastic Flowers</p>

Synergetics Dictionary

<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (P)''</p> <p>See Plural Unity Pneumatic Structures Poets Anticipate Science Point: Inbound & Outbound Point Pole Vaultler Pollen-delivering Inadvertencies Pollution: Infinite Room to Pollute Pollution: News as Most Polluted Resource Polyhedral Understanding Population Density: Manhattan Cocktail Party Population Sequence Poverty: Slow Slum Death Precession: Analogy of Precession & Social Behavior Problem: Statement of the Problem Process vs. Thing Proclivities: Invention Of Profile: There Is No Half-profile Profile of the Industrial Revolution Profit: Annual Profit and Failure System Profit: "We Stars Have Got to Make a Profit!" Prognostications About Future of Man</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (R)'</p> <p>See Raison d'Etre of Boast & Fear Hamify the Idealistic Reachability Range Reader Can Cope with his Reflexes Real Estate Development Realm: Heal: Royal Rectilinear Grid Systems Reductio ad Absurdum Reduction by Bits Reduction to Practice Reel of Tape Recorder Reflex: Conditioned Reflex of Bias Reform of Environment Rather than Reform of Man Regenerative Design: Law Of Reinvestable Time & Survival Needs Relevant: Lucidly Relevant Set Religion Related to 'Reglio' or 'Rule' Rememberable Number Research Fellowships</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (P)'''</p> <p>See Projective Transformation Prospect for Humanity Prototype Sequence Pulse Pattern Punched Cards Push Button & Dial Systems Push-pull Members Puzzle of Washington Crossing the Delaware Pyramid Technology Politics: Accessory After the Fact Promote: I Don't Promote Planetary Democracy Pathology: Preventive vs. Curative Property: You Can't Take it with You</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (R)''</p> <p>Regenerative Economic Sustainance See Resource Inadequacy Resource Inventorying Returning Upon Itself: Systems Returning Upon Themselves Return to Modelability Revolution: Hard Revolution & Soft Revolution Revolution by Inadvertence Right to Live: Proving Your Right to Live Right-Makes-Might Dominance Rocks Don't Love Rockabye Baby Rockets: Steerable Rockets Hope: I Take a Piece of Hope Rotation of Night as a Shadow Rule of Communication Rules of Operational Procedure Reel: Playing the Fish on a Reel Robin Hood Sequence Romance of History in the Making Rain as Radial</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (Q)</p> <p>See Quantum Wave Phenomena Sequence Quantum Mechanics: Grand Strategy Quarrying Quest-asking Possibility Question: Original Question Quick Death Quanta Lose by Congruence Quantum Mechanics: Minimum Geometrical Fourness</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (R-4)</p> <p>See Race with Evolution</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (R)</p> <p>See Radome Sequence Rudderling Sequence Railroad Tracks: Great-circle Energy Tracks on the Surface of a Sphere Rearrange the Scenery Radiation-Gravitation Sequence Rationalization Sequence Reflection Sequence: Apple Rich Man Drowning in Shipwreck Rest of the Universe Relative Asymmetry Sequence Radiation Sequence Rubber Glove Sequence Radio Programs: Invisible Operation of Thousands Of Radio Programs Rafts: Early World Drifting on Rafts Railway Trains: Loosely Coupled Rainbow: Optical Rainbow Range</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (S)</p> <p>See Science Opened the Wrong Door Science: Gap Between Science and the Humanities Social Highway Experience: Three Autos Structure Sequence Science-Technology-Industry-Economics-Politics Sequence Spaceship Earth Sequence Superatomics Sequence Spinach Spherical Triangle Sequence Survival Sequence: Love Synergy Sequence: Two Massive Spheres Sailing with the Wind: Sailing into the Wind Satellite: World Satellite Sensing Scaffolding Technology Scarcity: Not Enough to go Around Scenario Universe: Physical Evolution Scenario Scenery: Rearrange the Scenery Scheherazade Number Science Opened the Wrong Door</p>

Synergetics Dictionary

<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (S)'</p> <p>See Scissors Held in Fixed Opening Sea Technology Conversion to Land Technology Secrecy of Mathematical Knowledge Self-discovery Process Selfinside-outable Self: I Would Like to be Myself SeI-Now Shapeless: Universe Does Not Have a Shape Ships: A Fleet of Ships Needs More Room at Sea Sight: No Man Has Ever Seen Outside of Himself Skin Pigmentation Sky-island City Slow: The Slower We Get, the More Crowded Snake Swallows its Own Tail Snow, C.P.: Gap Between Science & Humanities Social Sciences: Analogue to Physical Sciences Solid State Sovereignty: Elimination Of Spheres & Spaces Space Technology</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (T)'</p> <p>See Three-petaled Flower Bud Thinking Out Loud Three and Only Structural Systems Threshold of Life Tiger's Skin Time Is Not the Fourth Dimension Tissue Cells of Animal Flesh Toenail in No Way Predicts Humans Tollgate: Private Tollgate the Society has to Go Through Tomorrow's Clock: Borrowing From Tomorrow's Clock Tongue: Biting Your Tongue Tongue: Stick Out Your Tongue Tools: Craft Tools & Industrial Tools Trail Making & Trail Remembering Transformational Projection Travel in a Human Lifetime Trees Sequence Trespassing: Not Trespassing Technology & Culture</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (S)''</p> <p>See Specialist Born with One Eye and a Microscope Spherical Barrel Scheherazade Number Stars: Invisible Motion Of Starting with Universe Starved by Ignorance Statement of the Problem Sticks: Falling Sticks Stone Falling and it's Going to Hit You on the Head Subconscious Coordinate Functioning Success as Norm Sugar on the Table Suicide of Humanity Sun is Not Saying Earth Hasn't Paid its Bill Superatomics Sequence Surprise: The Nonpolitical Surprise Has Already Occurred Surprise: Utter Surprise to be Born Survival Sequence: Love Swallow the Otherness Sweepout Synergy of Synergies</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (T)''</p> <p>See Tracer Bullet Sequence Trial & Error Trim Tab Trinity: Equation of Trinity Truth: Thinking About Truth Alters Truth Tuck in the Universe Tunability Tolerance Sequence Twelve-inch Steel World Globes Twenty-foot Earth Globe and 200-foot Celestial Sphere Twilight Zone Twenty Questions Twinkle Angle Two Balls Coming Together Transnationalism vs. Colonialism Time is an Invention Time is Only Now Transnational Capitalism & Export of Know-how Tetrahedron as Primitively Central to Life Technology: Enchantment vs. Disenchantment Toothpicks & Semi-dried Peas</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (S)'''</p> <p>See Service Industry Service: Serve Superstition of Social Superiority Stacking of Oranges & Cannon Balls Stars as Live Shows Billions of Years Ago</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (U1)</p> <p>See Up & Down Sequence Universe as Verb Universe as Invention Universe Citizenship Universe as Energy & Information Universe as Kaleidoscope Universe as Perpetual Motion Machine Universal Vertex Center Model Ultimate Computer Ultra Micro Computer (UMC) Umbilical Cord Uncertainty Principle Uncorked Bottle Understanding is Exquisitely Total Understanding: Urge to Understand & to be Understood Undimensional Night Undiscovered Principles Unemployment as Freedom to Think Unfolded Nothingness Uni-angular Vectorial Convergence</p>
<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (T)</p> <p>See Tactical Information Tactile Sequence Take Away the Leaders Task: The Larger the Task the Duller the Brain Brought to Bear Tastebuds of Sound Teleological Schedule of Universal Design Requirements Television: Third Parent Temperature of the Human Body Tennis Ball Hits the Big Earth Tensile Strength of Chrome-nickle-steel Tension & Compression Tenure: Academic Tenure Tether Ball Tetrahedral Tuck in the Universe Tetrahedron: Three Triangles: $2 + 1 = 4$ Tetrahedron: Two Triangles: $2 + 1 = 3$ Thinkable System Takeout Thinkable You</p>	<p>FILE INDICATORS</p> <p><u>Sequences: Metaphors:</u> (U2)</p> <p>See Unified Operational Field Uniform Boundary Scale Unique Perpendicularity Uniquely Variant Integral Unique Way of Playing the Game Unitary Communication Tools Unitary Conceptuality of Allspace Filling United States is Not a Nation United States: One of the Most Difficult Sovereignties to Break Up Units of Environment Control Unity: Complex & Simplex Unity is Plural Unity As Two Universal Integrity Universal Language Universal Maelstrom Universal Requirements of a Dwelling Advantage Universal Research Fellowships Universe Citizenship</p>

Synergetics Dictionary

FILE INDICATORS

Sequences: Metaphors: (U3)

See Universe Considers Itself
 Unpredicted: Sequence of Unpredicted Events
 Unspoken Communication
 Unspinning Angle: Tetrahelix
 Utopia or Oblivion

Sequence: Sequential: (1)

See Scenario
 Overlapping
 Intervariable Sequences
 Trend: Trending

FILE INDICATORS

Sequences: Metaphors: (W)

See Wind Sucking Sequence
 World Game Sequence
 Wave Pattern of a Stone Dropped in Liquid
 Wire to Wireless
 Wind Power Sequence
 Weapons Technology Sequence
 War: Official War & Unofficial War
 Wellspring of Reality
 World-around Communications Transcends Politics
 Wind Always Blows within 100 Miles
 Wind Power: Effect of Earth's Rotation
 Wind Power Feeding into Electric Utility Grid

Sequence: Sequential: (2)

See Awareness, 24 Apr'72
 Life-time-space Phenomena, 22 Feb'73
 Line, 6 Nov'73
 Energy & Intellect, May'49

FILE INDICATORS

Sequences: Metaphors: (XYZ)

See XYZ Coordinate System
 Youth, Truth & Love
 You Do Not Belong to You
 Yesterday's Private Castle Mentality

Serf: Serfdom: Serf Complex: (1)

See Industrial Hypocrisy
 Slave

TEXT CITATIONS

Sequence: Sequential:
 Sec. 1032.21

Serf: Serfdom: Serf Complex: (2)

See Labor: American Labor, 1960

Synergetics Dictionary

<p><u>Serial Communication:</u></p> <p>See Communication, Oct'70</p>	<p style="text-align: center;">██████████ <u>Series: Superseries:</u></p> <p>See Progressions, May'49 Scenario vs. Absolute Symmetry, 11 Dec'75</p>
<p>RBF DEFINITIONS</p> <p><u>Serial Universe:</u></p> <p>"The term 'serial Universe' was first employed by the British scientist James Dunn. It approaches my concept of Scenario Universe."</p> <p style="text-align: right;">- Cite RBF videotaping session Philadelphia, Pa., 20 Jan'75</p>	<p><u>Serious:</u></p> <p>See Light Side vs. Serious</p>
<p>RBF DEFINITIONS</p> <p><u>Series vs. Parallel Circuitry:</u></p> <p>"The difference between gravitation and radiation is analogous to the difference between parallel wiring and series wiring in electricity. Series wiring is like the lights on a christmas tree in which circuitry if one light goes out the whole system goes out. In parallel wiring when one light goes out the other lights remain operative. This is a demonstration of integration and disintegration. Series wiring is a <u>disintegrative</u> system, an open system. Parallel wiring is an <u>integrative</u> system, a closed system. It is not the 'parallelism' that matters but the fact that the circuit is closed. The word parallel came into use only because of the diagram first used to demonstrate the principle as well as the fact that the closed circuit wire is conveniently doubled back upon itself and bound into one 'lead' for house-wiring purposes. The fact that the vectors are parallel is only a convenience of the construction industry. The same length vectors--ergo the same energy magnitude involvement--used correctly, can provide either function. Here we have the convergent integrations and divergent disintegration language of synergetics in the language of electricity."</p> <p style="text-align: center;">09</p> <p>- Cite SYNERGETICS, 2nd. Ed. at Sec. 527.09; RBF rewrite 11 Dec'75</p>	<p>RBF DEFINITIONS</p> <p><u>Service Industry:</u></p> <p>"Great corporations have not as yet ventured into this field because wind energy has not seemed to be monopolizable over a pipe or wire. However, enterprise can be rewarded, in greater magnitude than ever before, by producing and renting world-around wind-harnessing apparatus-- as they already do in the computer, telephone, car rental, and hotelling service industries."</p> <p style="text-align: right;">- Citation and context at <u>Wind Power Sequence</u> (6), 15 May'73</p>
<p><u>Series vs. Parallel Circuitry:</u></p> <p>See Closed Systems & Open Systems Shunting</p>	<p>RBF DEFINITIONS</p> <p><u>Service Industry:</u></p> <p>"We can have an integrator calculating, designing and automatically manufacturing and putting together a geodesic dome in a giant jig, after which an automated 'sky tug' helicopter will carry the dome away to install it and prepare it for human occupancy, thus providing a telephone-system type of inventing, developing, installing, maintaining, relocating, and continually self-improving <u>service industry</u>, able to provide telephone-ordered 'instant housing.' Such a computer-controlled housing and livingry service industry is even now feasible at one percent of the weight, time, and energy involvement per unit of volume and living equipment found in conventional high-standard suburbia or Park Avenue skyscraper technology."</p> <p style="text-align: right;">- Cite THE PROSPECTS FOR HUMANITY, Sat. Review, 29 Aug'64</p>

Synergetics Dictionary

<p><u>Service Industry:</u> (1)</p> <p>See Automation of World Production and Services Dwelling Service Industry Dynamion House Fuller, R.B: What I Am Trying To Do Telephone More You Use it the More it Improves Mobile Rentability vs. Immobile Purchasing</p>	<p><u>Service: Serys:</u></p> <p>See Feedback Servomechanisms Fellow Man Man: How Do You Really Serve Man No License to Be of Service Mechanical Service Core</p>
<p><u>Service Industry:</u> (2)</p> <p>See Private Property, 28 Apr'71 Wind Power Sequence, (a)(b); (6)* Design Science: (B) Cosmic vs. Terrestrial Accounting, (4) Disarmament, (1)(2)</p>	<p>RBF DEFINITIONS</p> <p><u>Servomechanism:</u></p> <p>"Servomechanisms responding to sensed error in first one direction and then the other, successively correcting the steering-- first this way, then that way-- averaging an accomplished course halfway between. The variations get finer and finer, trending toward but never attaining, 'absolute straightness.' This is the essence of cybernetics. This way humans reached the Moon. It is the essence of all life growth...."</p> <p style="text-align: center;">- Citation & context at <u>Planetary Democracy</u>, (7), 15 May'75</p>
<p><u>Service vs. Instrument:</u></p> <p>See Telephone, 26 Jan'75 Distribution, 25 Jan'75</p>	<p><u>Servomechanism:</u> (1)</p> <p>See Feedback Servomechanism Rudderling</p>
<p><u>Service Terminal Installation:</u></p> <p>See Dome House Grand Strategy: 1927-1977, (2)</p>	<p><u>Servomechanism:</u> (2)</p> <p>See Sovereignty, (2) Planetary Democracy, (7)* Life is a Sumtotal of Mistakes, (1)(2) -Feedback, 7 Nov'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Set:</u></p> <p>"Even the development of <u>sets</u> derives from experience because mathematics is generalization-- and generalization itself is sequitur to experience... The mathematicians talk of 'pure imaginary numbers' on the false assumption that mathematics could be a priori to experience."</p> <p style="text-align: right;">- Cite RBF to EJA, Beverly Hotel, NYC, 13 March 1971</p> <p>- Citation at <u>Mathematics</u>, 13 Mar'71</p>	<p><u>Set of Patterns:</u></p> <p style="text-align: right;">See Conversation Sequence, (2) Minimum Set, 9 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Set:</u></p> <p>"All we do is deal in . . . images. We traffic in the memory sets, the TV sets, the recall sets and certain incoming sets."</p> <p style="text-align: right;">- Cite Oregon Lecture #3, p. 98, 5 Jul'62</p> <p>- Citation & context at <u>Imagination</u>, 5 Jul'62</p>	<p><u>Set:</u> (1A)</p> <p style="text-align: right;">See Central Set Circumferential Set Closed Set Comprehensive Set Conceptual Set Considerable Set Considered Set Empty Set Future Set Filled Set Local Set Loose Set Minimum Set Minimum Regenerative Set Net Set Nonsimultaneous Set Now Set Nuclear Set Number: Abstract Number Set Concepts</p>
<p>RBF DEFINITIONS</p> <p><u>Set:</u></p> <p>"Neither the <u>set</u> of all-experiences nor the <u>set</u> of all-the-words which describe them nor the <u>set</u> of all the generalized conceptual principles harvested from the total of experiences are either instantly or simultaneously reviewable."</p> <p style="text-align: right;">- Cite DIRECTIONAL MAPS, pp 131, 132, 1960</p> <p>- Citation at <u>Nonsimultaneity</u>, 1960</p>	<p><u>Set:</u> (1B)</p> <p style="text-align: right;">See Radial Set Recall Set Relevant: Lucidly Relevant Set Positive or Negative Set of the Whole Subset Thinkable Set Variables: General Theory Of Challenging Set Tunable Set: Tuned-in Set Intertransformability System Sets</p>
<p><u>Set of Feelings:</u></p> <p style="text-align: right;">See Conversation Sequence, (2)</p>	<p><u>Set:</u> (2)</p> <p style="text-align: right;">See Experience, Oct'71 Imagination, 5 Jul'62* Mathematics, 13 Mar'71* Nonsimultaneity, 1960* Parts, 1954 System, 25 May'72 Star Events, 1960 Etymology, Aug'71 In, Out & Around, Nov'71</p>

Synergetics Dictionary

Settlements:

See Ekistics
Human Unsettlement
Unsettling vs. Settlements
Squatters
Community

RBF DEFINITIONS

Seven Axes of Symmetry:

"There are 25 great circles on the vector equilibrium. On the icosahedron there are 31. These are all the symmetries; there are no other points or aspects of symmetry that you could develop either on the vector equilibrium or the icosahedron (electron) side. The 25 great circles of the vector equilibrium all go through the prime vertexes."

- Tape transcript, Tape 6A, Side A, p.6; RBF To Barry Farrel, Bear Island, 16 Aug'70

RBF DEFINITIONS

Seven Axes of Symmetry:

"The 56 axes of cosmic symmetry (See Sec. 1042.05) interprocess successively to regenerate the centripetal-centrifugal inwardnesses, outwardnesses, and aroundnesses of other inwardnesses, outwardnesses and aroundnesses as the omnipulsive cycling and omninterresonated eternally regenerative Universe, always accommodated by the six positive and six negative alternately and maximally equi-economical degrees of freedom characterizing each and every event cycle of each and every unique frequency-quantum magnitude of the electromagnetic spectrum range."

(For later context see Precession & Degrees of Freedom, 19 Nov'74.)

- Cite RBF holograph, New Delhi, 8 Dec'72 as rewritten by RBF 13 May'73

PRECESSION SEC 533.12

RBF DEFINITIONS

Seven Axes of Symmetry:

"I made many other subdivisions of octahedra and so forth and found the components always coming apart, as long as there is any cutting on the axes of symmetry, any of the ways in which nature could chop herself up with various extensions of planes, and they always come apart in whole rational numbers."

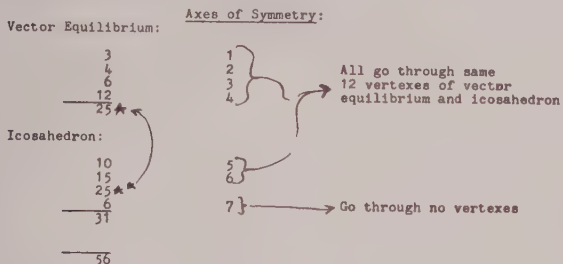
- Cite Oregon Lecture #6, p. 228. 10 Jul '62

SEVEN AXES OF SYMMETRY SEC. 1042.01

RBF DEFINITIONS

Seven Axes of Symmetry:

"These are the seven axes of symmetry of crystallography. They describe the only great circles foldable into bow ties.



- Cite RBF to EJA, Bear Island, 25 August 1971.

SEVEN AXES OF SYMMETRY - SEC. 1042.04

RBF DEFINITIONS

Seven Axes of Symmetry: Prime Generation Of:

"The prime generation of the seven axes of symmetry derives from the truncation of the tetrahedron:

- 4 original faces
- 4 triangular truncated vertexes
- 6 truncated edges

→ 14 new faces of truncated tetrahedron, whose axes generate the seven axes of symmetry."

- Cite RBF at Penn Bell studios videotaping, Philadelphia, PA., 24 Jan'75. Incorporated in SYNERGETICS, 2nd. Ed. at Sec. 1041.11

RBF DEFINITIONS

Seven Axes of Symmetry:

"Note that the seven axes of symmetry do not include the equator nor any single great circle."

- Cite RBF to EJA, Bear Island, 25 August 1971.

SEVEN AXES OF SYMMETRY - SEC. 1042.05

RBF DEFINITIONS

Seven Axes of Symmetry. Superficial Axes:

"There are only three superficial axes of symmetry of crystallography. They are:

- | | | |
|--|---|--------------------------|
| <p>Spin of vertex
Spin of mid-edge
Spin of center of area
(that is, c.g. of mid-faces)</p> | } | = three superficial axes |
|--|---|--------------------------|

"These are all the superficial surface angles which are the gravity. The central angles are the radiation."

- Cite RBF to EJA, 3200 Idaho, Washington DC, 21 Dec. '71.

SEVEN AXES OF SYMMETRY - SECS. 1041.01 + 02

Synergetics Dictionary

<p><u>Seven Axes of Symmetry:</u> (1)</p> <p>See Bow Ties Foldability of Great Circles Great-circle Spinnable Symmetries: Hierarchy Of Fourteen Axes of Truncated Tetrahedron</p>	<p>RBF DEFINITIONS</p> <p><u>Seven Minimum Topological Aspects:</u></p> <p>"Euler + Synergetics: The first three topological aspects of all minimum systems--vertexes, faces, and edges--were employed by Euler in his formula $V + F - E = 2$. Since synergetics geometry embraces nuclear and angular topology it adds four more minimum aspects to Euler's inventory of three:</p> <div style="margin-left: 20px;"> <table style="border: none;"> <tr> <td style="padding-right: 10px;">vertexes</td> <td rowspan="3" style="font-size: 2em; vertical-align: middle;">}</td> <td rowspan="3" style="padding-left: 10px;">EULER</td> </tr> <tr> <td>faces</td> </tr> <tr> <td>edges</td> </tr> <tr> <td style="padding-right: 10px;">angles</td> <td rowspan="4" style="font-size: 2em; vertical-align: middle;">}</td> <td rowspan="4" style="padding-left: 10px;">SYNERGETICS</td> </tr> <tr> <td>insiderness & outsiderness</td> </tr> <tr> <td>convexity & concavity</td> </tr> <tr> <td>axis of spin</td> </tr> </table> </div> <p style="text-align: right; margin-top: 10px;">- Cite SYNERGETICS 2 draft at Sec. 1044.01; 8 Feb'76</p>	vertexes	}	EULER	faces	edges	angles	}	SYNERGETICS	insiderness & outsiderness	convexity & concavity	axis of spin
vertexes	}	EULER										
faces												
edges												
angles	}	SYNERGETICS										
insiderness & outsiderness												
convexity & concavity												
axis of spin												
<p><u>Seven Axes of Symmetry:</u> (2)</p> <p>See Omnidirectional Typewriter (3) Prime Numbers: Pairing Of, 17 Jan'74 Trigonometric Limit: First 14 Primes, 14 Jan'74 Scheherazade Numbers: Declining Powers Of, 22 May'75</p>	<p><u>Sevni:</u> (1)</p> <p>See Powering: Seventh Powering: Seventh Dimension</p>											
<p>RBF DEFINITIONS</p> <p><u>Seven Fundamental Symmetries:</u></p> <p>"I will give you the design of the crystallogicals. We find seven fundamental symmetries" and they relate to the "seven great circles that are foldable."</p> <p style="text-align: right; margin-top: 10px;">- Cite RBF tape transcript, Chicago, Blackstone Hotel, 1 June 1971 - pp. 8-9.</p> <p><u>SEVEN AXES OF SYMMETRY SEC. 1042.04</u></p>	<p><u>Savan:</u> (2)</p> <p>See Prime Number, 16 Oct'71 Vector Equilibrium: Eight-pointed Star System, 16 Dec'73 Vectorial & Vertexial Geometry, (3)</p>											
<p>RBF DEFINITIONS</p> <p><u>Seven Minimum Topological Aspects:</u></p> <p>"The subsequent definition of four additional topological aspects to Euler's three aspects of vertexes, faces, and edges, synergetics adding (1) angles, (2) irrelevant untuned insiderness and outsiderness, (3) convexity and concavity, and (4) axis of spin, for a total of seven topological aspects (see Sec. 1044); and recognizing the addition of frequency as being always physically manifest in every special case."</p> <p style="text-align: right; margin-top: 10px;">- Cite SYNERGETICS, (2nd. Ed.) at Sec. 251.021; 12 Feb'76</p>	<p><u>Seventeen:</u></p> <p>See Limit, 15 Oct'71 Scheherazade Numbers: Decling Powers Of, 22 May'75; 22 Jun'72 Periodic Table: Harmonics of 18, 22 May'75</p>											

Synergetics Dictionary

Severance-tracing:

See Yin-yang, (1)(2)

RBF DEFINITIONS

Sex:

" . . . As . . . surprising as is the spontaneous synergetic urge of males and females to cohabit and to prey accidentally to start the synergetic formulation of another human being."

- Cite Dreyfuss Preface, "Decease of Meaning"
28 April 1971, p. 8

Sewers: Sewage Systems:

(1)

See Excrement: Excremental Functions
Plumbing
Toilet
Outbound Packaging of Human Food Waste

RBF DEFINITIONS

Sex:

"As survival rate and life sustaining capability increase, fewer births are 'required.' This may be related to our developing capacities in interchanging our physical parts, of producing mechanical organs, of having progressively fewer human organisms to replenish. The drive in humanity to reproduce as prodigally as possible decreases considerably. This may be reflected in social behaviors-- when all the girls begin to look like boys and boys and girls wear the same clothes. This may be part of a discouraging process in the idea of producing more babies.

"We shall have to stop looking askance on trends in relation to sex merely as a reproductive capability, i.e., that it is normal to make babies. Society will have to change in its assessment of what the proclivities of humanity may be. Our viewpoints on homosexuality, for example, may have to be reconsidered and more wisely adjusted."

- Cite THE YEAR 2000, San Jose State College, Mar'66

Sewers: Sewage Systems:

(2)

See Architecture, 26 Sep'68; 2 Jul'62
Building Industry, (7)
Houses & Infrastructure, 20 Sep'76
Scrap Sorting & Mongering, (2)

Sex:

(1)

See Gonads
Homosexuality
Male & Female
Man: Automated Metabolism of Man
Masturbation
Penis
Procreation
Naked Girl on the Bed
Survival Sequence: Love
Virgin
Kissing
Love

RBF DEFINITIONS

Sex:

"The metaphysical is what is very suddenly coming into prominence. These kids just really take sex. . . and how different it is now than when evolution had to reproduce itself and they had to think of their bodies as just this great baby-making machine home. Well, all that's becoming extinct and the kids don't act that way anymore and the metaphysical is emerging terribly fast."

- Citation and context at Cosmic Fish Sequence (2), 16 Oct'72

Sex:

(2)

See Cosmic Fish Sequence, (2)*
Emotion, May'65
Fuller, R.B: Moratorium on Speech, (1)(2)
Human Beings & Complex Universe, (9)-(11)

Synergetics Dictionary

<p><u>Sexave:</u></p> <p style="text-align: center;">See Sixwave (Sexave)</p>	<p style="text-align: right;"><u>Shadow:</u> (2)</p> <p>See Gravity, 23 Sep'73 Radiation-gravitation, 8 Mar'73* Universal Integrity, 7 Nov'73 Weather, Feb'73 Wind Power Sequence (3) Omnidirectional: Physical Existence Environment Surrounds, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Shadow:</u></p> <p>"Vegetation has to regenerate its young, but it can't have its young if there is a <u>shadow</u>. The young plants would not be able to get any of the necessary radiation. Therefore, most vegetation launches its new life in little seeds on the winds and on the waters. The possibility of these seeds landing in just the places where they will prosper is poor, and nature makes many starts-- enough to make sure that the species survives."</p> <p style="text-align: center;">- Cite RBF in Franklin Lecture, Auburn, Ala., p.88, 1970</p>	<p><u>Shadowless:</u></p> <p style="text-align: center;">See Gravity, 23 Sep'73</p>
<p>RBF DEFINITIONS</p> <p><u>Shadow:</u></p> <p>"Radiation has shadows; gravity has none."</p> <p style="text-align: center;"><u>Radiation-Gravitation,</u> - Citation and context at [redacted] 8 Mar'73</p>	<p><u>Shakespeare:</u></p> <p style="text-align: center;">See Man as a Function of Universe, 22 Jul'71 World Game, (3); Jun'69</p>
<p><u>Shadow:</u> (1)</p> <p>See Me & My Shadow Rotation of Night as Shadow Shadowless Wind Power: Effect of Earth's Rotation</p>	<p>RBF DEFINITIONS</p> <p><u>Shape:</u></p> <p>"Euler has the visual inventory. Aural sensing has no shape. Our visual sense verifies our tactile sense of shape. Smelling and sound have no shape. Smelling has less shape than sound. Sound has a little shape in reflecting bouncings of electromagnetic wave phenomena. Visually, when we don't see something, we call it space...."</p> <p style="text-align: center;">- Citation & context at <u>Silence</u>, 30 Sep'76</p>

Synergetics Dictionary

RBF DEFINITIONS

Shape:

"Every time you enter eternity everything called shape is cancelled. . . The episodes have shape, but the shape is always mildly asymmetrical and continually transforming. There is no conceptual shape in the ideal, i.e., the ideal tetrahedron, but no size, no time."

- Citation and context at Eternity (1)(2), 23 May'72

RBF DEFINITIONS

Shape:

"Shape is exclusively angular.

Shape is independent of size.

. . .

Shape being independent of size is abstractable."

- Cite COLLIER'S, p. 115, Oct'59

RBF DEFINITIONS

Shape:

"Generalized shape conceptioning is independent of size.

A triangle is a triangle independent of size.

- Cite OMNIDIRECTIONAL HALO, p. 119, Oct'60

RBF DEFINITIONS

Shape Awareness:

"You can have no awareness of sense of shape with just one otherness or two othernesses. Shape awareness commences only with three othernesses where the relationship of these as a triangle has finite closure. Shape is what you see areally and until there is closure there is no area of otherness."

- Cite SYNERGETICS draft at Sec. 1023.18, 20 Feb'73

RBF DEFINITIONS

Shape:

"Abstractions are conceptually shapable!"

~~- Cite SYNERGETICS "Corollaries," Sec. 240.59, Oct'59~~

- Citation & context at Abstraction, Oct'59

Shape of Things:

See Frame of Reference, 4 Oct'72

RBF DEFINITIONS

Shape:

"Different shaps, ergo different abstractions, are nonsimultaneous; but all shaps are de-finite components of integral though nonsimultaneous, ergo shapeless, Universe."

~~- Cite SYNERGETICS "Corollaries," Sec. 240.60, Oct'59~~

- Citation & Context at Conceptuality, 1971

Shape:

(1)

See Duality of Shapes
Energy Has Shape
Shapeless
Thought Has Shape
Graph: Graphable

Synergetics Dictionary

<p><u>Shape:</u> (2)</p> <p>See Wind Stress & Houses;(2)(3) Silence, 30 Sep'76*</p>	<p><u>Shapeless: Universe Does Not Have a Shape:</u> (2)</p> <p>See Sculpture as Single Frame, 22 Jul'71 Universe, May'71; 1965</p>
<p>RBF DEFINITIONS</p> <p><u>Shapeless: Universe Does Not Have a Shape:</u></p> <p>"Because of the fundamental nonsimultaneity of universal structuring, a single, simultaneous, static model of Universe is inherently both nonexistent and conceptually impossible as well as unnecessary. Ergo, Universe does not have a shape. Do not waste your time as man has been doing for ages, trying to think of a unit shape'outside of which there must be something,' or 'within which, at center, there must be a smaller something."</p> <p style="text-align: center;">- Cite SYNERGETICS draft at Sec. 307.04, Oct'71</p>	<p><u>Shapeless:</u></p> <p>See Amorphous Formless Nonform</p>
<p>RBF DEFINITIONS</p> <p><u>Shapeless: Universe Does Not Have a Shape</u></p> <p>"Because of the fundamental non-simultaneity of universal structuring, a single, simultaneous, static model of universe is inherently both,'nonexistent,' and 'conceptually impossible,' as well as, 'unnecessary.' Ergo, universe does not have a shape. Do not waste your time, as man has been doing for ages, trying to think of a unit shape 'outside of which there must be something,' or 'within which, at center, there must be a smaller something.'"</p> <p style="text-align: center;">Cite KEPES Caption Fig. 1, p. 66, 1965</p>	<p><u>Shapeless:</u> (2)</p> <p>See Eternity, (1) Ideal, 23 May'72 Integral, 1971 Transcendental, 6 Jul'62 Probability, 17 Feb'72 Silence, 30 Sep'76 Time is Only Now, 19 Jul'76</p>
<p><u>Shapeless: Universe Does Not Have a Shape:</u> (1)</p> <p>See Outside: What's Outside Outside? Sight: No Man Has Ever Seen Outside of Himself</p>	<p><u>Sharp: Sharps:</u></p> <p>See Flats & Sharps</p>

Synergetics Dictionary

<p style="text-align: right;"><u>Shell:</u> (1)</p> <p>See Icosahedron: Circumferential Closest Packing Boundary Layer Vessel Turtle Dome Structural Shell Protein Shell</p>	<p style="text-align: right;"><u>Shelter:</u> (1)</p> <p>See Antipriorities Dwelling: Dwelling Service Industry House: Housing Repr-shelter Environment Controls Dwelling Machines</p>
<p style="text-align: right;"><u>Shell:</u> (2)</p> <p>See Powering, (B) Wichita House, (1) Cyclic Bundling of Experiences, May'49 Icosahedron: Subtriangulation, (2)</p>	<p style="text-align: right;"><u>Shelter:</u> (2)</p> <p>See Squatters, (1)(2) Ecology, Dec'72</p>
<p>RBF DEFINITIONS</p> <p><u>Shelter:</u></p> <p>"The Anglo-Saxon origin of shelter would be: shell -- scyld (shield) + ter-- trum (firm): that which covers or shields from exposure or danger; a place of safety, refuge, or retreat."</p> <p style="text-align: right; margin-top: 20px;">- Cite NINE CHAINS TO THE MOON, p.33, 1938</p>	<p><u>Shelter Magazine: Publication in 1930's:</u></p> <p style="text-align: right; margin-top: 20px;">See Ecology, Dec'72</p>
<p>RBF DEFINITIONS</p> <p><u>Shelter:</u></p> <p>"Shelter is by far the greatest single item among man's requirements in point of physical volume, weight, cost, and longevity of tenure. Yet it is among the last to receive his scientific attention."</p> <p style="text-align: right; margin-top: 20px;">- Cite NINE CHAINS TO THE MOON, pp.15-16, 1938</p>	<p>RBF DEFINITIONS</p> <p><u>Ship:</u></p> <p>"A ship of the sea is not a ship because it is built of wood, for ships can be built of steel or aluminum or polyester fiberglass or pig skin or bark. And ships are inherently a complex of associative principles, and subsets of which are each in turn independent of any local resource limitation. For example, ships' fastenings may be of rivets, nails, screws, or bolts; of bronze, steel, or monel-- or welds. It is true, of course, that ships of special component chemistry may outperform others of less appropriate chemistry, but this is by obvious subsynergetic evolutionary improvement, and not by surprise."</p> <p style="text-align: right; margin-top: 20px;">- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Ship:</u> (1)</p> <p>"Throughout the documented milleniums of man's evolutionary technologies and their progressively integrated inventories, recognized environmentally as successive eras, there has been one fundamental category of technical, strategic, and economic undertakings which, of inherent necessity, transcended the going local traditions of opinion-governed expediency in treatment of physical problems and expenditures of local wealth and credit for those local ends; that is, if we except the enormous credit and physical investment of local undertakings in the most transcendental class as mystical insurance for eternal equanimity as built into the great religious edifices by the local communities, as representing the most generalized problem treatment and infinite range planning known to man's history. If instead, we confine our selves to discovering what has been the longest-range and most generalized case of the economic communities investment in equipment-- complex and complex-- designed for the improved satisfaction of living needs, we will discover that <u>ships</u> and watercraft building in the vast majority of historic communities, who of necessity lived near water bodies, undoubtedly represents the most generalized problem treatment"</p> <p>- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>	<p><u>Ship's Bow Waves:</u></p> <p style="text-align: right;">See Dihedral Angles of Tetra & Octa, 16 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Ship:</u> (2)</p> <p>"and longest range, time and geography wise, pattern planning. Why? Simply because a <u>ship</u> had to be designed to meet far more than the pattern indicated by the physical experience within the local environment of harbored confines; indeed, the more resources to be fetched for the complementation of the locally-occurring resources for integration into comprehensive capital goods wealth and higher productivity, the more extremes of climate and weather hazards, the more days and miles of possible hazards needed to be anticipated with approximate safety factors. <u>Ships</u> had to be designed for the generalized case of all oceans and all tasks. To accomplish all-ocean, all-task efficacy, men learned through bitter, mortal, dramatic experience that they must invest all the best of their commonwealth resources of time and physical goods inventory and cumulative science and craft know-how into the building and management of their long-range, wealth-integrating <u>ships</u>.</p> <p>"No arts nor knowledge of design and pattern failed to place in the undertaking. Because of the myriad conflicts of ambition of competitively lesser plan leaders and their easy expediency and shortsighted gain in recourse to piracy,"</p> <p>- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>	<p><u>Ships: Fleet of Ships Needs More Room at Sea than in Harbor:</u> (1)</p> <p style="text-align: right;">See Airplanes: Far Apart in the Sky but Slowed Down When Close Together on Land Fleet of Sailboats Slow: The Slower We Get the More Crowded</p>
<p>RBF DEFINITIONS</p> <p><u>Ship:</u> (3)</p> <p>"those whose foresight and comprehensiveness and thoroughness of realized competence effected the actualities of history, are found to have recognized in their major strategies that secrecy and closed-mouthedness in respect to the great ventures proved most effective insurance towards the day when 'our ship comes in,'</p> <p>"For this very reason the most effective strategies of men have been temporarily lost to history and historical accounting has been made in a myriad of secondary and almost irrelevant legend manufacture. As new day tools allow us to go to oceans bottom, and above all allow us greater perspective of time and distance, we have been able to reintegrate into informative pattern the outstanding historical fact that the whole concept of <u>shipbuilding</u> out of all the best resources to accomplish the highest limits of schedule performance, represents not only the essence of the meaning of 'priority' in access to the most effective commonwealth means, but over and above this identity to discern also that synergetic effectiveness was the very essence of the word 'wealth' itself."</p> <p>- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>	<p><u>Ships: Fleet of Ships Needs More Room at Sea than in Harbor:</u> (2)</p> <p style="text-align: right;">See Airspace Technology Environment Controls, (2) Pneumatic Structures, 25 Sep'72</p>
<p>RBF DEFINITIONS</p> <p><u>Ship:</u> (4)</p> <p>"For it was the products of complex pattern integration which made the great <u>ships</u> do what the wood logs and the iron ore and the fibrous plants could not and would not do of themselves. The broader the integration, the higher the synergetic effectiveness, and the more unexpected, and therefore invisibly harvestable individually managed wealth: i.e., the accrued new greater ability to initiate even greater synergetic effects in respect to unprecedented pattern articulation by those who could see the larger patterns while the eyes of the many were fascinated and gratified by the component aspects."</p> <p>- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>	<p><u>Shipwreck:</u></p> <p style="text-align: right;">See Collision: Ships Colliding on the Globe Piano Top Rich Man Drowning in Shipwreck</p>

Synergetics Dictionary

<p>TEXT CITATION</p> <p><u>Ships:</u> Mexico '63, p. 4, 10 Oct '63</p>	<p>RBF DEFINITIONS</p> <p><u>Short Cut:</u> "I do not allow myself what's called the luxury of a <u>short cut</u>. People say 'Why don't you cut it short?' Because I've got to take you from an experience to the thing. There's no use talking about it unless you feel it yourself."</p> <p style="text-align: right;">- Cite RBF quoted in ROLLING STONE, 10 June 1971.</p>
<p><u>Ships:</u> (1)</p> <p>See Battleship Boats at Anchor Retard the River's Flow Bubbles in the Wake of a Ship Sequence Collision: Ships Colliding on the Globe Diesel Ship at Sea Displacements of Ships & Buildings Generalized Boat Navy Sequence Ruddering Sequence Sailboats Sailing Ship Sailing Ship Effect Sea Technology Oil Tankers: Size Of History from the Sailor's & Shipbuilder's Viewpoint Factors of Ships City as a Ship House as a Ship Spaceship</p>	<p>RBF DEFINITIONS</p> <p><u>Short Cuts:</u> "There are no short cuts in the way of making babies: you can't accelerate fundamental processes. Nature is always operating at most efficient and economical time:energy rates of transformations."</p> <p style="text-align: right;">- Cite CULTIVATE THE POSITIVE, 9 May '57</p>
<p><u>Ships:</u> (2)</p> <p>See Air Delivery & Submarine Cities (1)-(3) Lever (b) Size (A)(B) Trails & Wakes, 8 Apr'75 Walls vs. Airspace Technology, (1) New York City, 31 Jul'75 Cybernetics, 7 Nov'75</p>	<p><u>Short: Shortest:</u> (1)</p> <p style="text-align: center;">See Most Economical vs. Shortest</p>
<p><u>Shoals:</u></p> <p>See Schools: Shoals</p>	<p><u>Short: Short Cut:</u> (2)</p> <p style="text-align: center;">See Triangle, 1960</p>

Synergetics Dictionary

Shrink: Shrinking:

See Earth Shrunk to One-town Dimension

RBF DEFINITIONS

Shunting: Relative Motion Patterns:

(1)

"Synergetics discloses that the apparently different velocities, or rates of acceleration, of which the physicist speaks do not truly exist. The seemingly different velocities are a plurality of angularly precessed-- or shunted-- energy action systems regeneratively operated in respect to other systems.

"Velocity is always 186,000 miles per second. All other relative motion patterns are the result of remotely observed, angularly precessed, 186,000 m.p.s. energy-action shunting.

"Angularly precessed shunting may divert omnidirectional energy into focused (angularly shunted) actions and reactions, of either radial or circumferential patternings, or both.

"Frequency modulation is accomplished through precession-shunted circuit synchronizations. "Valving" is angular shunting. Competent design is predicated upon frequency modulation by application of the precessional shunting principle."

- Cite Synergetics Notes, p.9, 1955. Incorporated at SYNERGETICS, Sec.647, 1 Oct'72

RBF DEFINITIONS

Shunt:

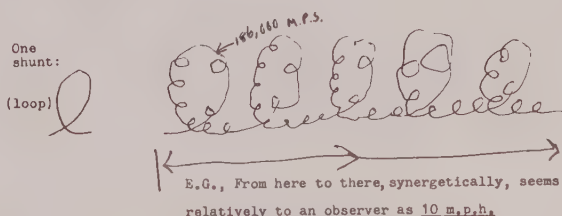
"Shunt is an angular change."

- Cite RBF Lecture
Town Hall, New York
12 March 1971

RBF DEFINITIONS

Shunting: Relative Motion Patterns:

(2)



- Cite Synergetics Notes, p.9 et. seq., 1955. Incorporated at SYNERGETICS SEC. 647, 1 Oct'72

RBF DEFINITIONS

Shunt:

"Modifications in relative magnitude of the system's import and export programming and their rates of reoccurrence is accomplished by component events of the system which interfere with and thus intercept and shunt (or valve) the import event receipts into holding patterns. From the holding pattern or reservoir the events may be valved into the system's component event patterning for use at preferred rates and magnitudes in extending or altering the regenerative integrity of the system. Scientific design controls these frequency and magnitude events by (valving), i.e. angle and frequency modulation."

- Cite NASA Speech, p. 42, Jun'66

RBF DEFINITIONS

Shunting and Re-Shunting:

"The compressively interprecessional cooperative and accommodative functionings of all structural systems are locally persistent constellations of resultant force-vectors, which are always angularly shunted, and regeneratively re-shunted, inwards of the systems tangential lines, i.e., at resultant angles less than 180 degrees in respect to the direction of origin of the generative force."

- Cit TENSORITY, Art News Annual, p. 120. Dec'61

RBF DEFINITIONS

Shunting:

"The icosahedron's function in Universe may be to throw the switch of cosmic energy into a local shunting circuit. In the icosahedron energy gets itself locked up even more by the six great circles-- which may explain why electrons are borrowable and independent of the proton-neutron group."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 458.11, 5 Nov'73

Shunt: Shunting:

(1)

See Icosahedron as Local Shunting Circuit
Holding Patterns
Precessionally Shunted Pattern Relay
Valving: Valvability
Fall-in, Shunt-out
Focus = Angular Shunting

Synergetics Dictionary

<p><u>Shunt:</u> <u>Shunting:</u> (2A)</p> <p>See Boats at Anchor Retard the River's Flow, 1960 Copper (A) Continuous Man (4) Design Covariables: Principle Of, 1959 Environment Controls (1) Manifest: One, 1973 Motion, 27 May'72 Mass Production, May'72 Ninety-two Elements, 9 Apr'40 Pattern Strip Aggregate Wrapabilities, 19 Dec'73 Radome Sequence (4); (B) Spherical Octahedron, Aug'72 Solid State, 13 May'73 Tensegrity, 20 Oct'72 Tensegrity Sphere: Six Pentagons (1)(2) Trespassing (1)(2) Water, May'65 Wave Pattern of a Stone Dropped in Liquid, 6 Jul'62 Omnidirectional Typewriter (4)</p>	<p><u>Shuttle:</u> <u>Shuttling:</u> <u>Shuttle-woven:</u> (2)</p> <p>See Jitterbug, 4 Oct'72 Pattern Strip Aggregate Wrapabilities, 19 Dec'73 Star Tetrahedron, 8 Oct'71 Two, (2)</p>
<p><u>Shunting:</u> (2B)</p> <p>See Tensegrity Model of Self-interference of Energy, 25 Mar'75 Vector Equilibrium: Field of Energy, (A) Environment, 29 Mar'77</p>	<p><u>Side Effects:</u> (1)</p> <p>See Primary vs. Side Effects No Sides</p>
<p><u>Shutter:</u></p> <p>See Omnidirectional Shutterable Sieve</p>	<p><u>Side:</u> <u>Side Effects:</u> (2)</p> <p>See Children as Only Pure Scientists, (A)</p>
<p><u>Shuttle:</u> <u>Shuttling:</u> <u>Shuttle-woven:</u> (1)</p> <p>See Intershuttling</p>	<p><u>Sideways:</u></p> <p>See Inadvertent = Sideways Oblique = Sideways</p>

Synergetics Dictionary

<p><u>Side:</u></p> <p>See Moon: Other Side of the Moon Other Side of the Universe</p>	<p>RBF DEFINITIONS</p> <p><u>Sight:</u></p> <p>"Before the speed of light was measured, sight seemed . . . to be instantaneous. . . But neither light nor any other phenomenon is instantaneous."</p> <p style="text-align: right;">- Cite NASA Speech, p.52, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Sieve:</u></p> <p>"A sieve is an angular valve."</p> <p style="text-align: right;">- Cite RBF at Penn Bell videotaping, Philadelphia, 30 Jan'75</p>	<p>RBC DEFINITIONS</p> <p><u>Sight:</u></p> <p>"Man sees only by omni-directional images illuminated within the experience-inventoried brain after images regeneratively fed-back by the energy of momentary sensorial scannings. It is significant that he gets direct or nondelayed visual report only from the actively radiant energetic centers of light, notably the stars. All other visual reports wait upon indirect routing by their superficial reflection from passive structures of energetic impasse, the planetary mass phenomena."</p> <p style="text-align: right;">- Cite PREVIEWS, I&I, p. 203, Apr'49</p>
<p><u>Sieve:</u></p> <p>See Omnidirectional Shutterable Sieve Dwelling Sieve</p>	<p>RBF DEFINITIONS</p> <p><u>Sight: No Man Has Ever Seen Outside of Himself:</u></p> <p>"... It must be remembered That no human has ever seen directly Outside himself. What we call seeing Is the interpretive imagining in the brain Of the significance and meaning Of the nervous system reports Of an assumed outsideness of self, All of which organic design conception May be that of a great intellect Which is inventing Universe progressively Evolving mathematically elegant Integral equations For each conceivable challenge Including the invention You and me."</p> <p style="text-align: right;">- Citation and context at <u>SENSORIAL IDENTIFICATION of Reality</u>, (2), May '72</p>
<p>RBF DEFINITIONS</p> <p><u>Sight:</u></p> <p>"... We see in 60 separate picture frames per second as in a moving picture continuity. Each frame is a finite increment. Our brain's after image lag is so powerful that (it) gives a sense of absolute 'eccentricity' to our only subconsciously packaged seeing."</p> <p style="text-align: right;">- Citation at <u>Eccentricity</u>, Jun'66 - Cite NASA Speech, p. 32, Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Sight: No Man Has Ever Seen Outside of Himself:</u></p> <p>"No man has ever seen outside of himself. He always sees in his brain."</p> <p style="text-align: right;">- Cite Letter to Dr. R. Urmston, 8 Oct '64, p. 2</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sight: No Man Has Ever Seen Outside of Himself:</u> "No man has ever 'seen' outside himself."</p> <p style="text-align: center;">██</p> <p>- Citation and context at <u>Brain's TV Studio</u>, 1960</p>	<p style="text-align: right;"><u>Sight:</u> (2)</p> <p>See Recall Log, 26 May'72 Senses, (I) Television, 5 Jul'62 Twelve Universal Degrees of Freedom: General Systems, (II) Repetitive, 28 May'75 Celestial Radiation Accumulators, 28 Apr'77</p>
<p><u>Sight: No Man Has Ever Seen Outside of Himself:</u> (1)</p> <p style="padding-left: 40px;">See Brain's TV Studio</p>	<p style="text-align: right;"><u>Signal:</u></p> <p style="padding-left: 40px;">See Information Signal</p>
<p><u>Sight: No Man Has Ever Seen Outside of Himself:</u> (2)</p> <p style="padding-left: 40px;">See Slides: Use of Slides in Lecturing, 6 Jul'62 You & I as Pattern Integrities, 22 Jan'75</p>	<p style="text-align: right;"><u>Signature of God:</u></p> <p style="padding-left: 40px;">See Triangle as Signature of God</p>
<p><u>Sight:</u> (1)</p> <p style="padding-left: 40px;">See Invisible Motion Optical Motion Spectrum Optical Tuning & Scanning Perception Seeability Seeing</p>	<p style="text-align: right;"><u>Significance:</u></p> <p style="padding-left: 40px;">See Mutual Survival Principles, (2)</p>

Synergetics Dictionary

RBF DEFINITIONS

Silence:

"Silence is the untuned. Silence takes the electromagnetic place of space. Space is a sort of tactile error. . . the frozen thing.

"With awareness and consciousness you already are thinking; but the point is that you didn't start out with the notion of doing some thinking; it wasn't your fault that you started to be conscious of something.

"Euler has the visual inventory. Aural sensing has no shape. Our visual sense verifies our tactile sense of shape. Smelling and sound have no shape. Smelling has less shape than sound. Sound has a little shape in reflecting bouncings of electromagnetic wave phenomena. Visually, when we don't see something, we call it space. But hearing is like smelling, when it is not tuned-in, it is silent. I've been saying tuned-out, but what I've meant all along is silence."

- Cite RBF to EJA; 3200 Idaho, Wash.DC; 30 Sep'76

RBF DEFINITIONS

Simple:

"Corollary A is: The simpler, the more enduringly reproducible."

- Citation and context at Regenerative Design: Law Of (1), 13 Mar'77

RBF DEFINITIONS

Silence:

"Space nothingness is the untuned. I now call it silence."

- Cite RBF to EJA; 3200 Idaho, Wash.DC; 29 Sep'76

Simplest Case:

See Modelability, (a)

Silence:

See Absolute Silence
Nothingness = Silence
Fuller, R.B: Moratorium on Speech

RBF DEFINITIONS

Simplest Knot:

"Look at any picture, point your finger at any part of the picture, and ask yourself: Which aspect is that, and that, and that? That's an area; or it's a line; or it's a crossing (a fix, a point). Crossings are loci. You may say, 'That is too big to be a point;' if so, you make an area by drawing a line around it. Here is the simplest knot drawn on the surface of a sphere:



"This identifies topology and knots at the simplest limit case."

- Cite SYNERGETICS, 2nd. Ed. at Sec. 1007.24, 1 Jan'75

Similar & Dissimilar:

See Triangling (1)(2)

Simplest Something:

See Minimum Something
Tetrahedron

(1)

Synergetics Dictionary

<p><u>Simplest Something:</u> See Tetrahedron, 26 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Simplicity:</u> "It seems to be a law of nature that the more fundamentally <u>simple</u> and biologically propitious an evolutionary growth may be-- the more aesthetically satisfying and lastingly acceptable is its multi-reproduction, e.g., roses, stars, and blades of grass."</p> <p style="text-align: right;">- Cite Newsweek, "Architecture: The Present Scene, 1968. - Citation at <u>Reproducible</u>, 1968</p>
<p>RBF DEFINITIONS</p> <p><u>Simplex:</u> "Chemistry seemed to laugh at our coordinate awkwardness as nature contrived all of our physical 'matter' entirely out of rational, whole integer simplexes."</p> <p style="text-align: right;">- Citation and context at <u>Calculus</u> (2) + (3), 1965</p>	<p>RBF DEFINITIONS</p> <p><u>Simplicity:</u> "The law seems to be that the more universal, the more symmetrical (see the helicopter versus the bomber); and the more symmetrical, the less the number of parts types. This is to say that the greater the superficial <u>simplicity</u>, and therefore the more adaptive the tool, the greater the required investment in anticipating teleology in the processing of proportionately larger blocks of self- and historically-relayed knowledge concerning experiences experiences, principles, and their reciprocal involvements."</p> <p style="text-align: right;">- Cite RBF draft Ltr. to Jim (Fitzgibbon?), Raleigh, NC, 1954-59</p>
<p><u>Simplex:</u> (1)</p> <p>See Complex & Simplex Limit Minimum Simplex Nuclear Simplex Topological Aspects: Inventory Of</p>	<p>RBF DEFINITIONS</p> <p><u>Simplification:</u> "We may hypothesize that as information increases exponentially-- explodes-- conceptuality implodes, becoming increasingly more <u>simplified</u>."</p> <p style="text-align: right;">- CITE VDS DECADE, Document 4, "Man and the Biosphere," p. 52, 1967. - Citation at <u>Conceptuality</u>, 1967</p>
<p><u>Simplex:</u> (2)</p> <p>See Calculus, (2)(3)* Regenerative Design: Law Of, (2)</p>	<p><u>Simple: Simplicity: Simplification:</u> (1)</p> <p>See Circle as Simplest Complex & Simplex Primary Structure Curvature: Simple Aesthetics of Uniformity Reproducible Most Economical = Simplest</p>

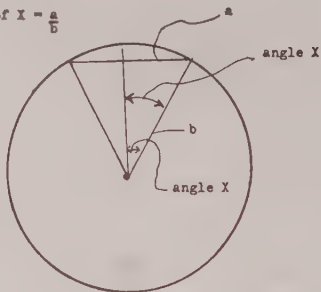
Synergetics Dictionary

<p><u>Simple</u>: <u>Simplicity</u>: <u>Simplification</u>: (2)</p> <p>See Environment Events Hierarchy, 1954 Calculus (2)(3)* Conceptuality, 1967* Patent, 1955 Reproducible, 1968* Regenerative Design: Law Of (1)* Scenario Universe, 22 Apr'68 Synergetics, undated Tetrahedron, Nov'71 Structural System, Nov'71 Mutual Survival Principles, (4) Awareness, 28 Apr'77</p>	<p><u>Simultaneity</u>: (2)</p> <p>See Dimension, 29 Nov'72* Interaccommodative, 13 Mar'73 Meaningless, Oct'66 Tension, 5 Jul'62* Visual Symphony (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Simultaneous</u>:</p> <p>"All dimensions are <u>simultaneously</u> considerable."</p> <p style="text-align: right;">- Citation at <u>Dimension</u>, 29 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Sin</u>:</p> <p>"I'm the only man I know who can sin. I find everybody else really too innocent. They don't really know what they're doing. I find that people who seem to be the most offensive are fantastic innocents. They really couldn't know what they're doing because they'd be mortified at the idea of doing something so unbecoming. But I've really had enough experience, such a fantastic amount, that I really know what it is to sin. And that would be to cheat on the great accounting system of Universe, trying to take something out and hang on to it.</p> <p>"I could very easily transgress. I could rest and sleep and make all kinds of money. The opportunities keep coming in all the time. But I have no desire to sin, I assure you. The point is: I know how. There are many things I did in my life that would be sinful if I did them today. I still feel I'm entitled to make experiments, but once I find out-- do it again? No. That's sinful."</p> <p style="text-align: right;">- Cite RBF in Barry Farrel Playboy Interview, ^{FEB} 1972 - Draft. p. 40.</p>
<p>RBF DEFINITIONS</p> <p><u>Simultaneous</u>:</p> <p>"The big jobs are done in tension and the small jobs in compression. We find that the tensions, because they are always curved, never can get straight and there is no meaning to the word straight in Universe. Therefore the tension members spiraling around must always come back into themselves. They are inherently self-closing; maybe not within simultaneous experiences-- obviously not in simultaneous experiences-- but around comes Halley's Comet. Every 70 years around she comes again. It is not a simultaneous experience at all. Several life times may be involved, and some of them may be coming around much more slowly, but there is an integrity of the tensions as around they come again. We find an idea about some kind of closed circuit."</p> <p style="text-align: right;">- Citation at <u>Tension</u>, 5 Jul'62 - See Oregon <u>Law</u> (1), pp. 11-12, 3 Jul'62</p>	<p><u>Sin</u>: (1)</p> <p>See Good & Evil Immorality</p>
<p><u>Simultaneity</u>: (1)</p> <p>See Children's Pictures of the Sun and the Moon Instantaneity Juggler Overlapping Nonsimultaneous Radiation: Speed Of Static Synchronous Unitary Conceptuality</p>	<p>RBF DEFINITIONS</p> <p><u>Sin</u>: <u>Angle of Error</u>:</p> <p>"The courage to adhere to the truth as we learn it involves, then, the courage to face oneself with the clear admission of all the mistakes we have made. Mistakes are sins only when not self-admitted. Etymologically, <u>sin</u> means <u>omission</u> where <u>admission</u> should have occurred. An angle is a sinus, an opening, a break in a circle, a break in the integrity of the whole human individual. Trigonometrically, the sine of an angle is the ratio of the length of the chord facing the central angle considered, as ratioed to the length of the radius of the circle whose center is also the apex of the angle, or sinus, considered. The angle is the angle of error of viewpoint of the individual whose circular integrity has been violated. The relative size of the chord opposite that angle of error as proportioned to the radius (taken as unity 1) of the circle of experienced knowledge of the individual; and being the sine of the angle considered, it is also the relative magnitude of the individual's sin. (Drawing attached.)"</p> <p style="text-align: right;">- Cite RBF Ltr. to Bro. Jos. Chuala, p.3; 7 Nov'75</p>

Synergetics Dictionary

Sin: Angle of Error:

The sine of X = $\frac{a}{b}$



- Cite RBF Ltr. to Bro. Jos. Chuala, attachment; 7 Nov'75

Single Atomic vs. Multiatomic:

(1)

See Atoms & Compounds: Difference Between

Sin:

(2)

See Emotion, May'65

Single Atomic vs. Multiatomic:

(2)

See Physics & Chemistry: Difference Between, 8 Apr'75
Model of Nonbeing, 11 Sep'75

Singing Early in the Morning:

See Superstition, 1938

Single Frame:

(1)

See Frame

Single Bonding:

See Chemical Bonds

Single Frame:

(2)

See Machines vs. Structures, 13 Nov'75
New York City, (7)

Synergetics Dictionary

<p>MBF DEFINITIONS</p> <p><u>Single Integer Differentials:</u> (1)</p> <p>"In synergetics we find the difference of one whole integer frequently manifest in our geometrical interrelationship explorations. Beyond the one additional proton and one additional electron characterizing the hierarchy of the already-discovered family of 92 regenerative chemical elements and their short-lived transuranium manifestability by high-energy physics experiments, we find time and again a single integer to be associated with the positive-negative energetic pulsations in Universe.</p> <p>"Because the energetic-synergetic relationships are usually generalised relationships independent of size, these single rational integer differentials are frequently found to characterize the limit magnitudes of asymmetric deviations from the zero-phase vector equilibrium.</p> <p>"The minor aberrations of otherwise elegantly matching phenomena of nature, such as the micro-weight aberrations of the 92 regenerative chemical elements in respect to their atomic numbers, was not explained until isotopes and their neutrons were discovered a few decades ago. Such discoveries numerically elucidate the whole-integer rationalization of the unique"</p> <p>- Cite SYNERGETICS, 2nd. Ed. at Secs. 310.11 and .12, 10 Nov'74</p>	<p>RBF DEFINITIONS</p> <p><u>Singular & Plural:</u></p> <p>"Compressions are <u>plural</u>. Tension is <u>singular</u>."</p> <p>- Cite Synergetics Update at Sec. 600.70, Dec. '77.</p> <p>- Citation at <u>Tension & Compression</u>, Dec'71</p>
<p>RBF DEFINITIONS</p> <p><u>Single Integer Differentials:</u> (2)</p> <p>"isotopal system's structural-proclivity agglomeratings."</p> <p>- Cite SYNERGETICS, 2nd. Ed. at Sec. 310.12, 10 Nov'74</p>	<p><u>Singular & Plural:</u></p> <p>See Love & Hate, Oct'71 Tension & Compression, Dec'71* Synergetics, 11 Oct'73 Potential vs. Primitive, 12 May'77 Environment, (A)</p>
<p><u>Single Integer Differentials:</u></p> <p>See Odd Ball Rational Whole Numbers</p>	<p><u>Sink: Sinking:</u></p> <p>See No Sinking: Man Cannot Sink</p>
<p><u>Single Otherness:</u></p> <p>See Environment, (A)</p>	<p><u>Sinus:</u> (1)</p> <p>See Angular Sinus Takeout</p>

Synergetics Dictionary

<p><u>Sinus:</u> (2)</p> <p>See Angle, 7 Nov'75</p>	<p>RBF DEFINITIONS</p> <p><u>Six:</u></p> <p>"The number of edges are always divisible by <u>six</u> in a structural system."</p> <p style="text-align: right;">- Cite P. PEARCE, Inventory of Concepts, June 1967</p>
<p>RBF DEFINITIONS</p> <p><u>Six:</u></p> <p>"There are six vectors or none."</p> <p style="text-align: right;">- Cite SYNERGETICS Corollaries, Sec. 240, by RBF 11 Oct. '71, Haverford, Penna.</p>	<p>RBF DEFINITIONS</p> <p><u>Six:</u></p> <p>"The number of all the lines-- which is to say the number of all the vectors-- in Universe, is always a number which is divisible by <u>six</u>. There are no exceptions. Now these <u>six</u> edges are the <u>six</u> edges of the tetrahedron..."</p> <p style="text-align: right;">- Citation & context at <u>Quantum</u>, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Six:</u></p> <p>"Six unique vectors constitute a tetrahedral event."</p> <p style="text-align: right;">- Citation at <u>Event</u>, 11 Oct'71</p> <p style="text-align: right;">- Cite SYNERGETICS Corollaries, Sec. 240, by RBF, 11 Oct. '71, Haverford, Penna.</p>	<p>RBF DEFINITIONS</p> <p><u>Six:</u></p> <p>"The minimum set, affording macro-micro separation of universe is a set of four local event foci. These four stars have an inherent <u>sixness</u> of relationships. This four-foci, <u>six</u>-relationship set is definable as the tetrahedron tetrahedron."</p> <p style="text-align: right;">(Adapted.)</p> <p style="text-align: right;">Cite OMNIDIRECTIONAL HALO, p. 140, 1960</p> <p style="text-align: right;">- Citation at <u>Tetrahedron</u>, 1960</p>
<p>RBF DEFINITIONS</p> <p><u>Six:</u></p> <p>"You have <u>six</u> vectors or none for every energy event."</p> <p style="text-align: right;">- Cite RBF to EJA, Washington, DC, 7 Oct. '71.</p>	<p>RBF DEFINITIONS</p> <p><u>Six:</u></p> <p>"It is a synergetic characteristic of minimum structural systems (tetra) that the system is not stable until the last strut is introduced. Redundancy cannot be determined by energetic observation of behaviors of single struts (beams or columns) or any chain-linkage of same which are less than <u>six</u> in number, or less than tetrahedron."</p> <p style="text-align: right;">- Cite RBF undated holograph on M.S.F. memo pad. (1950's)</p> <p style="text-align: right;">- Citation at <u>Strut</u>, 1950's</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sixness:</u></p> <p>"There is a systematic interrelationship of basic fourness always accompanied by a <u>sixness</u> of alternatives or freedoms."</p> <p style="text-align: right;">- Citation and context at <u>Pulsation</u>, 9 Nov'72</p>	<p>RBF DEFINITIONS</p> <p><u>Six Degrees of Freedom:</u></p> <p>"The rhombic dodecahedron . . . its twelve facets represent the planes perpendicular to the six fundamental degrees of freedom."</p> <p style="text-align: right;">- Citation and context at <u>Rhombic Dodecahedron</u>, 19 Apr'66</p>
<p>RBF DEFINITIONS</p> <p><u>Six Degrees of Freedom:</u></p> <p>"Experiments show that there are six positive and six negative degrees of fundamental transformation freedoms, which provide 12 alternate ways in which nature can behave most economically upon each and every energy-event occurrence. Ergo, there is not just one 'other'; there are always at least 12 'others.'"</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 537.12; Dec'71</p>	<p>RBF DEFINITIONS</p> <p><u>Six Degrees of Freedom:</u></p> <p>"The number of vectors (structural or force lines) cohering each and every subsystem of Universe is always a number subdivisible by <u>six</u>, i.e., consisting of one positive and one negative event, each of three vectors, which add up to <u>six</u>. This holds true topologically in all abstract patterning in Universe as well as in fundamental physics. The <u>six</u> vectors represent the fundamental <u>six</u>, and only <u>six</u>, degrees of freedom in Universe."</p> <p style="text-align: right;">- Cite RBF Ltr. to Prof. Theodore Caplow, 18 Feb. '66.</p>
<p>RBF DEFINITIONS</p> <p><u>Six Degrees of Freedom:</u></p> <p>"The connection between the six degrees of freedom and omnidirectionality is, of course, the vector equilibrium, which combines the threeness of the cube in relation to 20 as unity = VE."</p> <p style="text-align: right;">- Citation & context at <u>Vector Equilibrium</u>, 25 Aug'71</p> <p><u>EXPERIENCE - SEC. 502.25</u></p>	<p><u>Six Degrees of Freedom:</u> (1)</p> <p>See Cosmic Event Degrees of Freedom Frame of Reference: Six Schemata Powering: Sixth Dimension Twelve Universal Degrees of Freedom</p>
<p>RBF DEFINITIONS</p> <p><u>Six Degrees of Freedom:</u></p> <p>"Experiments show that there are <u>six</u> positive and six negative degrees of fundamental transformation freedoms, which provide twelve alternate ways in which nature can behave most economically upon each and every <u>energy event</u> occurrence."</p> <p style="text-align: right;">- Citation & context at <u>Environment Events Hierarchy</u> (6), Jun'66</p> <p style="text-align: right;">- <u>Cite with Special</u>, p. 32, Jun'66</p> <p><u>ENERGY EVENT - SEC. 511.03</u></p>	<p><u>Six Degrees of Freedom:</u> (2)</p> <p>See Artifacts (1) Closed System, 21 Oct'65 Coherence, 18 Feb'71; 11 Feb'73 Conceptuality, 1 Apr'72 Dimensional Reference Frame, 1972 Energy Unit, 17 Jan'74 Environment Events Hierarchy, (6)* Point, 28 Oct'63; Oct'59 Polar Vertices, 19 Feb'72 Pulsation, 9 Nov'72 Rhombic Dodecahedron, 19 Apr'66* Synergetics, 1 Apr'72; 20 Jun'66 Vector Equilibrium, 25 Aug'71* Cosmic Hierarchy, 23 Jan'77 Technology: Enchantment vs. Disenchantment, (1) Will, (1)</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Six - Five = One:</u></p> <p>"The difference of <u>one</u> between the spheric domain of the rhombic dodecahedron's <u>six</u> and the nuclear sphere's <u>five</u>--or between the tetra volume of the octahedron and the three-tetra sections of the tetrahelix--these are the <u>prime</u> wave pulsation propagating quanta phenomena that account for local aberrations, twinkle angles, and unzipping angles manifest elsewhere and frequently in this book."</p> <p>- Cite SYNERGETICS text at Sec. 985.08; RBF rewrite, Beverly Hotel, NYC; 8 Jan'74</p>	<p>RBF DEFINITIONS</p> <p><u>Six Motion Freedoms & Degrees of Freedom:</u></p> <p>"You are right that what we are talking about here--in the articulation of the primitive hierarchy--is more than what we usually mean by dimensionality.</p> <p>"In addition to dimension, what we are talking about is the interaction of the degrees of freedom, the six positive and negative motions--as well as the power factoring... the identification and quantation of the full behavior potential of energetic structurings."</p> <p>(NB: RBF had said that we are probably dealing with up to the 24th-dimension, when EJA objected to using dimension in this way. - eja.)</p> <p>- Cite RBF to EJA, in presentation by Chris Kittrick and Rob Grip in back room at 3500 Market St., Phila. PA; 11 Aug'77</p>
<p><u>Six - Five = One:</u></p> <p>See Octahedron as Annihilation Model, 30 Dec'73 Volumetric Hierarchy, (2) Nuclear Cube, 23 Feb'76 Spherical Interstices, 9 Jul'76</p>	<p>RBF DEFINITIONS</p> <p><u>Six Motion Freedoms & Degrees of Freedom:</u> (1)</p> <p>"There are the six positive and negative exercises of the motion freedoms, but the freedoms themselves come from the fact that the minimum system in the Universe consists of six vectors: the tetrahedron. The tetrahedron has a minimum of six edges. I want you to try to think about a minimum something. A something, a substance, has an insideness and an outsideness.</p> <p>"You cannot have a surface without the other surface. We teach kids that in two dimensionality there is only one surface, but we're always kidding them--we do that on a piece of paper or on a blackboard when they both have more than one side: therefore we have extracted a plane very improperly.</p> <p>"And we talk about a point which is dimensionless. A line was one-dimensional one-dimensional; a plane was two-dimensional; and a cube is three-dimensional. I say we don't have dimensionality less than four dimensionality. If we have something it is four-dimensional. It is only recently that we have had a microscope. If we took an engineer's scale we get down to 1/50th of an inch--you can really pick that off with the naked eye. You get down to 100th, you get a glass."</p> <p>- Cite transcript p.14, RBF interview with Dr. Michael Bruwer, 20 Feb'77</p>
<p>RBF DEFINITIONS</p> <p><u>Six Motion Freedoms & Degrees of Freedom:</u> (A)</p> <p>EJA: "Rob Grip is worried that your new sphere is .499 and not a clean 5. Also, you are talking about three-dimensionality for the first time. I don't understand. You used to say that Time is not the fourth dimension."</p> <p>RBF: "I say .499 because that is the closest that Heisenberg is going to let us come.</p> <p>"And the sphere emerges from the primitive hierarchy when it begins to spin. Spinning is just one of the degrees of motion freedom. Spinning and orbiting give you the sphere--at the point where frequency comes into time-size.</p> <p>"I have done a new piece for you on dimensionality in answer to your very good questions about the relationships between the six motion freedoms and the six degrees of freedom. And I have discovered that just as there are in reality 12 degrees of freedom, so there are in reality 12 motion freedoms.</p> <p>"All spheres are potential spheres. The sphere that the mathematicians have been dealing with in the primitive"</p> <p>- RBF to EJA by telephone from Pacific Palisades, CA; 8 Aug'77</p>	<p>RBF DEFINITIONS</p> <p><u>Six Motion Freedoms & Degrees of Freedom:</u> (2)</p> <p>"You get down to 1/200th of an inch and you can't see it at all. Long before people had microscopes there was a black speck against a white background: it was too small, it was under the dimensions that you and I can differentiate. You have a speck of 200th of an inch; you can see it as a speck but you couldn't resolve anything about it as a polyhedron. This is where man invented the idea of a point. You could point to it, but it was subdimensional--he said.</p> <p>"I started to see how we could make the mistake of points, and lines, and planes as something that you put together and find that you make reality. I started with my reality, and then if there's a point to it, well, there's something there; and if I put a really powerful magnifying glass to it I'm going to find there is a crystal. It is a polyhedron and it has an insideness and an outsideness. Anything that is substantial has an insideness and an outsideness. Any substance has something that stands below it: sub-stance, withinness.</p> <p>"I am going to take the minimum something. I take a rock and I get a child to hit the rock; you keep hitting it and"</p> <p>- Cite transcript p.15, RBF taped interview with Dr. Michael Bruwer, Ritz Carlton Hotel, Chicago; 20 Feb'77</p>
<p>RBF DEFINITIONS</p> <p><u>Six Motion Freedoms & Degrees of Freedom:</u> (B)</p> <p>"hierarchy is only three-dimensional because it is timeless and sizeless and prefrequency. Where you begin with insideness and outsideness is three-dimensional. But when the somethingness enters--when you go beyond primitive conceptuality, then you have to go beyond the primitive three-dimensionality. It was only that static three-dimensionality that the mathematicians used to talk about in their coordinate system.</p> <p>"But with frequency you have time-size and you come to fourth-, fifth-, and sixth-dimensionality. It is true that I say 'Time is not the fourth dimension,' that's why I say 'time-size'."</p> <p>- Cite RBF to EJA by telephone from Pacific Palisades, CA; 8 Aug'77</p>	<p>RBF DEFINITIONS</p> <p><u>Six Motion Freedoms & Degrees of Freedom:</u> (3)</p> <p>"you finally get to a something. You can't get to something less than four corners. It may be kind of flat and look like a flat triangle but it has really an altitude and you find that the minimum is four corners and six edges and four faces. You cannot get a rock with less than three faces around a corner. If it looks flat, it is just so many faces.</p> <p>"The tetrahedron is fourfold symmetry: four minimum absolute faces. A cube has only three. The minimum something has four faces of symmetry, four vertexes of symmetry. Now that is then the minimum something, degrees of freedom. I cannot have something less than four corners and I cannot have a face of less than three edges so that the minimum something has six edges altogether. Any one face has three edges so these six edges are vectors in that structure and they really are the defining set of events and with every turn to play in Universe we always get six moves so the minimum something is a minimum play.</p> <p>- Cite transcript p. 15, RBF taped interview with Dr. Michael Bruwer, Ritz Carlton Hotel, Chicago; 20 Feb'77</p>

Synergetics Dictionary

RBF DEFINITIONS

Six Motion Freedoms & Degrees of Freedom: (4)

"You always get six edges. They can be at all kinds of angles so that's where the degrees of freedom are. We find in topology that all somethings have vertexes, faces, and adges, but the numbers of the edges in Universe is evenly divisible by six. These are the six degrees of freedom and they can be positive or negative and they are always there. They are not on a plane; they are omnidirectional.

"The six motion freedoms are complex consequences of the six degrees of freedom. If you want to set an instrument held in position, it takes six restraints. If I have just five restraints, then the tetrahedron will change shape. Shape requires six restraints. Six restraints are what give structure.

"A minimum system is a tetrahedron; a minimum structure has six restraints, so anything that holds its shape has a minimum of six restraints so that the system itself can spin or the system itself can orbit. The system itself can inside out. There are systems behaviors and the six degrees of freedom are internal to it."

- Cite transcript p.16 RBF taped interview with Dr. Michael Bruwer, Ritz Carlton Hotel, Chicago; 20 Feb'77

Six Motion Freedoms: (1)

See Basic Motions
Motions: Six Positive & Negative

RBF DEFINITIONS

Six Motion Freedoms & Degrees of Freedom: (5)

"So there are six internals and six externals. The six system motions... will be part of the larger system in order to have them stop; they will be frozen in part of the larger system, they are going to have to lose one of those freedoms. ... we come to the six positive and the six negatives and there really are always 12 and they alternate equi-economically.

"If he doesn't have these six degrees of internal restraints, he's going to be very unstable internally.... You see if he doesn't want to get on with the system, he spins by himself... Oscillating is ambivalence: approaching and avoiding.... Inside-outing I saw as being deceptive, putting the wrong surface on themselves or the other way: giving up this game person and being a real person--when he really believes in the game so it is almost an unnatural thing....

"Precession I see as an effort I make to manipulate you, to cause you to move... because it is really at 90 degrees... you are looking this way... very inadvertent.

"I am saying that society doesn't realize that the most"

- Cite transcript p.17, RBF taped interview with Dr. Michael Bruwer, Ritz Carlton Hotel, Chicago; 20 Feb'77

Six Motion Freedoms: (2)

See Equilibrium & Disequilibrium, (1)

RBF DEFINITIONS

Six Motion Freedoms & Degrees of Freedom: (6)

"powerful social behavior is precessional... where my effect is inadvertent. If you are a strong psychiatrist and your patient thinks well of you, he orbits around you literally. All society is going in orbit in various realms...literally, the weak ones around the strong ones.

"We get such a static picture of people standing with one another in a house... We don't think of this. The mother will be in orbit about somebody else and the children will be in orbit about her.

"...Torquing is a squeeze, all right. You go through the wringer, as they say. That's torquing.

"...while oscillation is expansion and contraction: like we eat our food and then we get rid of it. So our friendship proceeds. We see so much of each other and then we stop, much as I am going to do with you. I would like to give you so much and let you have something and then you can study that and then come back for more. That's oscillating to me. You put on food and expend it--put on metaphysical fuel and expend it."

- Cite transcript p. 18, RBF taped interview with Dr. Michael Bruwer, Ritz Carlton Hotel, Chicago; 20 Feb'77

RBF DEFINITIONS

Six-Ridge Tetrahedral Globe: (1)

"As we take a close-up view of our little Spaceship Earth we see that the three-quarters of it which is covered with water has a greatest depth of about six miles, which is about the same as the six-mile altitude of its greatest dry land mountain peaks. We find that these ten-mile maximum variations of the spherical Spaceship Earth's 8,000-mile diameter are comparatively negligible. If we are looking at a 12-inch diameter globe, the distance between the outermost mountain peak and the innermost ocean depth is only 1/500th of an inch, which visually is an almost undetectable amount. As we look at a 12-inch globe, the thickness of the ink with which an ocean is depicted is deeper in proportion to the globe than in the real Earth globe's ocean depth in respect to its diameter.

"Three major mountain ridges of the Spaceship Earth converge in the Antarctic continent. From the South Pole one runs northwardly in the high continental plateau of Africa, and thence into Europe culminating as the Alps. A second ridge runs northwardly under water and emerges as Australia Malaysia, and later as Indo-China. A third ridge consists of South America's Andes which runs northward through Central America to terminate"

- Cite BEAR ISLAND STORY, galley p.6, 1968

Six Motion Freedoms & Degrees of Freedom: (1)

See Absolute Network
Behavioral Phases
Behavioral Potential
Proclivities: Inventory Of
Motions: Six Positive & Negative
Energetic Functions
Structural Functions

RBF DEFINITIONS

Six-Ridge Tetrahedral Globe: (2)

"In North America's Mexican mountains.

"In the northern hemisphere, the northern ends of these three southern-hemisphere-emanating ridges are interconnected by fourth, fifth, and sixth ridges, respectively. The fourth consists of the Alps, Asia Minor's highlands and islands, and the Himalayas. This fourth ridge runs between Europe and Indo-China and interconnects the northern terminals of ridges one and two. The fifth ridge consists of the China-Kamchatka mountains, and the Aleutian and North America's Rockies, which joins the northern end of ridge two with the northern end of ridge three in Mexico. The sixth ridge runs from Mexico and the terminals of ridges three and five via El Paso, Texas, and is thereafter momentarily broken through by the Mississippi; it continues as the Ozarks and the Appalachians and reaches northeastward as a chain via Newfoundland, Labrador, Greenland, Iceland, British Isles, Scandinavia, and Urals to final juncture with ridges one and four at the Alps.

"These six main ridges have for long been seen by physical geologists and geographers to constitute the now distorted--sunken here and risen there-- six edges of a spherical tetrahedron."

- Cite BEAR ISLAND STORY, galley p.7, 1968

Synergetics Dictionary

RBF DEFINITIONS	RBF DEFINITIONS
<p><u>Six-Ridge Tetrahedral Globe:</u> (3)</p> <p>"The spherical tetrahedron's four spherical triangle areas are roughly to be identified as: (1) the Indian Ocean and its abutting countries; (2) the Pacific Ocean; (3) the Atlantic Ocean (including Europe); and (4) the northern portion of North America (U.S.A., Canada), the Arctic Russia and China. . . .</p> <p>"The spherical tetrahedron's twisted ridges tell the evolutionary history of Spaceship Earth's contractual shrinkings and yieldings to primary force events of complex universal energy transactions. The Earth sphere's shrinking, and ridge twisting is like that of cooked green peas."</p> <p style="text-align: center;">- Cite BEAR ISLAND STORY, galley p.7, 1968</p>	<p><u>Six-Wave (Sexave) Phenomenon of Number:</u></p> <p>"...Six dimensional" provides " for the six-wave (sexave) phenomenon of number."</p> <p style="text-align: center;">- Citation and context at <u>Powering: Sixth Dimension</u>, 29 Nov'72</p>
<p><u>Six S's:</u></p> <p>See Architectural Aesthetics: Six S8s</p>	<p><u>Sixness:</u> (1)</p> <p>See Frame of Reference: Six Schemata Hexagonal Vector Pattern Interrelationships: Fourness & Sixness Minimum Six Powering: Sixth Dimension Powering: Sixth Powering Tensegrity: Stability Requires Six Struts Foldability: Six Cases of Foldability of Great Circles Interrelationship Twoness Basic Event Motions: Six Positive & Negative</p>
<p><u>Sixthing of the Circle:</u></p> <p>See Foldability: Six Cases of Foldability of Great Circles; 22 Nov'73</p>	<p><u>Six: Sixness:</u> (2A)</p> <p>See Coherence, 11 Feb'73; 18 Feb'71 Dimensional Reference Frame, 1972 Energy Event, 7 Oct'71 Event, 11 Oct'71* Geometry of Thinking, 16 Dec'73 Insideness & Outsideness, 11 Oct'71 Integer, 15 Oct'72 Line, 7 Nov'72 Minimum System, 26 May'72 Minimum Set, 18 Nov'72 Norm: Tetrahedron as Norm, 15 May'72 Pulsation, 9 Nov'72* Quantum, Jun'66* Relevance, 22 Jun'72 Rhombic Dodecahedron, 29 Nov'72; 27 Jan'75 Strut, 1950s* Structure, 16 Dec'73 Tetrahedron, 1960*: (1)(2); 1965 Universal Joint: Tetrahedron, 9 Nov'73 Pauling, Linus, 1965</p>
<p><u>Six-vector Teams:</u></p> <p>See Proton & Neutron Quantum: Event-paired Quanta</p>	<p><u>Six: Sixness:</u> (2B)</p> <p>See Vectors Are Real, 23 May'72 Positional Differentials, 1 Feb'75 Interference, (517.10) Nov'71 Structural Quanta, 9 Nov'73 Restrictions, 8 Aug'77</p>

Synergetics Dictionary

Sixteen: Sixteen-ness:

See Spherical Triangle Sequence, (iii)

RBF DEFINITIONS

Sixty Degreeeness:

"The metaphysically permitted frame of reference for all the asymmetrical physical experience of humanity is characterized by the 60-degree coordination with which synergetics explores nature's behaviors-- metaphysical or physical."

- ~~Cite RBF dictation for SYNERGETICS, Beverly Hotel, New York, 28 Feb. '71. See Sec. 205.4 of Oct. '71.~~

- Citation at Frame of Reference, Oct '71

RBF DEFINITIONS

Sixty Degreeeness:

"Sixty degrees is the vector equilibrium neutral angle relative to which life-in-time aberrates."

- Citation & context at Neutral Angle, 16 Dec '73

RBF DEFINITIONS

Sixty Degreeeness:

With regard to Z-cobra open triangular spiral which make up the tetrahedron: "Not the approximately 60 degree angularly precessional reactions or resultants."

- Cite RBF Marginalia on Synergetics Illustration #2, 7 Oct. 1971, Washington, DC.

TETRAHEDRON-622.02

RBF DEFINITIONS

Sixty Degreeeness:

"All the cosmic triangling of all varieties of angles always averages out to 60 degrees."

- Citation and context at Sphericity of Whole Systems, 26 Sep '73

RBF DEFINITIONS

Sixty Degreeeness:

"Among the Phoenicians and the Polynesians . . . the sixty degreeeness was known to them and it was the king's capability. The common people on the island were kept in just by having ninety degreeeness with which they were not able to do any important kind of mathematics at all. But what you could do with sixty degreeeness was very powerful. So the sixty degreeeness is part of the coordinate system that I am talking about. When we begin to integrate our arithmetic on a sixty degree basis, then we begin to find some coinciding with the topological interactions of systems, particularly the vector equilibrium."

- Cite Tape transcript RBF to EJA, Chez Wolf, 18 June 1971. P. 36

RBF DEFINITIONS

Sixty Degreeeness:

"Energetic geometry discloses the rational fourth, fifth, and sixth powering modelability of nature's coordinate transformings as referenced to the 60° equiangular isotropic vector equilibrium."

- ~~Cite RBF to EJA, 30 Dec 1971, Washington DC, 31 Dec '71.~~

- Citation at Fourth Dimension, 21 Dec '71

RBF DEFINITIONS

Sixty Degreeeness:

"If we accept 60 degreeeness we find that instead of getting only four right triangles around a point in a plane, or eight cubes around a point in space, we get six 60-degree angles about the point in the plane, and 20 tetrahedra around one point in space. Furthermore the circumferential modular frequency of planar or omnidirectional patterning will always be in one-to-one correspondence with the radial frequencies of modular subdividing. When we do this, we find we have made a model of the spontaneously coordinate structure which nature actually uses the vector equilibrium."

- Cite Conceptuality of Fundamental Structures (Kebes), p.72, 1965

Synergetics Dictionary

RBF DEFINITIONS

Sixty Degreeess:

"... The particles which make up cement are sifted sand and gravel, which, though they look rough, pack averagedly as spheres would pack-- in 60-degree angular packing. Few people think of cement that way, but if it is shaken down, agitated well, and lubricated together with a colloid, it will automatically avail itself of nature's tetrahedral structuring in 'closest packing' pattern."

- Cite CONCEPTUALITY OF FUNDAMENTAL STRUCTURES, Ed. Kepes 1965, p. 86.

Sixty Degree Modulatability:

See Vector Equilibrium: Field of Energy, (C)(D)

RBF DEFINITIONS

Sixty Degreeess:

"There are in closest packing, we find, always alternate spaces that are not being used so that triangular groups can be rotated into one position or 60 degrees to an alternate nestable place. . . . In other words you take the vector equilibrium, rotate it 60 degrees to the next nestable position and suddenly it is polarized."

- Citation & context at Vector Equilibrium: Polarization, {} Jul'62
 - Cite Oregon Lecture #9, pp. 234-235, 31 Jul'62

RBF DEFINITIONS

Sixty Degreeess: vs Ninety Degreeess:

"It could be that in always only coexistent action-reaction
 180°-ness begets 90°-ness }
 and } ergo (active)
 90°-ness begets 180°-ness }
 and 60°-ness is neutral, ergo (potential)

- Citation at Precession, 8 Dec'72

RBF DEFINITIONS

Sixty Degreeess:

". . . Whereas we can only get eight cubes around a point . . . 90 degreeess uses up all the space around a point. When I am dealing in 60 degreeess, when I am using tetrahedron as unity, we can get the whole volume of 20 tetrahedra around one point. The tetrahedron is unity. We are getting 20 around a point instead of eight. . . . If I have a volume of 20 around a point then two to the fourth power is 16 plus two to the second power. . . It is very easy to make models of the fourth dimensionalities."

- Cite Oregon Lecture #4, pp. 137-138, 6 Jul'62

RBF DEFINITIONS

Sixty Degreeess: vs. Ninety Degreeess:

"Perpendicularity (90-degreeess) uniquely characterizes the limit of three-dimensionality. Equiangularity (60-degreeess) uniquely characterizes the limits of four-dimensional systems."

- Cite SYNERGETICS draft at Sec. 965.04, 17 Nov'72

RBF DEFINITIONS

Sixty Degree Modulatability:

While "The cubes always and only co-occur in the eternal cosmic vector field and are symmetrically oriented within the field, none of the cubes' edge lines are ever congruent or rationally equatable with the most economical energetic vector formulating which is always rational of low number or simplicity as manifest in chemistry. Wherefore humanity's adoption of the cube's edges as its dimensional coordinate frame of scientific event reference gave him need to employ a family of irrational constants with which to translate their findings into their unrecognized isotropic vector matrix relationships where all nature's events are most economically and rationally intercoordinated with omni-sixty-degree, one-, two-, three-, four-, and five-dimensional omnirational frequency modulatability."

- Cite SYNERGETICS draft at Sec. 982.13, 19 Nov'72

RBF DEFINITIONS

Sixty Degreeess: vs. Ninety Degreeess:

". . . What shows up as so very important in all our synergetics is the sixty degree coordination whether it is circumferential or radial, giving a sixty degreeess. You have a fundamental coordination that way that you cannot retain a ninety-degreeess where the hypotenuses of the ninety degree angles will not be congruent and logically integratable with the radii."

- Cite Tape transcript RBF to EJA, Chez Wolf, 18 June 1971, p. 35.
 60. DEGREE COORDINATION - SEC. 432.02

Synergetics Dictionary

RBF DEFINITIONS

Sixty Degrees vs. Ninety Degreeess:

"I use 60 degrees as normal instead of 90 degrees."

- Citation at Normal, 2 May'71

Sixty Degreeess:

(1)

See Babylonian Mathematics
Cosmic Neutral
Closest Packing of Spheres
Equiangularity
Hexagon
Octet Truss
Spherical Octahedron
Tetrahelix: Continuous Pattern Strip
Vector Equilibrium: Field of Energy
Sixty Degreeess vs. Ninety Degreeess

RBFDEFINITIONS

Sixty Degreeess: vs. Ninety Degreeess:

"I am quite confident that I have discovered the coordinate system employed by nature and it uses 60 degrees instead of 90 degrees. Also the lines don't go through a point but they are 60-degree convergences even though the lines don't ever get together. They get in critical proximities-- and there are the domains of the convergences-- and so forth, even though they are open as you get to the non-closed convergences."

- Cite Oregon Lecture #4, p, 133. 6 Jul '62

Sixty Degreeess:

(2)

See Aberration Limit, 22 Jun'72
Fourth Dimension, 21 Dec'71*
Frame of Reference, 21 Dec'71*
Dihedral Angles of Tetra & Octa, 16 Dec'73
Energy & Number, Oct'71
Frequency, 2 Nov'73
Nestable, 11 Jul'62
Neutral Angle, 16 Dec'73*
Normal to Universe, 10 Sep'74*
Pi, Nov'71
Precession, 8 Dec'72*
Sphericity of Whole Systems, 26 Sep'73*
Synergetics, 14 May'73
Tetrahedron: Coordinate Symmetry, (A)
Three-way Great Circling: Three-way Grid, 17 Feb'72
Universe, 26 Sep'73
Vector Equilibrium: Polarization, (1)*
Vector Equilibrium, 26 Aug'75
Zero Volume Tetrahedron, 10 Dec'75
Dymaxion Aircean World Map, (a),(c), (g)-(i)
Gravity: Speed Of, 21 Oct'72
Triacentrahedron, 31 Jul'77

Sixty Degreeess vs. Ninety Degreeess:

See Precession & Degrees of Freedom, (1)*
Vector Equilibrium: Field of Energy, (A)-(D)
Normal, 2 May'71*
Spherical Octahedron, 29 Nov'72
Domains of Convergences, 7 Nov'73
Model of Toothpicks & Semi-dried Peas, (1)(2)

RBF DEFINITIONS

Size:

"Size is special case."

- Context and citation at Shape: Energy Map Shape, 25 Sep'73

RBF DEFINITIONS

Sixty Degrees as Norm:

"I use 60 degrees as normal instead of 90 degrees."

- Citation at Sixty Degrees, 2 May'71

RBF DEFINITIONS

Size:

"Size is physical and is manifest by frequency of length, area, volume and time. Size is manifest in the four variables of relative length, area, volume, and time; these are all four expressible in terms of frequency."

- Citation and context at Prime State, 21 Mar'73

Synergetics Dictionary

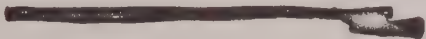
<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Size is always special-case experience."</p> <p>- Citation and context at <u>Equiangularity</u>, 25 Sep'72</p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Every event has size."</p> <p>- Cite SYNERGETICS Corollaries, Sec 240., by RBF 11 Oct.'71, Haverford, Penna.</p>
<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"The relative <u>size</u> of the vector equilibrium begins with the initial omnidimensional geometrical configuration of reference. Vector equilibria, as with the tetrahedra or other polyhedra, are conceptually valid vector equilibria or tetrahedra, independent of <u>size</u>. <u>Size</u> is where relativity becomes generated. The eternality of synergetics is conceptually experienceable independent of the successive experiences of relativity of time and size."</p> <p>- Cite RBF rewrite at SYNERGETICS Sec. 445.03^[04], 22 Jun'72</p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Vectors are size.</p> <p>No vectors = No size.</p> <p>No size = No vectors."</p> <p>- Cite SYNERGETICS Corollaries, Sec. 240. By RBF 11 Oct. 1971, Haverford, Penna.</p>
<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Size is sense comes with comparative experience."</p> <p>- Citation and context at <u>Otherness</u>, 28 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Frequency and <u>Size</u> are the same phenomena."</p> <p>- Cite RBF to EJA, Bear Island, 23 August 1971, Synergetics Sept. '71 draft, Sec. 882.1.</p> <p><u>SIZE - SEC. 528.03</u></p>
<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"... velocity being a product of time and <u>size</u> modules; and mass being a volume-weight relationship..."</p> <p>- Citation and context at <u>Time</u>, 27/2 May'72</p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"<u>Size</u> alone can come to zero-- not conceptuality. We have a sizeless nucleus for the jitterbug pumping model."</p> <p>. . . The point is the microcosmic turning around between going inwardly and going outwardly."</p> <p>- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971</p> <p><u>SIZE - SEC. 528.02</u></p>

Synergetics Dictionary

RBF DEFINITIONS

Size:

"There are three different aspects of size: linear, aerial and volumetric and each one has a different velocity." In coordinate symmetry "as they move in toward the opposite vertex, all these velocities come to zero at the same time. But because of the 60-degree-ness, the six edges and the four faces and the symmetry were never being altered, they were not variables. The only variable was size. So size and size alone can come to zero. The conceptuality of these aspects never changes."



- Cite RBF tape, Blackstone Hotel, Chicago, 31 May 1971, Pp. 25 and 26.
- Citation and context at Coordinate Symmetry, 31 May '71

SIZE - SEC 528.02

RBF DEFINITIONS

Size:

"Size and intensity are sensorial comparing functions of the special case experiences by brain and not by mind. Mind is concerned only with principles that hold true independently of size yet govern the relative size relationships."

- Cite NHRU-SPEECH, P.12. '13 Nov'69

* Citation & context at Brain & Mind, 13 Nov'69

SIZE - SEC 528.06

RBF DEFINITIONS

Size:

"The word locally means locally in time and space. By space we mean size-- a function of time."

- Cite RBF to WJA, Somersport Club, Boston, 22 April 1971
- Citation at Local, 22 Apr '71

RBF DEFINITIONS

Size:

"Concept of an experience's relationship to other experiences, defined in term of cyclic repetition of any one experimental demonstrable self-terminating or single-cycle experience. (A triangle, a tetrahedron, or a sphere, etc., is a triangle, a tetrahedron, or a sphere independent of size. An angle is an angle independent of the length of its edges. All of Plato's solids may have the same length size edges because their differences are entirely angular. An angle is inherently a subdivision of a single cycle. Therefore an angle is sub-size.)
"Size begins with one specific cycle's completion. Angles are conceptual independently of size. Size is linear. As linear size of an object is doubled, surface is fourfolded and volume is eightfolded-- ergo areas increase at a velocity of the second power and volumes at a velocity of the third power-- ergo size variation relationships are deceptive and not superficially predictable by any one experience. As we double the length of a ship its surface is fourfolded. Inasmuch as the power to drive a ship through the sea and air at a given speed is directly proportional to its surface, when we double its linear

SIZE - SEC 528.04 - Cite WORD MEANINGS, "Ekistics," Vol #28, Oct'69

(A)

RBF DEFINITIONS

Size:

(1)

"We can say an angle is an angle independent of the length of its edges. Likewise, a triangle is a triangle independent of its size. By Size we do not refer to the angle, but to the length of the edges, or magnitude of the faces or volumes, described by the linear boundaries. How long the edges are can be determined experimentally only in the terms of the repetitive multiples of some given pattern experience. The given experience module has a fundamental time consideration. All experience of size refers to the duration of the pattern-describing events. And the observer's time sense refers to any of his own afterimage consideration of one of his integral recycling organs.

- "A basic time cycle is a circle or a loop back.
- "Therefore an angle is subcyclic, for it is only part of a circle.
- "Angles, being cyclic, are subsize, for size begins with one cycle."

- Cite RBF holograph with old Synergetics draft, circa 1970

RBF DEFINITIONS

Size:

"size, we fourfold its rate of expenditure of energy but we eightfold its payload capacity. A ship's size is popularly thought of in terms of her length. Therefore it comes as a surprise that a man with a ship twice the length of another's can make eight times as much profit. That is why shipowners and sailors talk to one another in terms of tonnages, which is based on volumetric displacement of water by weight."

- Cite WORD MEANINGS, "Ekistics," Vol. #28, Oct'69

(B)

RBF DEFINITIONS

Size:

(2)

"When man refers to dimension he refers to the size aspects of his experiences as related to other experiences.
"That he had found the linear coordinates of an XYZ-rectilinear interrelationship useful in ~~analyzing~~ analyzing omnidimensional pattern experiences does not pre-empt the arithmetical evaluation of alternatives in dimensioning our experiences.
"In book (SYNERGETICS) I must ~~elaborate~~ ^{elaborate} the words three-dimensional as meaningful, and always use omnidirectional observation of multi-dimensional characteristics, with angle and frequency of cyclic reference as the only requirements."

- Cite RBF holograph with old Synergetics Draft, circa 1970

RBF DEFINITIONS

Size:

"Size and time are synonymous."

- Cite GENERALIZED PRINCIPLES, p. 6 - 28 Jan '69.

SIZE - SEC 528.03

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"<u>Size</u> is a measure of relative magnitude of separate linear, areal, volumetric, weight and other energetic experiences."</p> <p>"Conceptuality operates independent of <u>size</u>."</p> <p style="text-align: right;">- Cite NASA Speech, p. 99, Jun'66</p> <p><u>SIZE - SEC. 528.01. + 528.02</u></p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Shape is independent of <u>size</u>."</p> <p style="text-align: right;">- Cite SYNERGETICS, "Corollaries," Sec. 240.56, Oct'59.</p> <p style="text-align: right;">- Citation & context at <u>Shape</u>, Oct'59</p>
<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Size is simply three different things: linear, areal, and volumetric rates of change."</p> <p>"So you have three rates of change in the phenomenon called size."</p> <p style="text-align: right;">- Cite OREGON Lecture #6 - pp. 210, 209 respectively 10 Jul '62</p> <p style="text-align: right;">- Cite Carbondale Draft, NATURE'S COORDINATION - VI,7</p> <p><u>SIZE - SEC. 528.02</u></p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Arithmetical <u>size</u> dimensionality is identified geometrically with <u>relative frequency modulation</u>."</p> <p style="text-align: right;">- Cite COLLIER'S, p. 114, Oct'59</p>
<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"The phenomenon <u>size</u> consists of frequency modulated linear, that is, vectorial, dimension."</p> <p style="text-align: right;">- Cite OMNIDIRECTIONAL HALO, p. 144, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"... <u>Size</u> is not a generalized conceptual principle." Whether referring to the size of an object in respect to other objects or the <u>sizes</u> of any one object's subdivision, <u>size</u> emerges exclusively as a frequency concept uniquely differentiating out each 'specialized, case.'"</p> <p style="text-align: center; border: 1px solid black; border-radius: 15px; padding: 5px; margin: 10px 0;"> <i>N.B. BRACKETED PHRASE DELETED FROM SYNERGETICS DRAFT AT SEC. 528.01 - BY RBF - OCT. 1971</i> </p> <p style="text-align: right;">- Cite INTRO. to OMNIDIRECTIONAL HALO, p. 119, 1959</p> <p><u>SIZE - SEC. 528.01</u></p>
<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"The relative <u>size</u> of a triangle is a secondary observer-induced consideration and depends upon the frequency modulated edge increments of the triangle as ratioed to some other physical experience entity."</p> <p style="text-align: right;">- Cite OMNIDIRECTIONAL HALO, p. 144, 1960</p>	<p>RBF DEFINITIONS</p> <p><u>Size:</u></p> <p>"Generalized shape conceptioning is independent of <u>size</u>. A triangle is a triangle independent of <u>size</u>."</p> <p style="text-align: right;">- Cite Intro, to OMNIDIRECTIONAL HALO, p. 119, 1959</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Size Dimensionality:</u></p> <p>"Synergetical size dimensionality is identified geometrically with relative frequency modulation."</p> <p style="text-align: right;">- Citation and context at <u>Dimensionality</u> (2), 28 Oct'73</p>	<p style="text-align: right;"><u>Size:</u> (2)</p> <p>See Acceleration: Angular & Linear (1)(2) Brain & Mind, 13 Nov'69*; Coordinate Symmetry, 31 May'71* Equiangularity, 25 Sep'72* Frequency, 16 Feb'73 Local, 22 Apr'71* Otherness, 28 May'72* Prime State, 21 Mar'73* Reality, 23 Aug'71 Rigid, 24 Sep'73 Shape: Energy Has Shape, 25 Sep'73* Shape, Oct'59* Time, 27 May'72 Synergetics vs. Model (A) Structure, 27 Dec'74 Infinify = Frequency, 19 Feb'76</p>
<p>RBF DEFINITIONS</p> <p><u>Size Dimensionality:</u></p> <p>"Arithmetical <u>size dimensionality</u> is identified geometrically with relative frequency modulation."</p> <p style="text-align: right;">- Cite COLLIER's and SYNERGETICS "Corollaries," Sec. 240.46 and "Modelability, Powering," Sec. 777.</p>	<p>RBF DEFINITIONS</p> <p><u>Sizeless:</u></p> <p>"The vector equilibrium is absolutely dead center of Universe and will never be seen by man in any physical experience-- yet it is the frame of reference. And it is not in rotation and it is <u>sizeless</u> and timeless."</p> <p style="text-align: right;">- Cite tape transcript RBF to RO'R, Carbonale Dome, 1 May 1971 p. 39. - Citation at <u>Vector Equilibrium</u>, 1 May'71</p>
<p>RBF DEFINITIONS</p> <p><u>Size-selective:</u></p> <p>"Isotropic vector matrixes . . . are inadvertently, i.e., subjectively activated by the <u>size-selective</u> metaphysical consideration initiatives, or . . . objectively and physically articulated in consciously tuned electromagnetic transmission..."</p> <p style="text-align: right;">- Citation and context at <u>Isotropic Vector Matrix</u>, 30 Nov'72</p>	<p style="text-align: right;"><u>Sizeless:</u> (1)</p> <p>See Conceptuality Independent of Size No-size Conceptual Model Zerosize Prime Subfrequency Zerophase</p>
<p style="text-align: right;"><u>Size:</u> (1)</p> <p>See Independence of Size Magnitude Presize Sizeless Subfrequency Subsize Time-size Zerosize Oil Tankers: Size Of Rigid = Sized Structural Performance & Size Time-angle-size Aspects</p>	<p style="text-align: right;"><u>Sizeless:</u> (2)</p> <p>See Conceptual Tuning, 24 May'72 Frequency, 2 Nov'73 Mind As Reality, 27 Mar'73 Multiplication By Division, 4 Nov'73 Omnidirectional, 1960 Point, 20 Feb'73 Synergetics, 24 Sep'73 Teepee: Half-spin Teepee Twist, 20 Feb'73 Tetrahedron, 24 Sep'73 Timeless, 1 Apr'72 Vacuum, 17 Feb'72 Vector Equilibrium, 1 May'71* Prime, 18 Dec'74 Tensegrity Vector Equilibrium, 28 Jan'75 Model vs. Form, 8 Apr'75 Life, 5 Jun'75 Nuclear Cube, 11 Dec'75; 23 Feb'76 Six Motion Freedoms & Degrees of Freedom, (B)</p>

Synergetics Dictionary

<p><u>Skew:</u> <u>Skew-aberrated:</u></p> <p>See Radial-circumferential, 9 Jan'74 Dynamic Symmetry, (3)</p>	<p><u>Skizing:</u> <u>Skier:</u> (2)</p> <p>See Design Science: Education For, 1 Feb'75</p>
<p>RBF DEFINITIONS</p> <p><u>Skizing:</u></p> <p>"That's all skiing is-- the angular valving of gravity."</p> <p>- Cite RBF to Mary-Averett Seelye, Trapier Theater, St. Albans School, 20 Oct'72</p>	<p>RBF DEFINITIONS</p> <p><u>Skinner:</u> <u>B.F.:</u></p> <p>"I know and like Skinner. He is sincere and committed to his theories. I observe that he does not differentiate between brain and mind. (See my book 'Intuition.')</p> <p>Assuming only brain, chromosomes, DNA-RNA, and that life is entirely physical, it is logical for him to see everything as mechanistically behavioral and unexplicable by humans because he excludes from consideration a priori, eternally inexhaustible, mysterious integrity governing Universe; only a few of those ■ reliably guiding principles have thus far been discovered by humans."</p> <p>- Cite RBF Ltr. to James Coley, Sep'73</p>
<p>RBF DEFINITIONS</p> <p><u>Skizing:</u></p> <p>"...A ski compresses the snow into a grooved track of icy slidability."</p> <p>- Citation & context at <u>Airplane Flight as Lift</u>, 4 Oct'72</p>	<p><u>Skin It, Milk It, or Eat It:</u></p> <p>See Female, 17 Oct'72; May'65 Male & Female, 19 Dec'71</p>
<p><u>Skizing:</u> <u>Skier:</u> (1)</p> <p>See Surfing: Surfboarding</p>	<p>RBF DEFINITIONS</p> <p><u>Skinning:</u></p> <p>"When you transfer the projected data from the surface of a sphere to a plane, you have to break open the spherical skin in order to 'peel' it. There will be various angular cuts in the periphery of the skin when it is laid out flat, just as you take the skin off an animal. The openings along the edges are called sinuses. The sinuses on my map occur in the water. None of the cuts go into the land. Therefore, I am able to take all of the data off the Earth globe and make it accurately available in the flat."</p> <p>- Cite RBF to Wm. Marlin, Architectural Forum, p.71, Feb'72</p>

Synergetics Dictionary

RBF DEFINITIONS

Skinning:

"As in skinning an animal, a fruit, or a vegetable to provide a flat skin stretch-out, the development of a flat map of the complete world involve's arbitrary piercing of the world ball's surface map-skin, thereby making one or more holes or gashes from which to start the stretching-out and peeling-off process of the skin until it is liftable from off its ball center. After the data has been further stretched it may be laid out as one or more flat map sections. If the skinning is accomplished in separate peelings and those sections have curved peripheries they may be tangentially only as 'gears' or 'fans', which destroys the chance of forming a continuous one-surface comprehensive world map.

"To provide a continuous one-surface world map-- while peeling off the sections of the globe-- the transformation must be such that the pieces have straight and matching edges when peeled off and flattened out."

- Cite Undated Sheet: "THE DYNAMIXION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION

Skin Pigmentation:

See Race, (1)-(4)

RBF DEFINITIONS

Skinning: Tiger's Skin:

"Typical of all the finitely conceptual objects or systems, the tiger's skin can be pierced and slotted open. Thereafter, by enlarging the slotted hole by gashes in various directions, the skin can be peeled off all in one piece. It can be made to lay out flat by making a lunar-gash from the skin's edge into any remaining domical area of the skin. The slitting of a paper cone from its circular edge to its apex allows the paper to be layed out as a flat 'fan,' intruded by an angular sinus. . . . The surface contour of every object or system-- be it a complex creature such as crocodile, or a simple cube or a dodecahedron can thus be 'skinned' and laid out in the flat."

- Cite NEHRU SPEECH, p. 13. 13,Nov'69

Skin: Skins:

(1)

See Membrane
Sieve
Walls

SYSTEM - SEC. 401.4

Skinning:

See Angular Sinus Takeout, Dec'61
Thinkable System Takeout (1)

Skins: Skin:

(2)

See Plastics, 10 Aug'70
Good & Evil Sequence (1)
Octahedron as Photosynthesis Model, 11 Dec'75
Montreal Expo'67 Dome, (A)
North Face Domes, 20 Sep'76
Human Beings & Complex Universe, (9)(10)

RBF DEFINITIONS

Skin Pigmentation:

"At the heart
Of the heart
Of the Applewhite
Heart
Are ever
The black seeds
Whose skins
Like the Skin
Of its stem
Are its skin kin
To the barks
Of the appletrees
Ad infinitum,

"As the Sun's radiation
is photosynthesized
Into regeneration
Of biologically accommodated
Intelligent life
Around planet Earth
By unique differentiations
Of total electromagnetic
Spectrum
Into most locally effective
Pigmentations."

Skirt: Skirts:

See Angular Sinus Takeout, Dec'61

- Cite RBF Valentine to the Applewhites, "with dearest love for them from Uncle Bucky," 14 Feb '72, 3200 Idaho, Wash., D.C., U.S.A., Earth.

Synergetics Dictionary

<p><u>Skybreak Bubble:</u></p> <p>See Dome: Montreal Expo '67 Dome Sequence, (4)</p>	<p><u>Sky Harbor:</u></p> <p>See Heaven, 13 Nov'69</p>
<p><u>Sky Ocean:</u></p> <p>See Airocean</p>	<p><u>Skyscraper:</u> (1)</p> <p>See Horizontal Skyscraper Crystalline Asparagus</p>
<p><u>Sky Dwelling: Sky-island City:</u> (1)</p> <p>See Floating City Habitable Satellite Spac; Structures Skybreak Bubble</p>	<p><u>Skyscrapers:</u> (2)</p> <p>See Buildings as Machines, 13 Nov'69 New York City, 13 Mar'75; (1)-(12) Invented Jobs, 20 Sep'76</p>
<p><u>Sky Dwelling: Sky-island City:</u> (2)</p> <p>See Dwelling Service Industry (5) Inventability Sequence (1)</p>	<p><u>Skyscraper: Sky Tug Helicopter:</u></p> <p>See Air Delivery & Submarine Cities (3) Service Industry, 29 Aug'64</p>

Synergetics Dictionary

<p><u>Sky:</u> (1)</p> <p>See Air Biosphere Heaven: Heavens</p>	<p><u>Slaps in the Face:</u></p> <p>See Rationalization Sequence, (3)</p>
<p><u>Sky:</u> (2)</p> <p>See Order & Disorder, 5 Jul'62 Visual Symphony (2)</p>	<p><u>Slave-eliminating Machine:</u></p> <p>See Invention Sequence, (2)</p>
<p>RBF DEFINITIONS</p> <p><u>Slang:</u></p> <p>"Slang is the human drive to say more with less. Slang gains its users by its poetical economy."</p> <p>- Cite Dreyfuss Preface, "Decem se of Meaning," 28 April 1971, p. 20</p>	<p><u>Slave Mentality:</u></p> <p>See Life Is Not Physical, 29 Jun'72</p>
<p><u>Slang:</u></p> <p>See Fresh, 3 Oct'71</p>	<p><u>Slave Profession: Slave Discipline:</u></p> <p>See Architecture, Nov'66 Science, 10 Oct'63</p>

Synergetics Dictionary

<p><u>Slave: Slavedom:</u> (1)</p> <p>See Academic Tenure Divide & Conquer Energy Slave Industrial Hypocrisy Serf: Serfdom: Serf Complex</p>	<p>RBF DEFINITIONS</p> <p><u>Sleep:</u></p> <p>"Though one-third of our time is pre-allotted to the discontinuance of consciousness as <u>sleep</u>, the rotation of night as a shadow around the Earth results in a rotating wave of shadow sleepers, while two-thirds of all mankind are at all times continuously awake."</p> <p style="text-align: right;">- Citation & context at <u>Continuous Man</u> (2), 1963</p>
<p><u>Slave: Slavedom:</u> (2)</p> <p>See Comprehensiveness, 3 Nov'64 Energy Slave (1) Labor: American Labor, 1960 Specialization, 1970</p>	<p><u>Sleeping Bag:</u></p> <p>See Back Pack, 20 Sep'76 North Face Domes, 20 Sep'76</p>
<p>RBF DEFINITIONS</p> <p><u>Sleep:</u></p> <p>"Sleep is the great normalizer. The brain can only do its subconscious sorting when we are asleep. It accommodates the asymmetries and restores the symmetrical."</p> <p>(Above observation was a propos Arthur Clarke's contention that sleep is an intolerable waste of time.)</p> <p style="text-align: right;">- Cite RBF to EJA, Pepper Tree Inn, Santa Barbara, 11 Feb'73</p>	<p><u>Sleeping in the Same Bed:</u> (1)</p> <p>See Paired Congruency Reciprocal Involvement</p>
<p>RBF DEFINITIONS</p> <p><u>Sleep:</u></p> <p>"I've finally learned to accept the fact that apparently nature intends us to get to a point where we're supposed to <u>sleep</u>. For years I managed to get by on just two or three hours, letting myself sleep a half-hour ever four, or six or whatever it was. It worked fine, but it was a terrible inconvenience for my wife and she made me stop it. You can theorize about what <u>sleep</u> is, but it seems to me that each day we just get more and more asymmetrical until we have to sleep to get back into symmetry again. So I know I have to sleep and I know that if I use the reserve energies I'll have to take time to fill those reserve tanks. They're in an inconvenient position and they have small nozzles, and it takes longer to fill them. But the point of all this is that I'm so convinced of what's happening that I don't have any personal option at all. So just being tired is not enough reason to take it easy. I know that I get to the point where I'm so fuzzy-, imded that I'll mess things up more than help them, and then <u>sleep</u> is something I don't consider sinful."</p> <p style="text-align: right;">- Cite RBF in Barry Fowler Playboy Interview, 1972 - Draft. p. 39.</p>	<p><u>Sleeping in the Same Bed After the Other Guy Has Gotten Out Of It:</u> (2)</p> <p>See Congruence, 25 Jan'72</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sleeping & Thinking:</u> (1)</p> <p>Q. "Do you practice meditation? Is there a kind of Dymaxion sleep?"</p> <p>RBF: "I have never practiced it and I have never used either of those terms. I try to comprehend what my faculties may be. I can go to sleep in 30 seconds. Animals can go to sleep and still spring instantly into action. I thought this might be a good way to make the most of your time and energy, as a runner has a second wind--drawing on his reserve tanks. But it takes much more time and piping to replenish the reserve tanks.</p> <p>"So I decided to try and see if I could sleep at a higher frequency than the daily and nightly periods of the earning-a-living game. So I slept whenever I felt like it. You cannot put out unless you are putting in. After two years I found that I was sleeping only a half-hour every six hours, or getting only a total of two hours sleep a day and all the while I was incredibly healthy.</p> <p>"That may be something like the idea of meditation... we have all these messages coming in... I like to focus on some</p> <p>- Cite RBF to World Game Workshop; Phila., PA; 22 Jun'77</p>	<p>RBF DEFINITIONS</p> <p><u>Slenderness Ratio:</u></p> <p>"The Greek architects found experientially That when a stone column's height Exceeds eighteen diameters of its girth it tends to fail by buckling. The length to diameter ratio Of compressional columns is called its <u>slenderness ratio</u>. Steel columns are more stable Than stone columns. Steel columns are structurally usable with <u>slenderness ratios</u> as high as thirty-to-one. But such columns are called long columns. A short column is one whose <u>slenderness ratio</u> is far below that of the Greek column. Short columns tend to fail by crushing Rather than by buckling. A twelve-to-one <u>slenderness ratio</u> Provides a short column.</p> <p>- Cite BrAlN & LNU, p.127, May'72</p>
<p>RBF DEFINITIONS</p> <p><u>Sleeping & Thinking:</u> (2)</p> <p>"familiar object such as a boat I particularly like... and in 30 seconds I am asleep: that's the most I do in the way of meditation.</p> <p>"But I do a great deal of <u>thinking</u>, trying to put events together and sort out the significance of my experiences. By employing word tools we are able to compound the experiences of total humanity. I found a lot of nonsense coming out of my mouth. So I let my wife do the talking for me for all our everyday needs as I was resolved to say nothing until I was sure what its effect would be on other human beings... So I just kept at work... paying no attention to others."</p> <p>- Cite RBF to World Game Workshop; Phila. PA; 22 Jun'77</p>	<p><u>Slenderness Ratio:</u> (1)</p> <p>See Cigar Shape Length-to-girth Ratio</p>
<p><u>Sleep:</u> (1)</p> <p>See Awakening [redacted] Dream Subconscious Sorting Awakeness & Asleepness Waking Up</p>	<p><u>Slenderness Ratio:</u> (2)</p> <p>See Sphere, 2 Mar'68 Tension, 15 Oct'64</p>
<p><u>Sleep: Sleeping:</u> (2)</p> <p>See All-acceleration Universe (1) Conscious & Subconscious, Jun'66 Continuous Man (2)* Metaphysics, 2 Jul'62 Packaged, Jun'66 We-me Awareness, 31 May'74 Invented Jobs, 20 Sep'76 Equilibrium & Disequilibrium, (1)(2) Human Beings & Complex Universe, (15)</p>	<p>RBF DEFINITIONS</p> <p><u>Slides: Use of Slides in Lectures:</u></p> <p>"A lot of people tease me about how I start to give a lecture and have someone get out the projector and then we never get around to using the slides. I am so convinced though that what I have been saying to you-- about the fact that men do not see outside themselves, they only see in here-- that I am quite sure you have the best illustrating capability in sight. If I put it on the wall here it tends to make you lazy and short circuits. Not until I am quite confident that you are constructing in here, in your head, do I feel confident that it is all right to expose you to the slides."</p> <p>- Cite Oregon Lecture #4, p. 140. 6 Jul'62</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p>██████ <u>Slides: Graphics vs. Words:</u></p> <p>"I hope that I have been successful in communicating this to you conceptually without recourse to pictures. No man has ever seen outside of himself. He always sees in his brain. I think it is as easy to stimulate the brain conceptioning by words as it is by graphics. I often find in lectures that I don't have to show the slides which I had been prepared to do because I found that people had conjured up in their own brains from my words the very picture which I had intended to show but had gone on spontaneously to describe in advance. It is my intuitive surmise that the pictures thus conjured up are more powerfully planted in the other man's brain than those resulting from the beams of light bounced off a photograph back to the human eye lenses, retina and nerve connections and after to be scanned and IMAGE-ed (imagined) in the brain."</p> <p style="text-align: center;">- Cite Letter to Dr. R. Urmston, 8 Oct '64, p. 2</p>	<p><u>Slings:</u></p> <p style="text-align: center;">See Precession, (II)</p>
<p><u>Slides: Graphics vs. Words:</u></p> <p style="text-align: center;">See Model, 22 Jan'75</p>	<p><u>Slipper:</u></p> <p style="text-align: center;">See Flying Slippers</p>
<p>RBF DEFINITIONS</p> <p><u>Slides:</u></p> <p style="text-align: center;">See <u>Lecturing</u></p>	<p>RBF DEFINITIONS</p> <p>██████ <u>Slow:</u></p> <p>"Very, very slow changes humans identify as <u>inanimate</u>. Slow changes of pattern they call animate and natural."</p> <p style="text-align: center;">- CITE RBF Introduction to Gene Youngblood's EXPANDED CINEMA, p. 22, Oct '70</p> <p style="text-align: center;">- Citation at <u>Animate & Inanimate</u>, Oct'70</p>
<p>RBF DEFINITIONS</p> <p><u>Slingshot:</u></p> <p style="text-align: center;">See Charting Alternating Experiences (4)</p>	<p>RBF DEFINITIONS</p> <p><u>Slower & Closer vs. Faster & Far Apart:</u></p> <p>"A little body moving at sufficient velocity could have the same effect upon another body with which it interferes as could a big body moving at a slower rate."</p> <p style="text-align: center;">- Citation & context at <u>Interference</u> (2), Jun'66</p>

Synergetics Dictionary

<p><u>Slower & Closer vs. Faster & Far Apart:</u> (1)</p> <p>See Energy Magnitudes: Order Of Fast & Slow Frequency: High & Low Local Radius vs. Wide Arc Rates & Magnitudes Slow: The Slower We Get the More Crowded We Get</p>	<p><u>Slowdown:</u> (1)</p> <p>See Eternal Slowdown</p>
<p><u>Slower & Closer vs Faster & Far Apart:</u> (2)</p> <p>See Environmental Events Hierarchy (4)(5) Domains of Actions, 9 Jul'62 Freeways, Mar'66 Gestation Rate, 1 Mar'77</p>	<p><u>Slowdown:</u> (2)</p> <p>See Now, 14 Feb'72</p>
<p><u>Slow: The Slower We Get the More Crowded We Get:</u> (1)</p> <p>See Airplanes: Far Apart in the Sky but Slowed Down When Close Together on the Land Ships: A Fleet of Ships Needs More Room at Sea Than When Docked Side by Side Population Density: Manhattan Jet Dispersal</p>	<p><u>Slow Slum Death:</u></p> <p>See Death: Slow Death by Slums vs. War as Quick Death Death by Want</p>
<p><u>Slow: The Slower We Get the More Crowded We Get:</u> (2)</p> <p>See Balloon (C) Freeways, Mar'66 Pneumatic Structures, 25 Sep'72</p>	<p><u>Slow: Slowness:</u> (1)</p> <p>See Change Fast & Slow Speed Velocity Lag: Lag Rates</p>

Synergetics Dictionary

<p><u>Slow: Slowness:</u> (2) See Eternal & Temporal, 4 Sep'77</p>	<p><u>Smash-up:</u> (1) See Explosion</p>
<p><u>Slums:</u> (1) See Death: Slow Death by Slums</p>	<p><u>Smash-up:</u> (2) See Interference, (2); Nov'71</p>
<p><u>Slums:</u> (2) See Building Industry, (2) Buildings: Multiple Occupancy, 30 Apr'74 Conformity, 10 Oct'63 Empty, May'70 Invented Jobs, 20 Sep'76 Office Buildings, 28 Jun'72 Reverse Optimism, Aug'64 Weapons Technology, (2)</p>	<p><u>Smellable You:</u> See Hearable You, 22 Nov'73</p>
<p><u>Smell:</u> See Big & Little Element: Smallest Chemical Element Little Nuclear-smallest Tetrahedron as Smallest System</p>	<p><u>Smell-discover:</u> See Transistor, 22 Jun'74</p>

Synergetics Dictionary

<p><u>Smell:</u> (1)</p> <p>See Olfactoral Sense Odor: Odors</p>	<p style="text-align: center;"><u>RBF DEFINITIONS</u></p> <p><u>Smythe:</u> <u>Verner:</u> <u>RBF Patent Attorney:</u></p> <p style="text-align: center;">See <u>Billboard Model</u></p>
<p><u>Smell:</u> (2)</p> <p>See Fail-safe, 17 Oct.'72 Harmonics, (1)(2) Wind Stress & Houses, (9) Silence, 30 Sep'76</p>	<p><u>Snake Swallowing Prog:</u></p> <p style="text-align: center;">See Scenario Universe, 19 Jul'76</p>
<p><u>Smith, Cyril Stanley:</u></p> <p>See Fuller, R.B: Meeting with Fernandez-Moran, (1) Gravity, (e)-(k)</p>	<p><u>Snake Swallows its Own Tail:</u></p> <p style="text-align: center;">See Interference, Feb'72</p>
<p><u>Smoke Screens:</u></p> <p style="text-align: center;">See Privacy, 22 Apr'61</p>	<p><u>Snake:</u> <u>Snakes:</u></p> <p style="text-align: center;">See Children as Only Pure Scientists, (A)</p>

Synergetics Dictionary

Snowflake:

See Design, (1)

Soap Bubbles:

See Bubbles

RBF DEFINITIONS

Snow Mound:

"A child, when playing in sticky snow, may make a big mound of snow and hollow it out with his hands or a shovel to make a cave. Then, looking at the hollowed mound from outside, he may discover that he has made a rough dome. He might then conclude that whatever makes that structure stand up and span space is not dependent on what was at the center because the snow has been removed from the center. Whatever makes it stand up has to do with the circumferential interactions of the snow crystals and their molecules and the latter's atoms. He may find out by experiment that he could put not only one hole, but many holes through the snow dome shell and it continues to stand up. It becomes apparent that it would be possible to take a pneumatic balloon, pair the molecules, and get rid of all the molecules at the center that were not hitting the balloon-- for it is only the molecules that hit the balloon at high frequency of successive bounce-offs that give the balloon its shape."

(For text immediately following see Tensegrity Geodesic Grid)

- Cite SYNERGETICS ILLUSTRATION #96, caption, (Same text: Mexico '63, pp. 46-47), 10 Oct'63

BALLOON - SECS, 656.40+41

RBF DEFINITIONS

Social Adjustment:

"You'll find that energies are so distributed in Universe that the number of times large amounts of energy is available at any one point to do large things is very much less frequent than the number of times small amounts are available to do small things. The things we're talking about here, the social adjustments are very big. They're magnificent, the most marvelous part of the whole show. They don't get done overnight, but they're actually happening so fast that I can't believe it. I've seen in my lifetime rectification, rectification, rectification. And we really are getting there, I'm convinced of it."

- Cite RBF tape transcript for Barry Farrel Playboy Interview, Feb '72. Deleted. See draft p. 64.

RBF DEFINITIONS

Snow Mound:

"In the case of the pneumatic bag . . . what makes the net take the shape that it does is simply the molecules that happen to hit it. The molecules that are not hitting it have nothing to do with its shape. . .

"When you were a little child, the first time you went out in a fairly deep snow, or the first time you were allowed to go out on your own, you tended to make a mound of the snow. It was a fascinating thing because you could push it together and it would take shapes, it had coherence. I am sure that almost every child with mittens on builds himself a mound and then starts chipping and working away at the mound and makes a hole in it and he makes a cave. He finds that he can get in it and ~~he~~ what he discovers is that the structural integrity has nothing to do with the snow that used to be at the middle. It has something to do with the circumferential set of action of molecules there that you are accounting for. So we develop a strong intuition about this when we are very young. What I saw that might be possible was that we might hollow out the pneumatic network and we could do away with the molecules that weren't doing the work, if we had the ones that were doing the work neatly paired."

BALLOON - SECS 656.40+41 - Cite Oregon Lecture #5, 9 Jul'62

Social Breakout from Barnacle to Salmon:

(1)

See Coral Reef
Marine Life Analogy of Humans

Snow Mound:

See Balloon

Social Breakout from Barnacle to Salmon:

(2)

See Orbital Escape from Critical Proximity, (4)

Synergetics Dictionary

Social Economics: Majority Control of Social Economics
Plan by 1975:

See Economic Accounting System: Human Life-hour
Production, (1)
Dymaxion Artifacts, (1)(2)

RBF DEFINITIONS

Social Highway Experience: Three Autos:

"In the early days of the auto on a lonely road-- when you saw another car coming-- there was always a third. Three cars always come to approximately the same point at approximately the same time. This is not surprising because when we take away the two points for the axis of the observer, you always have the constant relative abundance with its three edges. Edges are lines. The cars are really lines... They are trajectories. They are simply averaging out. Universe tends to keep sorting, then, this way.

"We are really relating the social highway experience of three cars to the complementarity of the little triangle on the Earth's surface with the other three triangles. Critical proximity imposes the generalization. The triangle imposes the triangle."

- Cite RBF to EJA + BO'R, 3200 Idaho, Wash, DC, 17 Feb'72

Social Economics: (1)

See Design Revolution: Pulling the Bottom Up
Standard of Living

Social Highway Experience: Three Autos: (1)

See Probability Model of Three Cars on a Highway
Spherical Triangle Sequence

Social Economics: (2)

See Disarmament, (1)(2)
Old Man River Project, 20 Sep'76

Social Highway Experience: Three Autos: (2)

See Sphericity of Whole Systems, 26 Sep'73
Three-way Great Circling: Three-way Grid, 17 Feb'72

RBF DEFINITIONS

Social Highway Experience: Three Autos:

"In the early days of the auto on a lonely road-- when you saw another car coming-- there was always a third coming into view or already in view. Three cars frequently come to approximately the same highway point at approximately the same time. This is not surprising because when, having first taken away the two points from the system to accommodate the axis of the observer, we always have the topologically constant relative abundance of interference crossings, areas, and lines. Edges are lines. The car paths are reality lines, traces, with universal three-foldness of energy-event trajectory vectors. Universe keeps sorting its event traces into bundles of three. The social highway experience of three cars is the [REDACTED]

inexorably present tricomplementarity relationship of the little local triangle on the Earth's surface complemented by the three other great-circle triangles of the terrestrial spherical tetrahedron always produced in all system formation and transforming. Critical proximities impose three triangulations."

- Cite RBF to EJA, 3200 Idaho, 17 Feb'72 as rewritten by RBF: 18 Feb '72

Social Ignorance:

See Synergy: Degree Of, (6)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Social-Industrial Relay:</u></p> <p>"Despite intermittent submissiveness to runaway momentums of residual ignorance, man guards most dearly and secretly his freedom of thought and initiative. Therefrom emanates the <u>social-industrial relay</u>, from self-starters to group starters."</p> <p style="text-align: right;">- Citation & context at <u>Understanding</u>, 1 Apr '49</p>	<p>RBF DEFINITIONS</p> <p><u>Socialism:</u></p> <p>"... Disarmament is stalled in the U.S. because the country cannot keep its economy going through the 'irrigations system' now fed at the top through annual weaponry undertakings without seeming subscribing to '<u>socialism</u>.' In wartime emergencies, national management of economic activity is exempt from charges of socialism, but by custom and law such centralized authority is forbidden in peacetime. To avoid this embarrassment and to keep our economy healthy, wartime emergency powers are extended to meet the threat of the next war. This extension is called 'cold war.' The U.S. knows that the world needs and wants disarmament and that its socialism-avoiding subterfuge becomes increasingly evident to the rest of the world and thus less tenable. The government and powerful Washington lobbies of the armaments contractors, supported by the labor unions, are seeking ways to keep the economic irrigation system fed from the top while also attaining progressive disarmament."</p> <p style="text-align: right;">- Cite THE PROSPECT FOR HUMANITY, Sat. Review, 19 Sep '64</p>
<p>RBF DEFINITIONS</p> <p><u>Socialism:</u></p> <p>"Socialism is just a boring way of speeding up the mess."</p> <p style="text-align: right;">- Cite RBF in Corcoran Gallery Address, Washington, DC 23 Feb '72</p>	<p>RBF DEFINITIONS</p> <p><u>Socialism:</u></p> <p>"Socialism was one of yesterday's ways of dealing with inadequate wealth. Socialism is now as obsolete as the stone hammer. So also is undeveloped static property, or gold capitalism. Gold coins wear out; land erodes. That is why capitalism is obsolete. Industry and biology are metabolic; they grow."</p> <p style="text-align: right;">- Cite I&I, THE DESIGNERS AND THE POLITICIANS, p. 304. 1962</p>
<p>RBF DEFINITIONS</p> <p><u>Socialism:</u></p> <p>"Socialism means universal austerity."</p> <p style="text-align: right;">- Cite RBF to EJA Carbondale 2 April 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Socialism:</u></p> <p>"<u>Socialism</u>-- the theory of austerity for all and the sharing of the inadequacy with slow approach to certain untimely demise."</p> <p style="text-align: right;">Cite ARCHITECT AS WORLD PLANNER. July'61</p>
<p>RBF DEFINITIONS</p> <p><u>Socialism:</u></p> <p>"The word <u>socialism</u> was invented to describe equal sharing in the inadequacies of agricultural life support, ergo, austerity for all. Who wants universal austerity? The whole concept of socialism originated from an agricultural (and only dawning) industrial era which is now finished and is kept effective by 'living-in-state' as an ignorance-sustained conditioned reflex of society."</p> <p style="text-align: right;">- Cite YORTY LTR, p. 5, 1 Apr '71</p>	<p><u>Socialism:</u> (1)</p> <p style="text-align: right;">See Air is Socialized Public Lands Technocracy</p>

Synergetics Dictionary

<p><u>Socialism:</u> (2)</p> <p>See Acceleration of Change, 1938 Design Revolution: Pulling the Bottom Up, (7)(8) Initiative, 10 Aug'70 No Energy Crisis, (B)(C)</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Social Problems: Tetrahedral Coordination Of:</u></p> <p>"I have received your paper on 'Organizational Structure' entitled 'Mechanics of Group Dynamics'. It is splendid. I find it fascinating to observe your extension of my work into your social problems. I have intuited that they should be so extendable because of their fundamental and general nature. Colonel Lane made use of my tetrahedral coordinate system in logistical and maintenance procedures in Marine Corps Aviation. A Catholic priest, high in the councils of Rome, identified my coordinate system with the High Church's interpretation of the Heavenly Host. I myself have applied the tetrahedral coordinating system to the synergy of unique efforts of individuals of the chemical science world who themselves have discovered and verified the tetrahedral coordination of both the organic and inorganic chemical structuring. I was, therefore, aware of the extensibility of the principles but am therefore better prepared to judge and acclaim your efforts as extraordinary and representative of a major seasonal advance of the regenerative growth of our seeds."</p> <p style="text-align: right;">- Cite RBF Ltr. to Lewis E. Lloyd, Dow Chemical economist, Midland, Mich., 4 May'57</p>
<p><u>Social Justice:</u></p> <p>See Television: Third Parent, May'65</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Social Problems: Tetrahedral Coordination Of:</u> (1)</p> <p>See Lloyd, Lewis E: Dow Chemical Economist Social Sciences: Analogue to Physical Sciences Synergetic Accounting Advantages: Hierarchy Of Tetrahedral Dynamics</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Social Organization:</u></p> <p>"Now I would ask the question if this isn't of some importance, this matter of fooling ourselves into thinking that we see and feel the modern when it is unfeeling and unseeable. I should think that it would have very great significance. It could have something to do with why it is at the present moment that our technology is so developed that we could feed and make everybody technically more successful than any man has ever been before, and yet we don't have the ability socially to organize ourselves to do anything about it. We seem to be on the road to blowing ourselves up. We have more and more emergencies of higher and higher frequency, so I would say that our social capability is lagging. And I would say that much of our social disabilities have to do with our being preoccupied with certain myths. What I then intend to do in giving you the subject "Trends to Invisibility," is to really try to examine if I can, the ways in which we have deceived ourselves, and then examine ways in which we might be able to organize ourselves towards informing ourselves more effectively regarding where we are in our Universe and what we might do about it."</p> <p style="text-align: right;">- Cite Oregon Lecture #1, pp. 22-23. 1 Jul'62</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Social Problems: Tetrahedral Coordination Of:</u> (2)</p> <p>See Synergetics, 28 Oct'73 Twelve Universal Degrees of Freedom (1)(2)</p>
<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Social Problems: Tetrahedral Coordination Of:</u></p> <p>"...The tetrahedron can be extrapolated into life in all its experience phases, thus permitting man's entry into a new era of cosmic awareness."</p> <p style="text-align: right;">- Citation and context at <u>Synergetics</u>, 28 Oct'73</p>	<p style="text-align: center;">RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u></p> <p>"Our seeability is so inherently local that we never see anything but asymmetries. <u>Sociologists</u> have such trouble because they see (rather than principles) such a high frequency of asymmetries."</p> <p style="text-align: right;">- Cite RBF to Eda, Blackstone Hotel, Chicago, 31 May 1971 - Citation & context at <u>Asymmetry</u>, 31 May'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u></p> <p>"It is notable that the hard sciences, even mathematics, have the generalizations. But the social scientists, the behaviorists, have just the exceptions and not the generalizations."</p> <p style="text-align: right;">- Citation and context at <u>Economics</u>, 16 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u> (A)</p> <p>"I think the social sciences are going to be admitted, in due course, into the rigorously operative ranks of the physical sciences, but only as a consequence of physical science entering the social field. Modern physical science and industrial technology sprang from the discovery of natural law. There are natural laws operative in both individual and collective human behaviors. So far, however, the social scientists have failed to find any of the quantitative values governing the natural laws in human behavior. But the physical scientists, through cybernetics, behavioral science, and electrical probing of the brain, and so on, are finding some of those behavioral laws and their chemical, physical, and mathematical relationships..."</p> <p>"We can say that reform-intending social laws have been needed when man did not understand adequately the physical laws. The 1895 'It is forbidden to stick your head out of the railroad car window' should not be needed today...."</p> <p>"I think the social scientist ought to rejoice that he..."</p> <p style="text-align: right;">- Cite RBF in AAUW Journal, p.176; May'65</p>
<p>RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u> (1)</p> <p>"Social relationships must follow the rational energy quantum laws of physics but at a complex level. Social behaviors must follow all the generalized scientific principles such as <u>synergy</u> and <u>precession</u>. Because precession imposes angles other than 180° upon all interactions of all moving systems of Universe there are no straight lines demonstrated in nature. The fundamental wave behavior of all nature is a consequence of the omni-intereffective precession. Most of our social undertakings try to analyze subjectively and to persuade objectively individuals to move in 180° or straight-line paths. Such attempts are inherently futile. When society recognizes realistically that everything moves in an angular wave patterning, society will be able to accommodate its behavior in a more realistic and satisfactory manner. Democracy's right-left pulsations are imposed by nature's wave behavior. When society comprehends the omnirational isotropic vector matrix 60-degree angle coordinate system it may then be able to emulate the behavior of sailing ship masters and will learn how to beat, which means angling first left and then right 45° off the course leading directly into the wind, in order to</p> <p style="text-align: right;">- Cite NEHRU SPEECH, p.31, 13 Nov'69</p>	<p>RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u> (B)</p> <p>"has been unable to find absolute social formulas. We might say to the social scientists, 'It is just as scientific to discover that there is no formula as it is to discover a formula.'"</p> <p>"It was more difficult, socially and scientifically, to discover <u>zero</u> than to discover <u>one</u> or <u>two</u>."</p> <p style="text-align: right;">* - Cite AAUW JOURNAL, p.176, May'65</p>
<p><u>Social Sciences: Analogue to Physical Sciences:</u> (2)</p> <p>"accomplish distances in the direction from which the wind moves. Society finds it easy to sail with the wind but has demonstrated a lesser capability in negotiating windward passages. To sail with the wind is to yield to evolutionary forces. To sail into the wind is to master forces."</p> <p style="text-align: right;">(Edited.)</p> <p style="text-align: right;">- Cite NEHRU SPEECH, pp. 31-32, 13 Nov'69</p>	<p>RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u></p> <p>"... By my definition of Universe all that was relegated to metaphysical nebulosity is now embraced by finite Universes along with the physically energetic, wherefore all the hitherto 'inexact sciences' may become rigorously defined, enjoying equatable treatability at optimum degree of determinability."</p> <p style="text-align: right;">- Cite INTRODUCTION TO OMNIDIRECTIONAL HALO, pp.124-5, 1959</p>
<p>RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u></p> <p>"Though our social sciences have been earnestly seeking generalized principles which might give them the insights and design virtuosity enjoyed by physics, chemistry, et. al., they have until now had no important success. The reason we have introduced the general systems' vectorial geometry today is because it provides the connection between social and physical science. It opens the doors to powerful planning."</p> <p style="text-align: right;">- Cite Nehru Speech, pp. 29-30, 13 Nov'69</p>	<p>RBF DEFINITIONS</p> <p><u>Social Sciences: Analogue to Physical Sciences:</u></p> <p>"... Most socio-economic phenomena defy the exact treatments effective and necessary in chemistry, physics, astrophysics, etc., our case is different for it grew out of mathematical treatment ..."</p> <p style="text-align: right;">- Cite Ltr. to Jim Fitzgibbon (?), Raleigh NC, p.33, undated</p>

Synergetics Dictionary

TEXT CITATIONS

Social Sciences: Analogue to Physical Sciences:

-- For a discussion of triads and triangular structure in social organization and fundamental physics see correspondence between Prof. Theodore Caplow, Dept. of Sociology, Columbia, 24 Jan'66 and RBF reply of 18 Feb'66.

Society: Control Of:

See Least Resistance, 1938

Social Sciences: Analogue to Physical Sciences: (1)

See Closed-sphere-system Democracy
 Circuitry: Thermionic & Political Analogy
 Exponential Model vs. Limits to Growth
 Grid: Crisscross Right-angle Grid in Civil & Agrarian Law
 Individual: Theory Of
 Interference as a Social Model
 Metaphysical & Physical
 Organic World: Biological World as Model For Society
 Organization
 Precession: Analogy of Precession & Social Behavior
 Relativity: Marriage of Social & Natural Law
 Synergetic Hierarchy
 Social Problems: Tetrahedral Coordination Of
 Prediction: Socio-economic vs. Engineering
 Laws of Nature vs. Laws of Man

Society Does Not Understand Nature:

See Synergy, 4 Mar'69

Social Sciences: Analogue to Physical Sciences: (2)

See Acceleration of Change, 1938
 Air Space, May'65
 Asymmetry, 31 May'71*
 Democracy, 13 Nov'69
 Economics, 16 Feb'73*
 Energy, 28 Apr'48
 Intellect: Equation Of, 28 Apr'48
 Least Resistance, 1938
 Local Squareness, 9 Jul'62
 Marx, Karl, 6 Jul'62
 Public Opinion Polls, 4 Jan'70
 Rudderling Sequence (1)(4)(5)
 Synergetic Hierarchy, 31 May'71
 Design Science & World Game (A)-(C)
 Scrap Sorting & Mongering (2)
 Navy Sequence (2)
 Structural Sequence, (C)

RBF DEFINITIONS

Sociology:

"Sociology permits such fantastical asymmetrical extremes that we're looking at special cases instead of principles. . . . Such a high frequency of asymmetry. . . . And not knowing this, they don't realize that communism induces capitalism."

- ~~See tape transcript of RBF to EJA and DUSA, Chicago, 31 May '71.~~
 - Citation and context at Communism, 31 May'71

RBF DEFINITIONS

Society: Control Of:

"The creative control, or streamlining, of society by the scientific-minded (the right-makes-rightist) is in direct contrast to attempts by scheming matter-over-mundists (the might-makes-rightist) to control society by increasing, instead of lessening, resistance to natural flows through such devices as laws, tariffs, prohibitions, armaments, and the cultivation of popular fear."
 "By controlling direction it becomes possible, scientifically, to increase the probability that specific events will 'happen.'"

- Citation and context at Rationalization Sequence (2 (3)), 1938

Social: Society: Sociology: (1)

See Earth Fault: Society is Living in a Sort Of Earth Fault
 Fuller, R.B: As Harbinger of Society
 Metabolics
 Metabiblical Cord
 Organic Model: Biological World as a Model For Society
 Precession: Analogy of Precession & Social Behavior
 Self-considerate Society
 Superstition of Social Superiority
 Design Revolution: Pulling the Bottom Up
 Standard of Living
 Behavior & Environment
 Conditioning

Synergetics Dictionary

<p><u>Social:</u> <u>Society:</u> <u>Sociology:</u> (2)</p> <p>See Average Human Being, 1 Apr'73 Culture, 27 Jan'77 Dome Over Manhattan, 26 Apr'77 Ego, 9 Nov'75 Fear, Feb'72 Franklin, Ben, 22 Jan'73 Selfishness, 22 Jun'75 Symmetry & Asymmetry, Dec'71 Truth, 1967 Unselfishness, [REDACTED] Jan'72</p>	<p><u>Solar Panel Water Heating:</u></p> <p>See Now House, (4)</p>
<p><u>Social:</u> <u>Society:</u> <u>Sociology:</u> (3)</p> <p>See Social Adjustment Social Economics Social Highway Experience: Three Autos Social Ignorance Social-industrial Relay Social Justice Socialism Social Organization Social Problems: Tetrahedral Coordination Of Social Sciences: Analogue to Physical Sciences Society: Control Of Society Does Not Understand Nature Sociology</p>	<p><u>Solar Power:</u> (1)</p> <p>See Income Energy Wind Power Sun Energy Wind Power = Sun Power</p>
<p><u>Soft Revolution:</u></p> <p>See Revolutions: Soft & Hard</p>	<p><u>Solar Power:</u> (2)</p> <p>See Precession (b)</p>
<p>RBF DEFINITIONS</p> <p><u>Soil:</u></p> <p>See Topsoil</p>	<p>RBF DEFINITIONS</p> <p><u>Solar System Model:</u></p> <p>"The model of the solar system itself is a flattened polyhedron."</p> <p style="text-align: right;">- Cite RBF to EJA, Beverly Hotel, New York, 18 June 1971.</p>

Synergetics Dictionary

<p><u>Solar:</u> <u>Solar System:</u> (1)</p> <p>See Atom as Solar System Sun: Sunlight</p>	<p>RBF DEFINITIONS</p> <p><u>Solids:</u></p> <p>"Solids... are themselves only wave complexes."</p> <p>- Citation and context at <u>Noninterfering Zero Points</u>, '9 Mar'73</p>
<p><u>Solar:</u> <u>Solar System:</u> (2)</p> <p>See Black Hole (1) Regenerativity, 17:Jan'75</p>	<p>RBF DEFINITIONS</p> <p><u>Solids:</u></p> <p>"The superficially deceptive microaggregates which defied differentiating resolution, into their myriads of separate parts, by the instrumentally unaided human sight."</p> <p>- Cite INTUITION, p.40 May '72</p>
<p>RBF DEFINITIONS</p> <p><u>Soleri:</u> <u>Paolo:</u></p> <p>"Soleri is the example of the sculptor as politician. A bunch of people living together in the desert may be very attractive but what's that got to do with architecture? He is just a politician. I am not interested."</p> <p>- RBF to Lady architect Hay-Adams brunch, Wash Dc; 8 Feb'76</p>	<p>RBF DEFINITIONS</p> <p><u>Solids:</u></p> <p>"<u>Solids</u> are high tide aspects of faces."</p> <p>- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971</p> <p>- Citation and context at <u>Tidal</u>, 31 May'71</p>
<p>RBF DEFINITIONS</p> <p><u>Soleri,</u> <u>Paolo:</u></p> <p>"I know Paolo Soleri very well and think very well of him as a human being. I find him very inspiring to many other human beings in his humane viewpoints."</p> <p>"I think of him more as a sculptor than as an engineer, so I'm very sympathetic with his hope to serve humanity by what he gives you as an idea. But I do not think that is probably the way it is going to go. I think everything we produce will be produced more mobilely and with much more flexible kinds of relationships for humanity. All humanity is now prone to become world beings so we're going to have to accommodate the comings and going in very new places."</p> <p>└ For follow-on entry see <u>East-west Mobility Of World Man</u>, (1)(2)_7</p> <p>- Cite RBF to "Town Meeting of the Air," Wash,, DC; 10 Sep'75</p>	<p>RBF DEFINITIONS</p> <p><u>Solids:</u></p> <p>"The omninteractions impinge on your nervous system in all manner of frequencies-- some so high as to appear 'solid' things, some so slow as ■ seeming to be 'absolute voids.'"</p> <p>- Citation At <u>Halo Concept</u>, 25 Apr'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Solid State:</u></p> <p>"Science evolved the name 'solid state' physics when, immediately after World War II, the partial conductors and partial resistors-- later termed 'transistors'-- were discovered. The phenomena were called 'solid state' because without human devising of the electronic circuitry, certain small metallic substances accidentally disclosed electromagnetic pattern-holding, shunting, route-switching, and frequency-valving regularities, assumedly produced by the invisible-to-humans, atomic complexes constituting those substances. Further experiment disclosed unique electromagnetic circuitry characteristics of various substances without any conceptual model of the 'subvisible apparatus.' Ergo, the whole development of the use of these invisible behaviors was conducted as an intelligently resourceful trial-and-error strategy in exploiting invisible and uncharted-by-humans natural behavior within the commonsensically 'solid' substances. The addition of the word 'state' to the word 'solid' implied regularities in an otherwise assumedly random conglomerate. That I have discovered goes incisively and conceptually deeper than the blindfolded assumptions and strategies of solid state physics-- whose transistors' solid state regularities seemingly defied discrete conceptuality and scientific generalization and kinetic omnigramming."</p> <p>- Citation and context at <u>Atomic Computer Complex</u> (4)(5), 13 May'73</p>	<p><u>Solid State:</u> (1)</p> <p>See Transistor</p>
<p>RBF DEFINITIONS</p> <p><u>Solid State:</u></p> <p>"We have physics of the 'solid state,' a very late phase of physics very improperly called 'solid.' Even in the 'solid' state the voids between the atoms are as voids of interstellar space. The nucleus itself is as empty as space itself. But the concept that you could make everything solid was a most comfortable kind of concept."</p> <p>- Cite SYNERGETICS draft at Sec. 525.03, Nov'71</p>	<p><u>Solid State:</u> (2)</p> <p>See Atomic Computer Complex, (4)(5)* Particle, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Solid State:</u></p> <p>"Take the simple word <u>solid</u>. We have physics of the 'solid state,' a very late phase of physics, very improperly called, 'solid.' Even in the 'solid' state the voids between atoms are as the voids of space, and the nucleus itself is as empty as space itself. But the concept that you make everything solid was a most comfortable kind of concept."</p> <p>- Cite MERGERS & ACQUISITIONS Vol. 1, No. 1., p. 44, 1965</p> <p><u>SOLIDS MATTER - SEC. 525.03</u></p>	<p><u>Solids:</u> (1)</p> <p>See Entity Liquid vs. Solid Matter Particle Rules of No Actual Particulate "Solids" Tensegrity: Miniature Tensegrity Masts Bodies: Solid Bodies Liquid Solid No Solids</p>
<p>RBF DEFINITIONS</p> <p><u>Solid State:</u></p> <p>"One of the words we use a great deal is solid. Infact, in quite modern physics in relation to defense and so forth, we have <u>solid state</u> physics. It is a very strange phrase for the physicists to use because they have discovered that there is nothing solid. I don't know why they insist on using the words, but it seems to be good for bureacracy to have a solid state, and so you can handle it academically that way, but let's not get fooled because we haven't found anything solid. . . ."</p> <p>- Cite Oregon Lecture #3, p. 109. 5 Jul'62</p>	<p><u>Solids:</u> (2)</p> <p>See Halo Concept, 25 Apr'71* ; Jun'71 Invisible Circuitry, (2) Meaningless, Oct'66 Noninterfering Zero Points, 9 Mar'73* Powering, 11 Jul'62 Radiation: Speed Of, (C) Structure Sequence, (3); 15 Oct'64 Synergetics, (p.3) undated</p>

Synergetics Dictionary

<p><u>Solving:</u> <u>Solution:</u></p> <p>See Finite Solutions Problem Solving Problem: Statement of the Problem</p>	<p>RBF DEFINITIONS</p> <p><u>Somethingness & Nothingness:</u></p> <p style="font-size: small;">15.6.6 15.6.6 15.6.6 15.6.6 15.6.6</p> <p>"All the characteristics of a system are absolute because each of its components is the minimum limit case of its respective conceptual category, for all conceptuality, as the great mathematician Euler discovered and proved, consists at minimum of points, areas, and lines. Goldy further clarifies and simplifies Euler by saying that an area is a nothingness; a plurality of areas are framing separated views of nothingness. A point is a somethingness. A line is a relationship between two somethingnesses.</p> <p>"An enlarged seemingly single somethingness may prove to consist of a plurality of somethingnesses between which the defined interrelationship lines fence off the nothingness into a plurality of separately viewable nothingnesses. Points are unresolvable, untunable somethingnesses occurring in the twilight zone between visible and supravisible experience."</p> <p style="text-align: right;">- Cite GOLDYLOCKS Ms. p.A3, 9 Jun'75</p>
<p><u>Somereaulte:</u></p> <p>See Intertransformability Systems, 28 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Somethingness & Nothingness:</u></p> <p>"There is a fourfold twoness: one of the exterior, cosmic finite ('nothingness') tetrahedron, i.e., the macrocosm outwardly complementing all ('something') systems and the interior microcosmic tetrahedron of nothingness complementing all conceptually thinkable and cosmically isolatable 'something' systems."</p> <p style="text-align: right;">- Citation & context at <u>Two Kinds of Twoness</u>, (A)(B), 10 Nov'74</p>
<p>RBF DEFINITIONS</p> <p><u>Something:</u></p> <p>"We'll have to cut out this word something. I'd like some day to do something about this word 'something.' Some. Thing."</p> <p style="text-align: right;">- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971</p>	<p>RBF DEFINITIONS</p> <p><u>Somethingness^f & Nothingness:</u></p> <p>"The third power accounts both the untuned nothingness and the finitely tuned somethingness."</p> <p style="text-align: right;">- Citation and context at <u>Nothingness</u>, 16 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Somethingness & Nothingness:</u></p> <p>"These young scientists... said I had the answer to the age-old problem of how you start your accounting... of whether you start with two, or one, or zero.... I gave them awareness and otherness, identifying the secondness with otherness... The topology of the windows of nothingness. Somethingness is the same tunability of systems. Nothingness is ultra or infra, an untunability between the crests of waves of other systems, where there is no tuning at all."</p> <p style="text-align: right;">- Cite RBF to EJA, by telephone from Phila. office; 7 Oct'75</p>	<p>RBF DEFINITIONS</p> <p><u>Somethingness^f & Nothingness:</u></p> <p>"In synergetics the total mass somethingness to be acceleratingly expended is $10 P^2$, with always a bonus 2 : Me and the Otherness. In synergetics the total nothingness and somethingness involved in both inbound and outbound field is $20 P^3$. (Nothing = 10, Something = 10, Both = 20.) The multiplicative twoness of me and the otherness, $P^3 = \text{Unexpected nothingness } P^1 + \text{Expected somethingness } P^2 = P^3$."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 960.13, 16 Nov'72</p>

Synergetics Dictionary

Something-nothing-something-nothing: (1)
 See Binary
 Conceptuality & Nonconceptuality
 Now-you-see-it-now-you-don't
 Pulse Pattern

Something: Somethingness: (1)
 See Somethingness & Nothingness
 Time-somethingness
 Thing: Things
 Nothingness = Untuned Somethingness
 Simplest Something
 Point-to-able Something
 Minimum Something

Something-nothing-something-nothing: (2)
 See Resolvability Limits, 30 Apr'77

Simplest Something: (2)
 See Tetrahedron, 26 Apr'77

Somethingness & Nothingness: (1)
 See Space Nothingness & Time Somethingness
 Unstructurings & Restructurings
 Cosmic Discontinuity & Local Continuity
 Interference & Noninterference
 Visible & Invisible

Something: Somethingness: (2)
 See Bunch, 5 Mar'73
 Jitterbug, 4 Oct'72
 Lot, 5 Mar'73
 Tetrahedron, 20 Feb'73
 Triangle, 20 Apr'72
 Two Kinds of Twoness, (6)
 Thinking, 23 Feb'72
 One-dimensional Polarity, 11 Sep'75
 Two-dimensional Polarity, 11 Sep'75
 Minimum Tetrahedron, 22 Feb'77

Somethingness & Nothingness: (2)
 See Cosmic Discontinuity & Local Continuity, 15 Jan'74
 Fourfold Twoness, 10 Nov'74
 Minimum of Four Tetrahedra, 22 Feb'77
 Nothing, 11 Sep'75
 Out-lining, 22 Mar'76
 Quantum Sequence, (1)
 Self & Otherness: Four Minimal Aspects, 9 Jun'75
 Two Kinds of Twoness, (A)(B)*
 Windows of Nothingness, (1)
 Nature in a Corner, 20 Jun'77

Son of God:
 See Man as Son of God
 Trinity: Equation Of

Synergetics Dictionary

<p><u>Sound: Sound Waves:</u> (1)</p> <p>See Aural Babbling Hear Music Tastebuds of Sound</p>	<p><u>Source:</u></p> <p>See Cosmic Source Mysterious Source</p>
<p><u>Sound: Sound Waves:</u> (2)</p> <p>See Music, 4 Mar'69 Radiation-gravitation: Harmonics, 3 Jan'75 Harmonics, (1) Wind Stress & Houses, (9)[10] Limit Speed, 11 Sep'75</p>	<p>RBF DEFINITIONS (1)</p> <p><u>Sovereignty:</u></p> <p>Q. (Sen. Percy): "What do you mean, sovereignty is dead?"</p> <p>A. (RBF): "I am a student of large patterns. And as I look around I try to see what evolution is trying to do. We sometimes forget how important is the role of Universe. I have just been telling you that all the things that came in since I was born, automobiles, jet planes and the Queen Mary, radio, satellite communications, they were all unexpected, they were all surprises, and none of them were the result of conscious and deliberate development.</p> <p>"I do not look on it policywise. I see it as a worldwide biospheric pattern of honey bees and chromosomes.</p> <p>"The continental congress in Philadelphia has been so movingly described this morning, how people designed a democratic and marvelously representative government. But the congressman went back home on foot or horse. The city of Washington got one or two letters from Europe a month; and everyone knew what was said and went home and talked about it. Democracy flourished in a one-to-one correspondence of stimulation and response. With the advent of telegraph we lost all this;"</p> <p>- Cite RBF at Senate Foreign Affairs Subcommittee on UN, Washington, DC, 15 May'75 (EJA live notes)</p>
<p><u>Sound Word:</u> (1)</p> <p>See Names Sound Name</p>	<p>RBF DEFINITIONS (2)</p> <p><u>Sovereignty:</u></p> <p>"The effect of telegraphy on the news was mostly one-way, despatches from the field; by and large they provided no response. Democracy works on one-to-one correspondence, but now our communications are not working that way. In 1940 I explored the technology of communications, how if everyone voted daily would it affect the frequency of telephone use. Now we wonder if there might not be some electromagnetic patterns from the brain with all of humanity manifesting some kind of high-frequency electromagnetic, yes-or-no-field. If the satellite sensors are mapping our beef cattle, might they not also have a capability of picking up how humanity feels about a question. It's all going to be completely different from the ways of the past. You mentioned world government. There could be a sort of city management concept taking its orders from a consensus of humanity. Of course the majority might often be wrong, but with such instant communication errors would be recognized soon enough to correct them. Measuring what humanity is really thinking.</p> <p>"Servomechanisms work this way. All this is technically looming into view."</p> <p>- Cite RBF at Senate Foreign Affairs Subcommittee Hearing on US role in UN, Senate Office Bldg., Wash. DC, 15 May'75 (EJA live notes)</p>
<p><u>Sound Word:</u> (2)</p> <p>See God, May'72 Democritus, 6 Jun'69 Names, 20 Jan'75 Thinktionary, 27 May'75 Fuller, R.B: Moratorium on Speech, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Sovereignty:</u></p> <p>"Sovereign nations and states are examples of now obsolete but seemingly natural phenomena which were in fact concepts arbitrarily invented by the pirates."</p> <p>- Cite NASA Speech, p. 22. Jun'66</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sovereignty: Elimination Of:</u></p> <p>"Elimination of All World <u>Sovereignities</u>: All the customs barriers disappear as man goes from guarding the local roots of his originally exclusive agrarian metabolics life support into a world-around imperishable metals-sustaining impoundment of cosmic energy, and eternally regenerative energy, labeled industrialization in the world economy.</p> <p>"The high performance necessary to sustaining all life can only be realized by free access to all sources everywhere."</p> <p style="text-align: center;">- Cite WORLD-AROUND PROBLEMS THAT HAVE TO BE SOLVED BLOODLESSLY BY DESIGN SCIENCE REVOLUTION, NY Times, 29 Jun'72</p>	<p><u>Sovereignty: Sovereign States:</u> (2)</p> <p>See Cosmic vs. Terrestrial Accounting, (1) Dollar Bills: \$200 Billion One-dollar Bills Circling Around Earth, (3) Linear Programming, 5 Jun'73 Pirates: Great Pirates, (2) Spaceship Earth, 21 Jan'77 United Nations, 29 Mar'77</p>
<p><u>Sovereignty: Elimination Of:</u> (1)</p> <p>See Leaders: Take Away the Leaders Transnational United States: One of the Most Difficult Sovereignities To Break Up World Man Desovereignization Sequence Planetary Democracy Ideologies Become Supranational Spaceship Earth Homogenizing of Nations Competition: Elimination Of</p>	<p><u>Soviet Academy of Sciences:</u></p> <p>See Fuller, R.B: A Propos Ben Franklin, (1)</p>
<p><u>Sovereignty: Elimination Of:</u> (2)</p> <p>See Individual Economic Initiative, 13 Jul'74 Economic Accounting System: Human Life-hour Production, (1) Culture, 27 Jan'77</p>	<p><u>Soviet: ██████ Soviet Union:</u> (1)</p> <p>See Amtorg Engineers USSR</p>
<p><u>Sovereignty: Sovereign States:</u> (1)</p> <p>See Countries Geographical Identity Nation Political Mandates: Inventory Of Realm</p>	<p><u>Soviet: Soviet Union:</u> (2)</p> <p>See Intuition Sequence (4) Literacy, 18 Aug'70 Patent, 22 Aug'70</p>

Synergetics Dictionary

RBF DEFINITIONS

Space:

"Critical proximity accounts for the whole universe as we observe it, the collections of things and matter and noncontiguous space intervals."

--Cite RBF insert to SYNERGETICS (Conceptuality, Critical Proximity), Chicago, June 1971

- Citation at Critical Proximity, Jun'71

RBF DEFINITIONS

Space:

"The word locally means locally in time and space.
By space we mean size-- a function of time."

- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971

- Citation at Local, 22 Apr'71

RBFDEFINITIONS

Space:

"Space is the absence of events. Space is the absence of energy events, physically. Space is the absence of events, metaphysically."

- Cite SYNERGETICS Draft - "Conceptuality: Space" - May, 1971

SEC. 526.03

RBF DEFINITIONS

Space:

"Alan Watts: But I mean there is a common assumption-- it is ordinary common sense-- that space is nothing at all.

Fuller: That's noevent. I call it no-event. I don't like the word space anymore because it implies something. We have only frequencies. We have events and no-events. We have the unique energy packages."

Watts: But any sort of solid energy package seems to me inconceivable without a special ground.

Fuller: It doesn't bother me at all about the no-event.

Watts: Well, how can you talk of curved space, the properties of space?

Fuller: But you can't talk of straight space. There are no straight lines. Physics has found nothing but waves.

- Cite WATTS TAPE, p. 52, 19 Oct'70

RBF DEFINITIONS

Space:

"There is no universal space nor static space in universe. The word 'space' is conceptually meaningless except in reference to intervals between high-frequency events momentarily 'constellar' in specific local systems. There is no shape of universe. There is only omnidirection nonconceptual 'out' and the specifically directioned conceptual 'in.' We have time relationships, but not static space relationships."

- Cite SYNERGETICS Draft - Conceptuality: Space - May 1971

RBF DEFINITIONS

Space:

"In view of their limited range capabilities in respect to the electromagnetic spectrum and the relative rates of transformation which we speak of as motion, it is not surprising that the passengers aboard the skyship Earth make the mistake of talking about, 'Space' which is as meaningless as 'up' and 'down.' There is no static geometry. There are momentarily existant geometrical relationships. There are events and lack-of-events. The electromagnetic spectrum is a manifest of the gamut of unique frequencies of event recurrence. There are no 'solids,' no 'surfaces,' no 'continuums,' no straight lines or planes. We have only events and no-events-- the events being finite and their energies limited. . . .

"We are talking about no event, so let us contract those two words into one word, noevent, meaning nothing occurs."

- Cite BEAR ISLAND STORY, galley p.6, 1968

RNF DEFINITIONS

Space:

"The omninteractions impinge on your nervous system in all manner of frequencies-- some so high as to appear 'solid' things, some so slow as seeming to be 'absolute Voids.'"

- Citation at Halo Concept, 25 Apr'71*

RBF DEFINITIONS

Space:

"Space is the absence of energy events."

(Adapted.)

- Cite caption to SYNERGETICS ILLUSTRATION #94 - "Function of a Balloon as a Porous Network." 1967

Synergetics Dictionary

RBF DEFINITIONS

Space:

"... There is no static space frame of universe. The word 'space' is conceptually meaningless and dimensions may only be expressed in magnitudes of time, energy, frequency concentrations, and angular modulations. Time can be expressed only as 'relativity' in the terms of relative frequency of reoccurrence of any constantly recycling behavior of any chosen sub-system of universe."

- Cite NASA Speech, p. 49, Jun'66

~~- Cite CARBONDALE DRAFT IV-26~~

SPACE - SEC. 526.01 | +527.03

Space vs. Conceptuality:

See Conceptuality Independent of Size & Time, 5 May'74

RBF DEFINITIONS

Space:

"Velocity is the complementarity of time and space. Time and space are simply functions of velocity. Velocity is really the reality. You can examine the time or the space increment, but they are never independent of one another. They are unified as velocity."

~~- Cite Oregon Lecture #8, p. 298, 12 Jul'62~~

- Citation at Velocity, 12 Jul'62

SPACE - SEC. 526.02

Space Filling:

See Allspace Filling

RBF DEFINITIONS

Space Capsule:

"The word 'capsule' has hidden from man the fact that what science is really working on is a little house; not much room to move around in, no garden of roses outside, but nonetheless, a little house with a six billion dollar mortgage."

- For citation and context see Space Technology (2), 10 Oct '63

Space = Nontunability:

See Bubble Bursting, 20 Jan'78
Human Beings & Complex Universe, (4)

Space Capsule:

See Autonomous Living Technology Packet
Space Technology
Space Travel

RBF DEFINITIONS

Space as Nontuned Angle & Frequency Information:

"This moment in the evolutionary advance and psychological transformation of humanity has been held back by the non-physically-demonstrable, ergo non-sensorial, conceptionless mathematical devices and their resultant incomprehensibility of the findings of science. There are two most prominent reasons for this incomprehensibility: the first being the non-physically-demonstrable mathematical tools, the second being our preoccupation with the sense of static fixed 'space' as so much unoccupied geometry imposed by square, cubic, perpendicular, and parallel attempts at coordination, rather than regarding 'space' as being merely systemic angle and frequency information which is presently nontuned-in within the physical, sensorial range of tunability of the electromagnetic equipment with which we personally have been organically endowed."

- Cite SYNERGETICS 2 draft at Sec. 100,33; 22 Feb'77

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Space Nothingness & Time Somethingness:</u></p> <p>"The only instantaneity is eternity.</p> <p>"All temporal (temporary) equilibrium life-time-space phenomena are sequential, complementary, and orderly disequilibrium intertransformations of space-nothingness to time-somethingness, and vice versa. Both space realizations and time realizations are always of orderly asymmetric degrees of discrete magnitudes. The hexagon is an instantaneous, eternal, simultaneous, planar section of equilibrium, wherein all the chords are vectors exactly equal to all the vector radii: six explosively disintegrative, compressively coiled, wavelinear vectors exactly and finitely contained by six chordal, tensively-coil-extended, wavelinear vectors of equal magnitude."</p> <p style="text-align: center;">28</p> <p>- Cite SYNERGETICS text at Sec. 1032.21, Dec'73</p>	<p>RBF DEFINITIONS</p> <p><u>Space Program:</u></p> <p>"We are nothing but a space program. We are so physically negligible as to be approximately space itself."</p> <p>- Citation and context at <u>Twelve-Inch Steel World Globe</u> (3)(4), 17 Jul'73</p>
<p>RBF DEFINITIONS</p> <p><u>Space Nothingness & Time Somethingness:</u></p> <p>"The only instantaneity is eternity. All temporal (temporary) equilibrium life-time-space phenomena are sequential, complementary, and orderly transformations of space-nothingness into time-somethingness, and vice versa. Both space realizations and time realizations are always of orderly asymmetric degrees of discrete magnitudes."</p> <p>- Citation and context at <u>Hexagon</u>, 22 Feb'73</p>	<p><u>Space Program:</u></p> <p>See <u>Outlaw Area</u>, Jun'66</p>
<p><u>Space Nothingness & Time Somethingness:</u> (1)</p> <p>See Articulated & Unarticulated Cosmic Discontinuity & Local Continuity Somethingness & Nothingness Tuning-in & Tuning-out Interference & Noninterference</p>	<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u></p> <p>"Competition among nations holds us back. With 135 countries in the world, we have a spaceship with 135 absolute admirals-- each of whom wants to sink the rest of the ship."</p> <p>- Cite RBF quoted in <u>Lincoln Star</u>, front page, Lincoln, Nebraska; 21 Jan'77</p>
<p><u>Space Nothingness & Time Somethingness:</u> (2)</p> <p>See Jitterbug, 4 Oct'72 Hexagon, 22 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u></p> <p>"Spaceship Earth: I invented the term at the University of Michigan in 1951."</p> <p>- Cite RBF at Penn Bell videotaping, Philadelphia, 29 Jan'75</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u></p> <p>"Though brilliantly theorized to be so several thousand years earlier, it is only for the last 500 years that we humans have had proven to us by Magellan's circumnavigation that we indeed are dwelling aboard a spherical planet. It is only for five years that, having 'seen ourselves as others see us' from humans-on-the-Moon advantage, that we are beginning to realize that we are indeed living on a once superbly-equipped spherical spaceship and that we are a space program.</p> <p>"Despite our considerable resource of present-day theoretical knowledge, all humans continue to reflex in the manner to which they have been powerfully conditioned throughout millions of misconceiving years. As a consequence, even today we all seem to see the Sun rising and sinking, think in terms of 'up' and 'down', 'wide, wide world', the four corners of the Earth, and our 'air space', which misconceptions have no correspondence with the realities of Universe."</p> <p style="text-align: right;">- Cite RBF Address to MEMSA International, Chicago, IL, 22 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u> (D)</p> <p>"I invented this phrase, Spaceship Earth, a number of years ago when I was trying to get man to-- trying to help him, personally, particularly young people, to shake themselves loose of preoccupation with the powerfully conditioned reflex that there is something called Earth and something called space, this Heaven and Earth idea. I used to have students say to me 'I wonder what it would be like to be on a spaceship?' And I'd say: 'What does it feel like?'</p> <p>"The relative size of things.. When you get to the size of our Earth in space, 8,000 miles' diameter-- the Sun's corona when you look at it with filters through a telescope we can actually see it-- in the larger magnification, one of the flames would be about an inch. One inch of flame is often an altitude of over a hundred times the diameter of our Earth. The size of our Earth would be undetectable in one of those flames.</p> <p>"The distance to the next nearest star to our Sun takes light coming 700 million miles and hour four and two-thirds years to get here. So somewhere between that kind of distance we have a tiny invisible spot of 8,000 miles' diameter, our planet,</p> <p style="text-align: right;">- Cite Rasa Gustaitis, WHOLLY ROUND, p.161, (HR&W,NY) Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u> (A)</p> <p>But when I question his Spaceship Earth metaphor he becomes annoyed and distressed. "It is a spaceship. That's not an analogy. It's a fact," he says.</p> <p>"But a spaceship is built by man, all the factors have been designed for a particular known purpose. The earth is an organic thing on which we live," I argue.</p> <p>"The planet is designed-- superbly designed-- by a greater intellect than that of man," he says. "And it's moving through space."</p> <p>"But are we passengers or an organic part of it?"</p> <p>"We've got three billion and a half passengers on board."</p> <p>"What about the plants, whales, horses-- are they also passengers?"</p> <p>"A passenger is someone taking passage aboard a vehicle," he says with a sharp edge of impatience. "You are aboard a"</p> <p style="text-align: right;">- Cite Rasa Gustaitis, WHOLLY ROUND (HR&W, NY), p.158, Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u> (E)</p> <p>"going around the Sun at 60,000 miles an hour. And the Sun itself, and the galactic system.. sum totally we're making something like a million miles an hour right now."</p> <p>Now usually when someone mentions a multidigit number to me, I blank out. But Fuller has led me into those interstellar spaces. That's Fuller the poet, conveying reality, not describing with words.</p> <p>"So we couldn't be more of a spaceship and we couldn't be tinier and we couldn't be more beautifully designed... If we were to say that man was God, if that's what you're objecting to, that this design is so much better, then OK. But nevertheless, I call it a design... The space is a priori mystery that the space vehicle goes in. And you don't think that it's a mysterious thing that he had the capability to get there? It's all part of the same mystery."</p> <p>"People who listen to me say, 'Here's a man who's selling screwdrivers. . . They don't realize how mysterious screwing is.'"</p> <p style="text-align: right;">- Cite Rasa Gustaitis, WHOLLY ROUND (HR&W, NY), p. 161, Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u> (B)</p> <p>"vehicle moving at 60,000 miles an hour through the heavens and you're aboard as a passenger. I'm sorry but your objection is invalid.</p> <p>So decreed Justice Fuller. I tried a different angle having, apparently, failed to make myself understood: "There's an organization just formed in San Francisco called Living Creatures Associates. It's a press agency claiming to represent other species-- whales, garter snakes, foxes-- represent them publicly on their own terms, with a right to exist on this spaceship, then, in the same way as I do. With some rights that conflict, perhaps, with those of men."</p> <p>"Did the foxes invite them? Did the daisies elect them?... I have no objection to other people's doing what they do but nothing could be more remote from me," says Fuller.</p> <p>"I call this a do-gooder organization, idealistic and so forth. And their effectiveness approximately zero.. I think it is a very nice manifest of consciousness of man. He's beginning to think about things."</p> <p>"The idea is that.. we must accept the rights of other beings."</p> <p style="text-align: right;">- Cite Rasa Gustaitis, WHOLLY ROUND (HR&W, NY), p.159, Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u> (F)</p> <p>"...I've been identified only with the physical so far. I went through 25, 30 years of people saying: this the bathroom man, or the automobile man-- that's all they thought about me. It's only in the last couple of years that they discover I'm a thinker. And I started as a thinker. I didn't start with bathrooms. I started off with God and my charge was to work on the physical. That's where I had the capability; that's why we're here. I accepted this. And to find myself identified, then, with just being a fishing-pole salesman! I find this thing echoed when you say that about my analogy, 'cause I use a very good tool there. I have helped to shock man into realizing he's on board a space vehicle. He's a passenger on it and he's intimately related to it."</p> <p style="text-align: right;">- Cite Rasa Gustaitis, WHOLLY ROUND (HR&W, NY), p.162, Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u> (C)</p> <p>"What happened to those dragons?" he replied. "What happened to the flying creatures of a few million years ago? What happened to their rights? What about the rights of volcanoes when the whole Earth was volcanic? Who took their rights away?"</p> <p>"But it's a fact that certain birds and animals are dying because of man's actions. Don't we have to take responsibility for that?"</p> <p>"We have to take the responsibility of being responsible. So far we have not been very responsible. You don't say to a new child, 'You better go back in there, you're not very responsible...' They're just using words-- foxes and daisies. ... I say: What might I do that made it logical for man not to do these things? That's what I'm caring about. That's what design science is..."</p> <p style="text-align: right;">(See Tree, Feb'73)</p> <p>He was shocked that I found fault with his Spaceship Earth analogy.</p> <p style="text-align: right;">- Cite Rasa Gustaitis, WHOLLY ROUND (HR&W, NY), p. 160, Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u> (I)</p> <p>"Your Senate hearing gives me a short but welcome opportunity to talk thus about all that man has learned from his two million years aboard our spaceship Earth, therefore I wish to point out vigorously to you that we are indeed aboard an 8,000-mile-diameter spherical space vehicle. We were excited during the Christmas days when we first looked at the Earth from the Moon. But I heard our President speaking 'down to Earthedly' to the astronauts about their going up to the Moon. There is no 'up' or 'down' in Universe. He find so-called practical men saying, 'Never mind that space stuff, let's get down to earth.'</p> <p>"And we retort 'Where is that? Where is "down" and what and where is that non-space existing theory avoiding Earth?'</p> <p>"Despite their ignorant urging of 'Never mind that space stuff, let's get down to earth,' we find that our little 8,000-mile-diameter planet Earth, together with the Moon, is flying formation at 60,000-miles-per-hour around the Sun."</p> <p style="text-align: right;">- Cite RBF at Senate Hearings, p. 9, 4 Mar'69</p>

Synergetics Dictionary

RBF DEFINITIONS

Spaceship Earth: (2)

"Earth is a beautifully designed spaceship equipped and provisioned to support and regenerate life aboard it for hundreds of millions of years, even until the time when so much energy of Universe has been collected aboard Earth as to qualify it to become a radiant star, shortly before which man will have antipocentrically resituated himself on other planets at nonincineratable distances from the Earth nova."

- Cite RBF at Senate Hearings, ■ p.9, 4 Mar'69

RBF DEFINITIONS

Spaceship Earth: (c)

"And to make things even more challenging and intelligence-invoking for the passengers, no instruction book on identification of the parts and what they do and how to operate them came with the spaceship. Because some of the red berries were healthily sustaining while other red berries were poisonous, the passengers were forced to learn by trial and error about the myriad of life-advantaging principles that have been secretly built into the integral metabolism of Spaceship Earth and that spaceship's complementary universal environment, which is ever energetically transforming and evolving. This was made possible by the apparently ample tolerance for their many errors which was included in the design of the ship and the celestial support system. Though often obvious for millions of years, most of these vital advantage-giving principles long have remained unrecognized for what they are and can do; it would seem to be a part of the designed scheme of Universe that-- for the nonce, anyway-- nothing is quite so invisible to Spaceship Earth's passengers as the obvious. . . .

"As all of the Spaceship Earth's passengers see all their experiences only by image-nation in their brains, we too may imagine ourselves aboard the little spherical, 8,000-mile
- Cite BEAR ISLAND STORY, galley p.3, 1968

RBF DEFINITIONS

Spaceship Earth:

"I just say to all of you: 'Hullo, astronauts, You're all astronauts. I'm sure you're not thinking of yourselves as astronauts or you wouldn't have the word for somebody else. But you're all astronauts, you never have been anything else. You've just got to catch on that you're all astronauts. It's a very small little ship we've got here; it's superbly equipped and every part of it is reciprocal; there are no labels on it which say anything belongs to anybody. Everything that's there is to regenerate all of life."

- Cite RBF in "The Listener" transcript by John Donat, 26 Sep'68

RBF DEFINITIONS

Spaceship Earth: (d)

"diameter Spaceship Earth with its then atmospheric, ionic, and radiation-shielding Van Allen [redacted] mantles, speeding integrally at 17 miles per second in a vast elliptical orbit around our 92-million-mile distant, fully automated energy supply ship-- the Star Sun-- in the presence of our 10-trillion-mile further distant, next nearest star.

"These two stars are our Spaceship Earth's nearest prime energy, life-giving, and life-sustaining, regenerating supply ships. As do also the myriad of even further away supply ships, these two stars 'fly formation' with our Spaceship Earth in the vast inconceivable ocean of time. The energy supply ships are flown at a distance sufficient to prevent their heat and radiation from drying up and incinerating the many forms of life aboard Spaceship Earth.

"Large though 8,000 miles may seem to the human passengers, who are only one-thousandth of a mile tall, Spaceship Earth's diameter as seen from another planet is only a tiny pinpoint of Sun-reflected light similar in appearance to the Spaceship Mars or Venus as seen from Spaceship Earth."
- Cite BEAR ISLAND STORY, galley p.4, 1968

RBF DEFINITIONS

Spaceship Earth: (a)

"Once upon a time and aboard a spaceship there were almost four billion passengers, each so small and the ship so large that the passengers wandering about on its spherical deck, pulled feetward toward its center of gravity, could see only about one two-millionth of the ship's total deck surface at any one time. Usually they [redacted] all told, only a millionth of it in their entire lifetimes." As a consequence they did not realize that the only locally irregular surface on which they walked did not stretch away as a plane to infinity and was in fact a finite or closed spherical surface system.

"That spaceship had been given the name 'Earth' by its passengers, this name being descriptive of its hard-packed dust, dirt, and rock-surfaced deck stretching away surrounded by water seemingly to infinity. So impressed have the passengers been with that stationary, egocentric, two-dimensional concept that they have for long, and as yet, begin their children's education with plane geometry-- its surfaces and lines-- stretching away to infinity. . . .

"Three-quarters of Spaceship Earth's surface is covered with water and only about half of the dry one-quarter is both"

- Cite BEAR ISLAND STORY, galley pp.2-3, 1968

RBF DEFINITIONS

Spaceship Earth: (e)

"After at least two million years of experience aboard it, many of the almost four billion amateur astronauts aboard Spaceship Earth have become theoretically well informed regarding a few behavioral characteristics of a meager fraction of the celestial phenomena. But none of them-- excluding possibly the Russian and U.S.A. professional spacemen [The three bears, Goldilocks, and her father]-- as yet consciously and realistically sense that their own planet is a spaceship and see and feel themselves zooming through Universe upon that spherical ship. . . .

[See Up and Down Sequence (A) - (B)]

"Because the Spaceship Earth is also spinning equatorially at 1,000 miles per hour as it orbits the Sun at 60,000 miles per hour, when we launch a tiny, two- or three-man-carrying, capsule by rocket from our Earth Spaceship, we must give the capsule an additional acceleration boost of approximately 16,000 miles per hour in order to break out of Earth's gravitational pull. This means that we on our big mother Spaceship Earth must give our small space 'launches' a local space speed of 76,000 mph., or 16,000 mph. faster than Spaceship Earth's"

- Cite BEAR ISLAND STORY, galley pp.4-5, 1968

RBF DEFINITIONS

Spaceship Earth: (b)

"habitable and suitable for providing vital support of the passengers. This meager ten percent of the spaceship's surface with its vitally hospitable damp surface is divided into many small fractions scattered so remotely from one another around the Earth's sphere and with such vast and formidable waters, mountains, deserts, and ice intervening, that as a result each of the local groups of inhabitants of the various areas-- for 99 percent of the period of their known presence on Earth-- have been unaware of the other groups' existence or whereabouts aboard the spaceship.

"Equipped materially to take care of its passengers for millions of celestial travel years, but needing additional energy to produce, maintain, and regenerate its complex, interchemically exchanging, life-support system, it was designed by the conceiver of the vast, ever and everywhere nontemporaneously transforming Universe, that the additional and vital energy [redacted] constantly transmitted to the spaceship by the electromagnetic radiations emanating from enormous, fiery, unmanned, automated mother spaceships traveling in company with, but at great distances from, the little Spaceship Earth."

- Cite BEAR ISLAND STORY, galley pp.3, 1968

RBF DEFINITIONS

Spaceship Earth: (f)

"Sun-orbiting speed. Aboard Earth we are accustomed to the idea of big ships carrying small lifeboats; launches, tenders, and gigs. We must now think of our space-rocketed capsules as small boats launched outwardly from our bigger spaceship.

"But these speed variations of our spaceship and its launches become minuscule and negligible in comparison to the speed of Spaceship Earth as a solar system component as that solar system itself orbits within our galactic nebula's even greater perimeter motion and our galactic nebula's collective motion in respect to the other nebulae."

- Cite BEAR ISLAND STORY, galley p.5, 1968

Synergetics Dictionary

<p style="text-align: center;">BARBARA WARD QUOTATION</p> <p><u>Spaceship Earth:</u></p> <p>"To my esteemed and beloved friend friend, Buckminster Fuller", who provided much more than the title of this book.</p> <p style="padding-left: 20px;">-- Barbara Ward Jackson</p> <p style="padding-left: 20px;">-- 23 May'66</p> <p style="padding-left: 20px;">[N.B. This debt to R.B.F. acknowledged only in her presentation copy to him. l., and buried in text at p.15.]</p> <p style="padding-left: 20px;">- Cite Lady Jackson inscription in RBF presentation copy of her SPACESHIP Earth, Columbia Univ. Press, N.Y. 1966, inscribed 23 May'66</p>	<p><u>Spaceship Earth:</u> (2)</p> <p>See Antientropy (A) Man as a Function of Universe (B) Miniature Earth, 28 Apr'74 Know-how & Know-what, 11 Nov'74 Milley, Edna St. Vincent, (3) Wealth, 20 Sep'76 Building Industry, (11) United Nations, 29 Mar'77</p>
<p style="text-align: center;">BARBARA WARD QUOTATION</p> <p><u>Spaceship Earth:</u></p> <p>"In fact, I can think of only one way of expressing the degree to which interdependence and community have become the destiny of modern man. I borrow the comparison from Professor Buckminster Fuller, who, more clearly than most scientists and innovators, has grasped the implications of our revolutionary technology. The most rational way of considering the whole human race today is to see it as the ship's crew of a single spaceship on which all of us, with a remarkable combination of security and vulnerability, are making our pilgrimage through infinity. Our planet is not much more than the capsule within which we have to live as human beings if we are to survive the vast space voyage upon which we have been engaged for hundreds of millenia-- but without yet noticing our condition. This space voyage is totally precarious. We depend upon a little envelope of soil and a rather larger envelope of atmosphere for life itself. And both can be contaminated and destroyed. Think what could happen if somebody were to get mad or drunk in a submarine and run for the controls. If some member of the human race gets dead drunk on board our spaceship, we are all in trouble. This is how we have to think of ourselves. We are a ship's company on a small ship. Rational behavior is the condition of survival."</p> <p style="padding-left: 20px;">- Cite Barbara Ward, SPACESHIP EARTH, Columbia Univ. Press, NY, 1966, P.15.</p>	<p><u>Space Structures:</u> (1)</p> <p>See Floating City Moon Structures Habitable Satellite Satellite Environment Controls Sky Dwelling Sky-island City Skybreak Bubble</p>
<p>RBF DEFINITIONS</p> <p><u>Spaceship Earth:</u></p> <p>"For at least 2,000,000 years men have been reproducing and multiplying on a little automated spaceship called Earth, in an automated Universe in which the entire process is so successfully pre-designed that men did not even know that they were automated, regenerative passengers on a spaceship and were so naive as to think they had invented their own success as they lived egocentrically on a seemingly static Earth."</p> <p style="padding-left: 20px;">[N.B. At Hugh Kenner's house in Baltimore, in response to an inquiry from the Baltimore SUN, RBF said that to the best of his recollection this citation was his earliest reference to spaceship Earth in print. -- 3 Oct'73.]</p> <p style="padding-left: 20px;">- Cite PROSPECT FOR HUMANITY, Sat. Review, 19 Sep'64</p>	<p><u>Space Structures:</u> (2)</p> <p>See Biosphere, (1)-(4) Necklace, Nov'71</p>
<p><u>Spaceship Earth:</u> (1)</p> <p>See Earth Planet Earth Competition: Elimination of Sovereignty: Elimination of</p>	<p>RBF DEFINITIONS</p> <p><u>Space Technology:</u> (1)</p> <p>"In contrast to the home arts let us look at the space rocketry world. At the present moment we have the enormous, major governments subsidized weaponry race into space undertaken by both Russia and the United States. In order to be able to put a man in space-- to stay in space, not to make a few orbits-- in order to have man, in effect, live continuously in outer space for weeks and months and possibly years, we have to solve scientifically the problem of mastering the ecological pattern of the human being and the metabolic pattern of the human being. We have to realize that the energy events that take place metabolically in supporting man ecologically on Earth involve energy transforming functions of trees, worms, water, sunlight, the slowly forming topsoil, et. al. The delicately balanced pressure and heat of energy exchanges and chemical transformations involve very large ecological domains to complete the cycles of a man-supporting environment process on Earth. We are going to have to compress the total ecological domain of man from approximately a one-mile radius process into a ten-foot radius process. We are going to reduce the total volume of energy transformation patterning several millionfold. In order to be able to send that man off into"</p> <p style="padding-left: 20px;">- Cite MEXICO '63, p. 11, 10 Oct '63</p>

Synergetics Dictionary

RBF DEFINITIONS

Space Technology:

(2)

"space, we have to scientifically anticipate and effectively service all his processes and psychological reflex requirements. In order to be able to do that we are, in effect, building a little house-- a little space house. We had been using the word 'capsule,' which has hidden from us the fact that what science is really working on is a little house; not much room to move around in, no garden of roses outside, but nonetheless, a little house with a six billion dollar mortgage.

"In this strange battle of man to anticipate offensive-defensive weaponry battles in the cold warring, the battle to attain the moon, or protracted living upon a platform in space, has brought about a race in capital funding initiatives between Russia and the United States specifically in relation to this little house, amounting to six billion dollars. This staggering amount is now appropriated to hire scientists to go to work to design and produce one little sky house, the first scientific human dwelling in history. It must be capable of sustaining man as a metabolic success anywhere in Universe. It won't be a very charming little house. It won't be 'good architecture' by the traditional a-la-mode"

- Cite MEXICO '63, p.11, 10 Oct '63

RBF DEFINITIONS

Space Technology:

(6)

"means of housing and servicing men (or women or both) anywhere in Universe which means under vastly more difficult conditions than on Earth and, because of the superman requirements of the service, at a higher standard of satisfaction of living fundamentals than any men have ever known.

"Tents won't do in airless space. If you spit in space the spit goes into orbit and you retro-orbit. There is no sewer system in space. There is no gravity to pull matter down the drain. There are no water supply lines, no electric wires, no supermarkets. Because of the completely un-earthly conditions within which our men at the new space front have to operate, science has now been invoked for the first time in history to 'enshrine living man.' That is the surprise!

"Science has always been a complex of independent and subjective economic slave disciplines, primarily concerned with the harvesting of information, rather than with the practical application of that information. To provide the unearthly sky dwelling for our celestial fire-power soldiers, science has at last been brought to bear objectively and"

- Cite MEXICO '63, p.13, 10 Oct '63

RBF DEFINITIONS

Space Technology:

(3)

"aesthetics. Above all I want you architects at this Seventh World Congress of the I.U.A. to realize that what the space scientists are working on is in fact the design of a house: that is architecture. The scientists are in your business competing with you in the solution of all the problems that a house for regenerative man involves. It involves every one of the fundamental principles ever discovered by man in Universe. The scientists are attending to the dwelling problems that you have failed to attend to or have left to someone else to solve, as for instance, the plumbers. Then the prototype moon dwelling and its space autonomy mechanics are developed, and it has been satisfactorily test orbited for 100 days, and that house has finally taken man successfully to the moon, or to a space platform, there to dwell for months, then we will have history's first scientific semi-autonomous dwelling. In that sky dwelling we will have the energy exchange processes, internal and external to man's ecology, becoming locally regenerative.

"This process and its scientific tooling and instrumentation must become locally regenerative on an extraordinarily satisfactory basis before we shoot man to the moon or in"

- Cite MEXICO '63, pp.11-12, 10 Oct '63

RBF DEFINITIONS

Space Technology:

(7)

"integratively upon the generalized problem of converting man's combined ecological and metabolic patterning in Universe from a random matrix of happenstance interferences, of unknown miles of overall dimension, into a compacted metabolic coordinate system of high certitude of controllability, ergo a local ecological success under approximately any conditions other than those of falling into the Sun or other stars. The sky house man must be made capable of taking position at will, either by interior or remote control, approximately anywhere in the dynamic intercoordination of physical Universe. Yet, by virtue of entropy, that is of inherent local loss of energy of all local systems in Universe, the sky house may not be perpetually independent and self-regenerative. It is ultimately dependent upon the good will replenishment of that local and remote ecological system by the organized energetic activities of other men acting both as individuals and as vast teams, coordinated under the predominant will of organizations of men on Earth."

- Cite MEXICO '63, pp.13-14, 10 Oct '63

RBF DEFINITIONS

Space Technology:

(4)

"to protracted space orbiting. We are not going to pick the finest, healthiest world specimens, the best coordinated human specimens we have, and send them off to space to live in some highly inadequate and swiftly deteriorating condition. All the world will be hooked up by TV to observe the details of man's first home life in the sky. The technology will have to be performed superlatively before we shoot man to the moon or sky platform. This means that the problems will be solved on Earth and not in the sky. The mechanics of solution will be produced here on Earth. The establishment of this capability here on Earth also is going to make possible a very different kind of dwelling technology right here on Earth. We will no longer have to have water pipes and sewer systems. Mankind will suddenly start mass-producing the space house prototype's pipeless, wireless, trackless ability to deploy man around the Earth's surface as well as in space. Man will be able to take position anywhere on the face of the Earth, as an eagle takes firm, safe poise on his beautiful mountain peak vantage, with many able to readily reach such points by rooftop and able to survive at such remote spectacular points at very high living standards, comfort, and low cost with swift ability to"

- Cite MEXICO '63, p.12, 10 Oct '63

Space Technology:

(1)

See Autonomous Living Technology Packet
 Fuel Cell
 Moon Structures
 Moon Trip
 Space Capsule
 Space Structures
 World Game: Men Landing on Moon
 Airspace Technology
 Walls vs. Airspace Technology

RBF DEFINITIONS

Space Technology:

(5)

"reconvene in cultural centers, etc. . .

"For the first time in the history of man on Earth we are actually applying the highest scientific capability to that extraterrestrial space dwelling, underwritten inadvertently and exclusively by weaponry supremacy ambitions for celestial control of world fire power. This celestial supremacy involves, however, an unprecedented weaponry system requirement: that of making man a successfully semi-autonomous biological intelligence system remote from Earth where he will be unable to survive normally by himself, as detached reconnaissance soldiers have been able to do in all previous history. A surprise event thus entered into the age-old weaponry system evolution, the significance of which has not as yet been publicly nor politically apprehended or comprehended.

"All weaponry up to this moment in history has been designed primarily to kill men with maximum scientific skill. Here we discover the as-yet uncomprehended surprise. Now for the first time in history the space weaponry race has forced the weaponry system directors inadvertently to design a"

- cite MEXICO '63, pp.12-13, 10 Oct '63

Space Technology:

(2)

See Dwelling Service Industry (3)-(6)
 General Systems Theory, 4 Jan'70
 Science: Cause of Science For Man, 14 Mar'71
 Spherical Triangle Sequence (VIII)
 Tolerance Sequence, Jun'69
 Plastics, 10 Aug'70
 Dome: Rationale For (I)

Synergetics Dictionary

<p><u>Space-time:</u></p> <p style="text-align: center;">See Time-space</p>	<p style="text-align: right;"><u>Space Travel:</u> (2)</p> <p>See Atomic Computer Complex (7) Biosphere (1)-(3) Disparity, 1960 Icosahedron as Local Shunting Circuit, 22 Jun'72* Invisible Circuitry (1)(2) Radiation, May'72 Spaceship (2); (e)(f) Orbital Escape from Critical Proximity, (1)</p>
<p>RBF DEFINITIONS</p> <p><u>Space Travel:</u></p> <p>"... The icosahedron is stuck locally with no way to get to another continent. The vector equilibrium is how you get from one sphere to another, from Earth to Mars."</p> <p style="text-align: center;">- Citation and context at <u>Icosahedron As Local Shunting Circuit</u>, 22 Jun'72</p>	<p style="text-align: center;"><u>Space ≠ Unoccupied Geometry:</u></p> <p style="text-align: center;">See Space as Nontuned Angle & Frequency Information, 22 Feb'77</p>
<p>TEXT CITATIONS</p> <p><u>Space Travel:</u></p> <p>Synergetics draft Secs. 1009.71 - ff, 15 Feb'73</p> <p>Hyper, World Mag., 4 Apr'73 - p. 38; 1st & 2nd Cols.</p> <p>780.22-780.28</p> <p>1009.65</p>	<p>TEXT CITATIONS</p> <p style="text-align: center;"><u>Space Walking:</u></p> <p style="text-align: center;">Synergetics draft at Secs. 1009.66 - ff. 14 Feb'73</p>
<p><u>Space Travel:</u> (1)</p> <p>See Astrogator Cosmic Transmission Eye-beamed Thoughts Man: Interstellar Transmission of Man Man's Universe Penetrations Travel: Extraorganic Travel World Game: Men Landing on Moon Space Capsule Planets: Probable Myriads of Consciously Operated Planets Moon: Humans Reach Moon and Return Electromagnetic Transmission of Human Organisms Extraorganic Travel</p>	<p style="text-align: right;"><u>Space:</u> (1)</p> <p>See Air Space Allspace Filling Available Space Conceptuality & Space Curved Space: Bent Space Domain Field of Omnidirectional Nothingness Interspace Interstitial: Interstitial Space No Geometry of Space Nothing Nothingness of Areal & Volumetric Spaces Novent Otherness We Call Space Spheres & Spaces Static Invalidity of Solid Things vs. Empty Space Thinkability vs. Space Time-space Vacuum Volume Void</p>

Synergetics Dictionary

<p><u>Space:</u> (2)</p> <p>See Critical Proximity, Jun'71* Face, 20 Feb'73 Halo Concept, 25 Apr'71* Infinite, 15 Oct'72 Local, 22 Apr'71* Omnipertangency, 17 Feb'73* Vacuum, 19 Feb'72* Velocity, 12 Jul'62* Graphable, 27 May'72 Events & Novents, Nov'71 Silence, 30 Sep'76* Tuning-in & Tuning-out, 17 May'77</p>	<p><u>Speaking:</u></p> <p>See Speech</p>
<p><u>Space:</u> (3)</p> <p>See Space Capsule Space Filling Space Nothingness & Time Somethingness Space Program Spaceship Earth Space vs. Conceptuality Space Structures Space Technology Space Travel Space Walking Space ≠ Unoccupied Geometry Space as Nontuned Angle & Frequency Information Space = Nontunability</p>	<p>RBF DEFINITIONS</p> <p><u>Spear:</u></p> <p>"Vectors are like spears. I could 'massage' any object into a spear shape, point and thrust-throw it in a discrete direction. I intuitively liked those directional vector 'spears.' I felt that they tended at least to embody all the energetic qualities of represented experiences."</p> <p style="text-align: right;">- Cite "Bucky" by Hugh Kenner, p. 105; probably from Snyder or Parrel, Summer'71</p>
<p><u>Spar Crystals:</u></p> <p>See Iceland Spar Crystals</p>	<p><u>Spear:</u> (1)</p> <p>See Javelin Vector</p>
<p><u>Sparking & Nonsparking:</u></p> <p>See Copper, 15 Aug'70</p>	<p><u>Spear:</u> (2)</p> <p>See Geometry of Vectors, 10 Oct'64</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>Q. "You look at the world in such a different way. . . Why?"</p> <p>RBF: "It's just because all people are special. Everyone is a special case."</p> <p style="text-align: right;">- Cite RBF to Sue Liberman at WAMU*FM, taping, Wash, DC: 26 Apr'77</p>	<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"Though special-case experiences exemplify employment of eternal principles those special cases are all inherently terminal; that is, in temporary employment of the principles."</p> <p style="text-align: right;">- Citation and context at <u>Eternal</u>, 13 Mar'73</p>
<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"Structures are always special case. Structures are operational. Operational = physically realized. Structures always have unique size. By definition, a structure is a complex of energy events interacting to produce a stable pattern.</p> <p>"An energy event is always special case. Whenever we have the experienced energy we have special case. The physicist's first definition of physical is that it is an experience which is extracorporeally, remotely, instrumentally apprehensible. Metaphysical are all the experiences that are excluded by the definition of physical. Metaphysical is always generalized principle."</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. Ed., at Secs. 1075.10-11, 27 Dec'74</p>	<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"The facts of experience are always special case."</p> <p style="text-align: right;">- Citation and context at <u>Order</u>, 13 Mar'73</p>
<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"Special case is always realized by its energetic information.... Time incrementation is special case information."</p> <p style="text-align: right;">- Citation & context at <u>Energy & Information</u>, 27 Dec'74</p>	<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"Special case always has frequency and size-time."</p> <p style="text-align: right;">[34] - Cite SYNERGETICS draft at Sec. 1011.34, 17 Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"The physical is always experientiable and special case."</p> <p style="text-align: right;">- Citation and context at <u>Limit-Limitless</u>, 4 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"Polarized precession is special case. Omnidirectional precession is generalized."</p> <p style="text-align: right;">- Citation and context at <u>General Case</u>, 16 Feb'73</p>

Synergetics Dictionary

RBF DEFINITIONS

Special Case:

"The special cases seem to go racing by because we are now having in a brief lifetime experiences which took centuries to be recognized in the past."

[55]

- Cite SYNERGETICS draft at Sec. 1005.56, 16 Feb'73

RBF DEFINITIONS

Special Case:

"A vector is . . . an abstraction of a special case, as are numbers abstract (empty sets) or special case (filled sets)."

- Citation and context at Vector, 26 May'72

RBF DEFINITIONS

Special Case:

"And all the categories of creatures act individually as special case... but... they are all interaffecting one another synergetically..."

- Citation and context at Linear and Spherical Analysis, 16 Feb'73

RBF DEFINITIONS

Special Case:

"The human brain apprehends and stores each sense-reported bit of information regarding each special-case experience. Only special-case experiences are recallable from the memory bank."

- Cite Dreyfuss Preface, "Decease of Meaning,"
28 April 1971, p. 5
CONCEPTUALITY SPECIAL CASE - SEC. 504.02

RBF DEFINITIONS

Special Case:

"All special case events are generated in critical proximity."

- Citation and context at Critical Proximity, 15 Feb'73

RBF DEFINITIONS

Special Case:

"Experience is always special case."

- Cite RBF to EJA
Carbondale
2 April 1971

CONCEPTUALITY - SPECIAL CASE - SEC. 504.01

RBF DEFINITIONS

Special Case:

"...Ever-multiplying Universe's special-case experiences."

- Citation and context at Cosmic Fish, 8 Feb'73

RBF DEFINITIONS

Special Case:

"The physical is always special case."

- Citation and context at Generalization Sequence (1), Jun-Jul'69

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"If you try to remember all of the special case experiences of which your life is composed, your brain will be very quickly overloaded in the given category of recall. It is going to take too long to get this information back and sorted out to use. Instead of trying to deal in all the special cases, deal with exactly the opposite; work towards the great generalizations."</p> <p>- Citation at <u>Generalization & Special Case</u>, 26 Aug'66</p> <p>- Cite RBF address to LongPhosphors in Rhode Island, 26 Aug. '66</p>	<p style="text-align: right;"><u>Special Case:</u> (1)</p> <p>See Abstraction of a Special Case Brain No Generalized Boat General Case Generalization & Special Case Generalization of the Special Case Filled Set Time-limited Size Whole to Particular Pre-special-case</p>
<p>RBF DEFINITIONS</p> <p><u>Special Case:</u></p> <p>"... The generalizable was always present in the special case."</p> <p>- Citation and context at <u>Principle</u>, 9 Jul'62</p>	<p style="text-align: right;"><u>Special Case:</u> (2A)</p> <p>See Black Hole (1) Cosmic Fish, 8 Feb'73* Creativity (1)* Critical Proximity, 15 Feb'73* Education Revolution (1) Evolution, 1970 Einstein: General Theory & Special Theory, 4 Mar'73 Eternal, 13 Mar'73* Frequency, 16 Feb'73 Generalization, 17 Feb'73; 26 May'72 Generalization Sequence (1) Is, 24 Apr'72 Limit-limitless, 4 Nov'73* Local, 23 May'72 Lever (11) Linear & Spherical Analysis, 16 Feb'73* Order, 13 Mar'73 <u>Physical is Always Special Case, 14 Feb'72</u> Principle, 9 Jul'62* Physical, 12 Nov'75; 4 Nov'73; Jun'69</p>
<p>RBF DEFINITIONS</p> <p><u>Special Case Event:</u></p> <p>"Now there is, in the universe, a vast order. It never lets you down. I throw a coin in the air and it returns and hits the floor every time. Nature is never at a loss what to do when she takes over after you and I sign off. Nature never vacillates in her decisions. The rolling oceans cover three-fourths of the earth. Along the beaches, the surf is continually pounding on the shore. No two successive local surf poundings have ever been the same, nor will they ever be the same. They typify the infinitude of individualism of every special-case event in the universe. While there is great music in the pounding of the surf, as the infinite creative integrity of the universe is manifest, I cannot identify man, who hears this music, as the creator. I therefore do not use the word 'creativity' in man's employment of a priori infinite variety."</p> <p>- Citation and context at <u>Creativity (1)</u>, spring'66</p> <p>- Cite PARADIGMS & ACQUISITIONS, Vol 1, No. 3 Spring 1966</p> <p><u>CONCEPTUALITY - SPECIAL CASE - 504.03</u></p>	<p style="text-align: right;"><u>Special Case:</u> (2B)</p> <p>See Physical Sciences, 1959 Physical Life, 22 May'73 Rigid, 24 Sep'73 Spheric Domains, 6 Nov'72 Things, 17 Feb'72 Truth, 16 Feb'73; 31 Jan'75 Vector, 26 May'72* Conceptuality Independent of Size & Time, 2 Jun'74 Radial Depth, 20 Dec'74 Energy & Information, 27 Dec'74 Identity, 24 Jan'75 Spherical Triangle, 23 Jan'75 Pattern Integrity, 6 Nov'73 Number, 7 Nov'73 Real World, 12 May'75 Verbs, 12 Nov'75 Metaphysical & Physical, 13 Nov'75 Universe, 11 Dec'75 Modules: A & B Quanta Modules, 20 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Special-case Experience:</u></p> <p>"Weightless, abstract human mind reviews and from time to time discovers mathematically reliable and abstractly statable interrelationships existing between and amongst, but not 'in' or 'of,' any of the special-case experience components of the relationship.</p> <p>"When a long-term record of testing proves the relationship to persist without exception, it is rated as a scientifically generalized principle. Whenever human mind discovers a generalized principle to exist amongst the special-case experience sets, the discovery <u>itself</u> becomes a new special-case experience to be stored in the brain bank and recalled when appropriate. Amongst a plurality of brain-stored, newly understood experiences, mind has, from time to time, discovered greater and more significant understandings, which in their turn as discoveries, which are 'experiences,' constitute further <u>new</u> special-case experiences to be stored in the recallable and reconsiderable brain bank's wealth of special-case experiences."</p> <p>- Cite SYNERGETICS text at Sec. 504.04; galley rewrite, 6 Nov'73</p>	<p style="text-align: right;"><u>Special Case:</u> (2C)</p> <p>See Seven Minimum Topological Aspects, 12 Feb'76 Height, Length & Width, 19 Jul'76 Trigonometry, 18 Jul'76 Radiation, 11 Feb'76 Human Beings & Complex Universe, (1)</p>

Synergetics Dictionary

RBF DEFINITIONS

Specialist: Born with One Eye and a Microscope:

"I find it surprising that society thinks of specialization as logical, necessary, desirable, if not inevitable. I observe that when nature wants to make a specialist she's very good at it, whereas she seems to have designed man to be a very generally adaptable creature-- by far the most adaptable creature we know of. If nature had wanted man to be a specialist, I am sure she would have grown him with one eye and a microscope on it. She has designed no such creatures. I observe that every child demonstrates a comprehensive curiosity. Children are interested in everything and are forever embarrassing their specialised parents by the wholeness of their interests. Children demonstrate right from the beginning that their genes are organized to help them to apprehend, comprehend, coordinate, and employ-- in all directions."

- Cite RBF at Franklin Lecture, Auburn, Ala. 1970

RBF DEFINITION:

Specialization:

"Extinction is the consequence of overspecialization. Inbreeding concentrates special-capability genes, but only at the expense of losing general adaptability, i.e., the ability of the species to cope with the infrequently occurring large, surprising and hostile events of the environment melange, while prospering-- only temporarily-- during the long intervals of innocuous, high-frequency, low-magnitude, environmental changes."

- Cite Dreyfuss Preface, "Decease of Meaning"
28 April 1971, p. 10

Specialist Born with One Eye & a Microscope:

See Degenius, 26 Sep'68

RBF DEFINITIONS

Specialization:

"Specialization, being concerned with parts, is inherently preoccupied with the physical." . . .

"Specialization is antisnergetic."

- Cite Dreyfuss Preface, "Decease of Meaning"
28 April 1971, p. 8.

RBF DEFINITIONS

Specialization:

"Specialization is the divide and conquer of the intellectuals by the muscle men."

- Citation and context at Divide and Conquer Sequence (E) 5 May'72

RBF DEFINITIONS

Specialization:

"Part of the scheme of specialization is that there has to be a head man."

- Cite RBF Lecture
Town Hall, New York
12 March 1971

RBF DEFINITIONS

Specialization:

"The omnicommitment
Of the twentieth century's
World-around society
To the synergy invalidated misconception
That specialization
is desirable and inevitable,
Tends to preclude humanity's
Swift realization
Of its many misconceptionings
And its necessity to substitute therefore
Tactically reliable information."
Specialization is antisnergy."

- Cite INTUITION, p.41, May '72

RBF DEFINITIONS

Specialization:

"Specialization is anti~~s~~synergy."

- Cite INTUITION Draft Feb. '71, p. 30.

Synergetics Dictionary

RBF DEFINITIONS

Specialization:

"Specialization is only a fancy form of slavery wherein the 'expert' is fooled into accepting his slavery by making him feel that in return he is in a socially, culturally preferred, ergo, highly secure life-long position."

- Cite I SEEM TO BE A VERB, Bantam, 1970

RBF DEFINITIONS

Specialization:

"There is a strong awareness that we have been overproducing the army of rigorously disciplined, scientific, game-playing academic specialists who through hard work and suppressed imagination earn their PH.D.'s only to have their specialized field become obsolete or bypassed by evolutionary events in five years. Despite their honor grades they prove not to be the Natural Philosopher scientist-artist, but just deluxe quality technicians or mechanics."

- Cite AAUW JOURNAL, May 1965, P. 173

RBF DEFINITIONS

Specialization:

"Because humanity has deliberately fractionated the formal study of residual reality into ever more minute specializations, which continually know more and more about less and less, the residual preoccupations have lost sight completely of any of the comprehensive and infinitely inspirational mystery of totality."

- Citation & context at Perceptual Peephole as Fraction of Reality, Dec'69

RBF DEFINITIONS

Specialization:

(1)

"Whitehead pointed out that the men going into those graduate schools and then going into a very specialized area instead of having a broad focus were getting down to a very narrow focus and within that very narrow focus would become specialists themselves so they would be professors of specialization within specialization. The specialists would then become so linear, instead of comprehensive-- instead of being broadcast, they would be narrowly beamed-- and being very bright ones they would make great speed in their linear acceleration. It would mean that they would speed outwardly through the Universe and would become very bright stars in the firmament, but as stars, very remote from one another.

"He pointed out then that because the specialists had been very carefully picked as individuals of high intellectual capability and, of course, intellectual integrity would be implicit. Their own integrity would make clear to them how little anyone outside their specialization could possibly know about their area of inquiry. They wouldn't feel any pride about it-- it would just be a fact that no one else in the public would tend to know anything about what they were talking about. Because they would

- Cite Oregon Lecture #2, pp.39-40, 2 Jul'62

RBF DEFINITIONS

Specialization:

". . . Specialists working within the graduate school saw great possibilities for further specialization within their special subject and . . . their energies then developed a linear acceleration instead of a comprehensive acceleration. They went out like rockets and became remote stars, remote one from the other. . . "

- Cite RBF Rhode Island Address, 26 Aug. '66.

RBF DEFINITIONS

Specialization:

(2)

"tend to recognize that to be a fact in their own experience, they would also not presume to go into any other specialists' laboratory and assume what the significance was of the work going on there. They would be the first to say: I can't talk about that. So these specialists would tend to talk to each other about football or tennis, and would not have much that they would feel they could converse about."

- Cite Oregon Lecture #2, pp.39-40, 2 Jul'62

RBF DEFINITIONS

Specialization:

"Life, as born, is inherently comprehensive in its apprehending, comprehending and coordinating capabilities. Every child is interested in the universe. His questions are universal. Development of specialization has been either a forced training affair or is a product of inbred talent-- as two musician parents tend to produce musical aptitude children.

"Specialization, as a consequence of educational or craft training, was invented by the great pirates. Pirates had to be forever on guard against those ambitious to displace them. They were worried only about the bright ones who might detect the pirates' secret stratagems. Consequently, the pirates deliberately and anticipatorially subdivided and conquered the bright ones as each one came along simply by making them specialists."

- Cite ~~W.A. Speech, p. 19, Jun'66~~

- Citation and context at Education (B), Jun'66

RBF DEFINITIONS

Specialization Tollgate:

"...Your specialty: You have to have your little private tollgate that society will have to go through..."

- Citation and context at Intuition of the Child (2), Feb'73

Synergetics Dictionary

RBF DEFINITIONS

Specialization Tollgate:

"Now, men in our industrial and educational system have become more and more specialized. Everyone, wanting economic security, has seemed to think that as specialist he could command the tollgate of an expressway to unique and essential information. He thought: 'A great many people will have to go through my specialization tollgate and I'll have a special, education-guaranteed economic security.'"

- Cite THE PROSPECTS FOR HUMANITY, Sat. Review, 29 Aug'64

Species:

See Charting Alternating Experiences of Man & Nature, (1)
 Synergy: Degrees Of, (5)
 Synergy of Synergies, 31 May'71
 Viral Steerability: Angle-Frequency Design Control, 22 Jul'71

TEXT CITATIONS

Specialization:

Operating Manual for Spaceship Earth, pp.27-28,
 Oregon Lecture #1, pp.26-27, 1 Jul '62
 Wood Design in a Dynamic Technology, p.9
 University of Chicago Address, in toto, 5 May'72

Specific:

See Lever, (2)
 Line, '7 Nov'72

Specialization: Specialist:

(1)

See Categoryitis
 Divides & Conquer
 Academic Tenure
 Inbreeding
 More & More About Less & Less
 Nature Has No Separate Departments
 Overspecialization of Biological Species and Nations
 Pirates: Great Pirates
 Specialization Tollgate
 Whitehead's Dilemma
 Overspecialization of the Sciences
 Generalists & Specialists

Speck:

See Invisibility of Macro- and Micro- Resolutions, (1)
 Point-to-able Something, 30 Apr'77

Specialization: Specialist:

(2)

See See Computer (A)
 Differentiation, 10 Oct'63; 10 Dec'64
 Diplomats, 5 May'72
 Education (B)*
 Generalized Principle (2)
 Human Beings, 10 Dec'73
 Intuition of the Child (2)*
 Linear Programming, 5 Jun'73
 Materials, 7 Nov'67
 Nation, Oct'70
 Eternal Orderliness, 15 May'72
 Orderliness Operative in Nature (1)(2)
 Perceptual Peshphala, Dec'69*
 Real Estate Development, 10 Jun'71
 Sensorial Reflex, 13 Mar'73
 Organic & Inorganic, May'49
 Nonthing, 11 Sep'75

RBF DEFINITIONS

Spectrum:

"... Unique resonances and frequencies of the electromagnetic, protoplasmic, pneumatic-hydraulic, and crystallographic spectrums...."

- Citation and context at Integer, 15 Oct'72

Synergetics Dictionary

<p><u>Spectrum:</u></p> <p>See Color Spectrum Electromagnetic Spectrum Extrasensibility Invisible Spectrum Optical Motion Spectrum Sensorial Spectrum Sensorial-Frequency-spectrum Inventory</p>	<p>RBF DEFINITIONS</p> <p><u>Speed:</u></p> <p>"There is a question-asking-possibility that omniscience may be transcendental in velocity to the definitive physical <u>speed</u> of energy ^{to} omnipotence."</p> <p>*cite Omnidirectional Halo, p. 163, 1960 - Citation at <u>Metaphysical & Physical</u>, 21 Dec'71</p>
<p><u>Speculation:</u></p> <p>See Irreversible, 6 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Speed:</u></p> <p>"Speed is a unit of rate which is an integrated ratio of both time and space..."</p> <p>- Citation & context at <u>Rate</u>, 1938</p>
<p><u>Speech: Speaking:</u> (1)</p> <p>See Lecturing Moratorium on Speech Vision vs. Speech Conversation Cliche Cussing</p>	<p><u>Speed:</u> (1)</p> <p>See Eternity is Simply the Highest Speed Fast & Slow Instantaneity Intellect: Speed Of Light: Speed Of No Speed Radiation: Speed Of Rate Sound: Speed Of Top Speed Velocity Terminal Speed Limit Speed Gravity: Speed Of Cosmic Speed</p>
<p><u>Speech: Speaking:</u> (2)</p> <p>See Fresh, 3 Oct'71 Communication, 21 Jun'77</p>	<p><u>Speed:</u> (2)</p> <p>See <u>Metaphysical & Physical</u>, 21 Dec'71* <u>Rate</u>, 1938*</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The sphere is the tetrahedron or octahedron or icosahedron.' I did write 'There are no others,' but I think it is stronger just the way it is. They obviously can be of any frequency."</p> <p>"The spun frequency of all three = superficial sphericity."</p> <p style="text-align: right;">- Cite RBF Ltr. to EJA, 25 Feb'74</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"If you get too semantically incisive the reader loses all connections with anything he has ever thought before. That might not be a great loss. But I like to assume that the reader can cope with his reflexes and make connections between the old words and the new and better words. For example, we have had to clear up what we mean by a <u>sphere</u>. It is not a surface; it is an aggregate of events in close proximity. It isn't just full of holes: it doesn't even have the connections."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1023.11, 20 Feb'73</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"Physically, spheres are high-frequency event arrays whose spheric complexity and polyhedral system unity consist structurally of discontinuously islanded, critical-proximity-event huddles, compressionally divergent events, only tensionally and omninterattractively cohered. The pattern integrities of all spheres are high-frequency, traffic-described subdivisionings of either tetrahedral, octahedral, or icosahedral angular interference, intertriangulating structures profiling one, many, or all of their respective great-circle orbiting and spinning event characteristics. All spheres are high-frequency geodesic spheres; i.e., triangular-faceted polyhedra, most frequently icosahedral because the icosasphere is the structurally most economical."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 985.22, drafted 30 Dec'73</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"No sphere large enough for a flat surface to occur is imaginable. This is verified by modern physics experimentally induced abandonment of the Greeks' definition of a sphere which absolutely divided the Universe into all the Universe outside and all the Universe inside the sphere with an absolute surface closure permitting no traffic between the two and making inside self-perpetuating to infinity complex, ergo the first locally perpetual motion machine completely contradicting entropy. Since physics has found no solids or imperious continuous surfaces, and has found only finitely separate energy quanta, we are compelled operationally to redefine the spheric experience as an aggregate of events approximately equidistant in a high-frequency aggregate in almost all directions from one only approximate event. Since nature always interrelates in the most economical manner, and since great circles are the shortest distances between points on spheres, and since chords are shorter distances than arcs, then nature must interrelate the spheric aggregated events by the chords, and chords always emerge to converge, ergo converge convexly around each spheric system vertex, ergo the sums of the angles around the vertexes of spheric system never ^[2-] add to 360°."</p> <p style="text-align: right;">- Cite SYNERGETICS text at Sec. 1106.23, 26 Jan'73</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The Greeks defined the sphere as a surface outwardly equidistant in all directions from a point. As defined, the Greeks' sphere's surface was an absolute continuum, subdividing all the Universe outside it from all the Universe inside it; wherefore, the Universe outside could be dispensed with and the interior eternally conserved."</p> <p style="text-align: right;">- Cite RBF galley correction to SYNERGETICS at Sec. 224.07, 28 Oct'73</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"... Every system is always losing energy. But they always have imports as well as exports. And physics has found no solids. Physics has found no continuums. So our only way of defining a spherical experience in modern scientific terms is an aggregate of events approximately equidistant in approximately all directions from one approximate event. That's the nearest we can come. It is then a Galaxy of very approximate event points. There being no continuum, these energy events have relationships. And the most economical relationships between circular or spherically arrayed points are not the arcs, but the chords. I've come to discovering how very powerful all this is as its going on in geodesic domes which is simply what I'm talking about: an array of points approximately equidistant from one point and making all the most economical chordal interrelationships which makes them always triangulated."</p> <p style="text-align: right;">- Cite RBF Tel Aviv Address, p.7, 16 Jun'72</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"...The sphere (i.e., the high-frequency, omnitriangulated, geodesic, spheroidal polyhedron) encloses the most volume with the least surface."</p> <p style="text-align: right;">- Citation and context at <u>Tetrahedron</u>, 26 Sep'73</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"It is not surprising . . . that ball bearings prove to be the most efficient compression members known to and ever designedly produced by man. Nor are we surprised to find all the planets and stars to be approximately spherical mass aggregations, as also are the atoms, all of which spherical islands of the macrocosmic and microcosmic aspects of scenario universe provide the comprehensive, invisible, tensional, gravitational, electromagnetic and amorphous integrity of universe with complementarily balancing internality of compressionally most effective, locally and temporarily visible, islanded compressional entities."</p> <p style="text-align: right;">- Cite RBF marginalia, SYNERGETICS text, Sec. 644.084, 1971</p>

Synergetics Dictionary

RBF DEFINITIONS

Sphere:

"The moment you know you are on a sphere or spheroid, you know that none of the perpendiculars are parallel to one another."

- Cite RBF to SINS Seminar, U. Mass., Amherst, 22 July 1971.

RBF DEFINITIONS

Sphere:

"Spheres are high tide aspects of vertexes. Solids are high tide aspects of faces. Spheres in closest packing are high tide aspects of vertexes."

- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971

- Citation at Tidal, 31 May '71

RBF DEFINITIONS

Spheres:

"Spheres are just very high-frequency geodesics."

- Cite RBF to EJA, Fairfield, Conn., Ches Wolf, 18 June 1971.

RBF DEFINITIONS

Sphere:

"Pi (π) is irrelevant in synergetics because the sphere is not experimentally demonstrable and the tetrahedron is the minimum sphere. Compound curvature starts with the tetrahedron. Pi drops out because chords are more economical than arcs. Chords of an omnidirectional system never add up to 360° around a point. They are always geodesics. A point on a sphere is never an infinitesimal tangency with a plane."

- Cite RBF to EJA, Blackstone Hotel, Chicago, 31 May 1971

RBF DEFINITIONS

Sphere:

"The sphere is an asymmetrical phenomenon. It is an inward-outward pulsative from the vector equilibrium."

- For citation and context see Vector Equilibrium: Spheres and Spaces, 31 May '71

RBF DEFINITIONS

Sphere:

"Imagination means man's communication of what he thinks it is that he thinks his brain is doing with the objects of his experience. His discovery of general conceptual principles characterizing all of his several experiences-- as the rock, having insiderness and outsiderness, the many pebbles, having their corners knocked off and developing roundness: he thinks there could be pure 'roundness' and thus imagined a perfect sphere."

- Cite RBF to EJA, Somerset Club, Boston, 22 April 1971

CONCEPTUALITY SEC. 50141b

RBF DEFINITIONS

Sphere:

"A sphere is an asymmetrical phenomenon. It is an inward-outward pulsative from the vector equilibrium. The sphere's spaces are interchangeable."

- Cite RBF tape transcript, Blackstone Hotel, Chicago, 31 May 1971, p. 48.

RBF DEFINITIONS

Sphere:

"In further demonstration of the non-mirrored complementary phenomena, we note that compression columns become more and more effective as we make them fatter and fatter going from long, thin cylinders to cigar-shaped systems. By increasing the compression member's relative girth and shortening its height still further, we finally develop a compression structure that is spherical."

"The sphere is compressionally ideal. As a slender column it had to be loaded carefully on its neutral vertical axis to avoid eccentric bending. When it is a sphere, however, the compression loads applied from any direction are automatically opposed by one of an infinity of neutral axes. The sphere provides nature's optimum limit in structural opposition to compressive forces in universe-- ergo, the stars and planets and atoms are all spherical islands of compression."

- Cite GOUDKESSES, Sat Review, 2 Mar 68

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"A <u>sphere</u> is a plurality of events approximately equidistant in approximately all directions from approximately one event at approximately the same time."</p> <p style="text-align: right;">- Cite DEFINITIONS FOR SYNERGETICS BY PETER PEARCE. 1967</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The best definition we make of spherical appearing system is 'a constellation of event foci approximately equidistant in approximately all directions from one approximate event at approximately the same time.' By the time we have been able to measure many of the distances others would have changed their positions and conditions."</p> <p style="text-align: right;">- Cite NASA Speech, p. 85, Jun'66</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>Topologically speaking, a <u>sphere</u> is a spherical constellation and $\frac{2\pi}{360}$ vertexes between which there are always the most economical inter-relationship which consist of chordal distances between the vertexes. These chords form multi-faceted polyhedra and the sums of the angles around all the vertexes of the polyhedral system will always be the number of vertexes times 360 degrees minus 720 degrees."</p> <p>"When we get into the sphere, I find that relatively few people really think in terms of spherical thinking. Spherical thinking has not been used too much because calculus seems to take its place in many ways, and it is important to realize that in spherical thinking the angles don't add up to 180 degrees."</p> <p style="text-align: right;">- Cite NASA Speech, p. 85, Jun'66 - Cite CARBONKITE DRAFT IV, 53, IV-54</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The <u>sphere</u> is complex unity and the triangle simplex unity. Here and here alone lie the principles governing finite solution of all structural and general systems theory problems."</p> <p style="text-align: right;">- Cite RBF Ltr. to Shoji Sadao, 15 Feb '66, p. 5. - Citation and context at <u>Unity: Complex and Simplex Unity</u>, 15 Feb'66</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The Greeks defined a sphere as 'A surface equidistant in all directions from a point.' As defined there could be no holes in the sphere, because if there were any holes the surface would be turning inwardly around the holes rim, and radius would change and the holes would leave areas within them where radius would not be equal in all directions. The Greeks' definition inferred that there is some kind of continuous and impervious continuum which absolutely subdivides all the universe which is outside the sphere forever, from all the universe which is inside the sphere. Were there no holes in the sphere, there could be no possible energy traffic inbound or outbound-- therefore entropy. Entropy-- the second law of thermodynamics shows that every local energy system in physical universe is always losing or emitting energy. The minimum set of all energy transactions and transformation is physical universe itself. Therefore only universe as an aggregate of non-simultaneous energy event transformings is the only possible perpetual motion system. If we could have a local perpetual motion machine we could throw away the rest of universe. Therefore the sphere, as defined by</p> <p style="text-align: right;">- Cite NASA Speech, pp.84-85, Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The only definition of a sphere now tenable by experimental physics is: 'A plurality of energy event foci approximately equidistant, in approximately all directions, at approximately the same time from the approximate center of progressive measuring actions.'"</p> <p style="text-align: right;">- Cite Ltr. to Dr. Robt. W Horne, 14 Feb '66, p. 4</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"the Greeks was the first proposed fallaciously perpetual motion machine."</p> <p style="text-align: right;">- Cite NASA Speech, p.85, Jun'66</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"A <u>sphere</u> is a plurality of events approximately equidistant in all directions from one event."</p> <p style="text-align: right;">- Cite MUSIC, Caption to Figure 9, p. 65 10 Dec'64</p>

Synergetics Dictionary

RBF DEFINITIONS

Sphere:

"Now a sphere is defined by the Greeks as a surface equidistant in all directions from a point. No man has ever witnessed an impervious surface so we can't say that any more. The definition by the Greeks of a surface equidistant in all directions means it could have no holes in it because then the radius would change. This would be the first definition of antientropy that you would successfully subdivide an inwardness from an outwardness-- subdivide the Universe in two parts and have no traffic between them. "But my definition of a sphere-- really like a Hilbert point system-- is a plurality of events approximately equidistant in one direction /sic/ from one event. This is a very satisfactory one." It accommodates a "very high frequency of events, but it does change mathematics completely. You will find it affects us."

- Cite LEDGEMENT LAB. Address, p.50, 15 Oct'64

RBF DEFINITIONS

Sphere:

"Among geometrical systems a tetrahedron encloses the minimum volume with the most surface and a sphere the most volume with the least surface."

- Cite OMNIDIRECTIONAL HALO, p. 141, 1960

RBF DEFINITIONS

Sphere:

"Aiming of the compressional loading of a short column into the neutral or central-most axis of the column provides the greatest columnar resistance to the compressing because, being the neutral axis, it brings in the most mass coherence to oppose the force. To make a local and symmetrical island of compression from a short column which axial loading has progressively twisted and expanded at girth, into a cigar shape, you have to load it additionally along its neutral axis until the ever-fattening cigar shape squashes into a sphere. In the spherical condition, for the first and only time, any axis of a spherical structure is neutral-- or, ergo, in its most effective resistant-to-compression attitude. It is everywhere at highest compression and tension resisting capability to withstand any forces acting upon it."

- Cite RBF expansion of Ledgement, p.32. See SYNERGETICS test, 'Tension and Compression- Sphere: An Island of Compression.' Sec. 614.08. 15 Oct'64

RBF DEFINITIONS

Sphere:

"We can state that the number of vertices of any system (including a 'sphere' which must, geodesically, in universal energy conservation, be a polyhedron of n vertices) minus two times 360° equals the sum of the angles around all the vertices of the system."

- Cite OMNIDIRECTIONAL HALO, p. 152, 1960

RBF DEFINITIONS

Sphere:

". . . As a condition of the sphere for the first time, any axis is a neutral axis, in the spherical condition, it has aptitude in any direction to withdraw the forces on it; it is not surprising that ball bearings become the most effective compression members ever designed by man. I am not surprised to find more or less spherical planets in the heavens tensionally cohered, compression at its most effective."

- Cite LEDGEMENT LAB, p. 32, 15 Oct'64

RBF DEFINITIONS

Sphere:

A sphere is a multiplicity of discrete events, approximately equidistant in all directions from a nuclear center."

- Cite MARKS, P. 138, 1960

RBF DEFINITIONS

Sphere:

"A sphere contains the most volume and the least surface and is in the most comfortable condition. These energy patterns are always the most comfortable and the most economical conditions."

- Cite Oregon Lecture #5, pp. 186-187, July '62

RBF DEFINITIONS

Sphere:

"All the points in the surface of a sphere may be interconnected. If most economically interconnected, they will subdivide the surface of the sphere into an omnitriangulated spherical web matrix."

- Cite OMNIDIRECTIONAL HALO, p. 150, 1960

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"A sphere is a plurality of events approximately equidistant in approximately all directions from one event."</p> <p style="text-align: center;">- Cite ITEM "0", p. 4, May'55</p>	<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The sphere is not a minimal system because no completely enclosed surface exists and therefore no line spherical integrity. The sphere has a plurality of sides which makes it a polygon reducible to triangles and hence, tetrahedron.</p> <p>"The sphere on the other hand encloses or defines more volume with the least surface than any other geometric figure.</p> <p>". . . The sphere is an invisibly multifaceted polyhedron-- each facet reducible to trusses and hence to triangles."</p> <p style="text-align: center;">- Cite Undated typescript among Synergetics Papers (from RBF)</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"The regular six-chord-edged tetranedron encloses (defines) the minimum volume with the most surface of all geometric polyhedrons or structural systems; whereas sphere encloses most volume with least surface and the minimum sphere-defining structure is the regular six-great-circle-arc-edged tetrahedron of 109°28' central angles and 120° surface angles. As there may be no absolute division of energetic universe into isolated or non-communicable parts, there is no absolute enclosed surface or absolutely enclosed volume; therefore, no true or absolutely defined simultaneous surface sphere integrity. Therefore, a sphere is a polyhedron of invisible plurality of trussed facets ('trussed' because all polygons are reducible to triangles or trusses and are further irreducible) and trusses are therefore basic polygons. Infinite polyhedron is infinitely faceted by basic trusses."</p> <p style="text-align: center;">- Cite MCHALE, Plate 36, caption.</p> <p>ISOTROPIC VECTOR MATRIX - SEC 420-03 (The same language appears earlier in PENNA. TRIANGLE, p.10, Nov, 52)</p>	<p><u>Sphere Center:</u></p> <p>See Indispensable Center, 19 Feb'72 Omnitriangulation, 20 Feb'75 Triacotrhedron, 13 May'77 T Quanta Module, (10)</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"No sphere is large enough to be flat."</p> <p style="text-align: center;">- Citation and context at Dynamic, 1950</p>	<p><u>Sphere Integrity:</u></p> <p>See No Sphere Integrity</p>
<p>RBF DEFINITIONS</p> <p><u>Sphere:</u></p> <p>"In a compound curvature sphere of paper all the surface represents an intertriangulation of great circles, wherefore each great circle helps the other. Each is a compression circle enclosed within a tension circle. If we try to flatten the sphere, its equator cannot move outwardly to accommodate the down thrust as did the girth of the paper cylinder. Therefore, no one circle can lever its compressive interior against polar points, and, disunited, fail. In the sphere, the pressure at one point must invoke an infinity of great circles to crush an infinity of points simultaneously in a progressively rolling radius as the sphere is gradually pushed inside out-- but never flattened-- and only rolls the wave to the equator, which holds. Even in its inside-outness the sphere maintains its comprehensive interaction of system, seeking to re-establish its shape. Thus do balls tend to bounce."</p> <p style="text-align: center;">- Cite IDEAS AND INTEGRITIES, p. 219 Preview of Building, Apr'49</p>	<p><u>Sphere = Polyhedron:</u></p> <p>See F1, 8 Feb'73</p>

Synergetics Dictionary

Sphere of Reference:

See Omnidirectional: Physical Existence Environment Surrounds, (3)

RBF DEFINITIONS

Spheres & Spaces:

"Considering spaces between is one way of looking at universe and the sphere is another way of looking at universe. This is typical of not being fooled by just looking at spheres or just looking at the little triangle locally on the surface of the big sphere where we had our big triangle. This is beginning to give us ways of seeing the complementarity at all times."

~~--Cite Carbondale-Draft-
Natura's Coexistence, p. VI, 53-~~
- Cite Oregon #7, p.258, 11 Jul'62

RBF DEFINITIONS

Spheres & Spaces:

"The sphere-to-space, space-to-sphere intertransformability is a conceptual generalization holding true independent of size, which therefore permits us to consider the generalized allspace-filling complementarity of the convex (sphere) and concave (space) octahedra with the convex (spheres) and concave (space) vector equilibria; and also permits us to indulge our concentrated attention upon local special-case events without fear of missing further opportunities of enjoying total synergetically conceptual advantage regarding nonsimultaneously-considerable scenario Universe."

- Cite SYNERGETICS, 2nd. Ed. at Sec. 1238,22, 14 May'75

Spheres & Spaces:

(1)

See Mite: Positive & Negative Functions
Resonance Field
Allspace Filling: Octahedron & VE
Vector Equilibrium: Field of Energy
Vector Equilibrium: Spheres & Spaces
Interstitial: Interstitial Spaces
Internuclear Voids

RBF DEFINITIONS

Spheres and Spaces:

"The spheres and spaces are disequilibrium, i.e., asymmetrical phases of the vector equilibrium's complex of both alternate and coincident transformabilities. . . . By virtue of these transformations and their accommodating volumetric involvement, the spheres and spaces are interchangeably intertransformative. For instance, each one can be either a convex or a concave asymmetry of the vector equilibrium."

- Citation and context at Interchangeable Intertransformativeness, 22 Feb'73

Spheres & Spaces:

(2)

See Interchangeable Intertransformativeness, 22 Feb'73*
Push-pull, 22 Feb'73
Sphere, 31 May'71
Valve, 20 Feb'72
X Configuration with Ball at the Center (2)
Trigonometry: Spherical Trigonometry (3)
Harmonics, (2)(3)
Modules: A & B Quanta Modules, 20 Dec'73
Vector Equilibrium Involvement Domain, 24 Apr'76
Quantum Mechanics: Minimum Geometrical Fourness, (2)
Wave Pattern of a Stone Dropped in Liquid, 22 Jun'77

RBF DEFINITIONS

Spheres and Spaces:

"A sphere is a convexly expanded vector equilibrium and all spaces are concavely contracted vector equilibria and octahedra at their most disequilibrium pulse moments."

- Cite RBF to EJA, 3200 Idaho, incorporated at SYNERGETICS Sec. 970.15, 14 Oct'72, 13

Spheres Become Spaces and Spaces Become Spheres:

See Spheres & Spaces

Synergetics Dictionary

Spheres & Vertices:

See Push-pull Members, 28 Oct'72

Sec. 722.02

Sphere Tangent with a Plane:

See Calculus, 1960
 Infinity & Finity, Jun'66
 Raft, 3 Apr'75
 Sphere, 31 May'71
 Zero Condition, 14 Feb'66
 Geodesic Sphere, (1)(2)
 Halo Concept, Nov'71

RBF DEFINITIONS

Sphere: Synergetics Formula for the Volume of a Sphere:

"Here are a lot of illustrations for 'Synergetics. This one where we have 12 spheres closest packed around one, I did freehand. It shows all the geometries that occur from 12 spheres around one, and how they all appear as rational values. We show in the book (Sec. 982.60) that the value of the sphere itself turns out to be the number five, a whole rational number five, without any π , where the volume of the tetrahedron is one."

(This is RBF comment on Illustration at 982.62.)

- Cite RBF to HUGH Kenner, Phila. PA, transcript p.11; 9 Jun'75

RBF DEFINITIONS

Sphere of Unit Vector Radius:

"The concentric hierarchy was conceived from the outset and as early as 1934, but I had one value more to establish--which was the volume of the sphere of unit vector radius, which proved out at five."

- Cite RBF marginalis on EJA's "Cosmic Fish" ms. Chap. I, p.8; 20 Nov'75

TEXT CITATIONS

Sphere: Synergetics Formula for Area & Volume of a Sphere:

Synergetics: Sec. 982.60
 985.00 - 985.08

RBF DEFINITIONS

Sphere: Volume-surface Ratios:

"The largest number of similar triangles into which the whole surface of a sphere may be divided is 120. The surface triangles of each of these 120 triangles consist of one angle of 90°, one of 60°, and one of 36°. Each of these 120 surface triangles is the fourth face of a similar tetrahedron whose three other faces are internal to the sphere. Each of these 120 tetra has the same volume as have the A or B Quanta Modules. Where the tetra is 1, the sphere's volume is 5. Dividing 120 by 5 = 24 quanta modules per tetra. The division of the sphere of volume 5 by its 120 quanta modules discloses another unit system behavior of the number 24 as well as its appearance in the 24 external vector edges of the vector equilibrium."

- Cite RBF to EJA, 3200 Idaho, Wash., DC; incorporated in SYNERGETICS, 2nd. Ed. at Sec. 1053.36; 11 Dec'75

Sphere: Synergetics Formula for the Volume of a Sphere:

See O Module, 29 Sep'76
 Triaconrahedron, 13 May'77

RBF DEFINITIONS

Spheric:

"A spheric is any one of the rhombic dodecahedra, the center of each of whose 12 diamond facets is exactly tangent to the surface of each sphere formed equidistantly around each vertex of the isotropic vector matrix."

[3]

- Cite SYNERGETICS at Sec. 426.32, 20 Nov'72

Synergetics Dictionary

RBF DEFINITIONS

Spherics:

"Because the rhombic dodecahedra fill and symmetrically subdivide allspace, while simultaneously, symmetrically, and exactly defining the respective domains of each sphere as well as the respective shares of the interclosest-packed-sphere interstitial space, the Rhombic dodecahedra are called 'spherics' for their respective volumes are always the unique closest packed, unradius spheres' volumetric domains of reference within the electively generatable and selectively 'sizable' or tunable of all isotropic vector matrixes of all metaphysical 'considering' as regeneratively re-originated by any thinker anywhere at any time; as well as all the electively generatable and selectively tunable (sizable) isotropic vector matrixes of physical electromagnetics, ~~and~~ always re-originatable physically by anyone anywhere in Universe."

(A.S.S.)

[21]
- Cite SYNERGETICS draft at Sec. 426.22, 30 Nov'72

Spheric Domain vs. Nuclear Domain:

See Six - Five - One, 8 Jan'74

RBF DEFINITIONS

Spheric:

"I like to use 'spheric' because it seems to take in more than 'spherical.' It would include the 'spheroidal.' Both a ball and a tomato are 'spheric.'"

* Cite RBF to EAA, 3200 Idaho, 15 Oct'72

Spheric Domain:

(1)

See Domains
Prime Domains
Rhombic Dodecahedron
Spheric
Prime Volumes

RBF DEFINITIONS

Spheric Domains:

"All the well-known Platonic polyhedra, as well as all the symmetrically referenced crystallographic aberrations are symmetrically generated in respect to the centers of the spheric domains of the isotropic vector matrix and its inherently nucleating radiational and gravitational behavior accommodating by concentrically regenerative, omnirational, frequency and quanta coordination of vector equilibria which may operate propagatively and coheringly in respect to any special-case event fix in energetically identifiable Universe."

- Cite SYNERGETICS draft at Sec. 981.20, 6 Nov'72

Spheric Domain:

See Coupler, 20 Dec'73
Rhombic Dodecahedron, 2 Nov'73
Domains of Interferences, 7 Nov'73

RBF DEFINITIONS

Spheric Domain:

"Spheric domain is prime volume."

- Citation and context at Vector Equilibrium, 18 Nov'72

Spheric Event:

See System Enclosure, (1)

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spheric Experience:</u></p> <p>"The spheric experience is simply an ultra-high frequency of finite event occurrences in respect to the magnitude of the tuning of the observer. (High frequency to the human may be low frequency to the molecule."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 1023.13, 20 Feb'73</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Barrel:</u></p> <p>"This whole spherical barrel system is non-redundant because of the triangular 'three-point' contacts of each of the three interfaces of the truncated cork star octahedra, but would be redundant with the trapezoidal interfaces of simply truncated tetrahedra formed inwardly on each and every geodesic sphere's omnitriangular grid."</p> <p style="text-align: right;">- Cite Ltr. to Shoji Sadao, 15 Feb '66, p. 4</p>
<p>TEXT CITATIONS</p> <p><u>Spheric Experience:</u></p> <p>Synergetics draft at Sec. 985.40, 14 May'73</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Barrel:</u> <u>Kumasi Dome:</u> (1)</p> <p>"In this particular experiment the triangular 'corks,' (i.e., octahedra) were small enough to render this [.005 aluminum / foil of structural effectiveness. . . .</p> <p>"What is unique about this Kumasi dome is that the octa corks had their triangular radial great-circle plane surfaces mathematically guided together only by two control holes in each of their abutting triangular great-circle plane faces . . . to tentatively guide the approach of these surfaces toward one another and thereafter to cohere the whole spherical system in a loose manner. . . . Wire bands described all 31 of the basic great circles of the icosahedron's symmetrical subdivisions. . . Fifteen of these great circles lie alternately along the edge of the icosahedron and then act as vertical bisectors of the next two icosahedronal major triangles. Of the 31, the remaining ten and six great circles interact with the 15 great circles in such a manner that they form approximately uniform tensional triangles overlying a six-frequency truncatable icosahedronal pattern, with the wires crossing over each of the vertexes as well as the mid-faces of the system to impinge vertically on the edges opposite each of the verticals."</p> <p style="text-align: right;">- Cite Ltr to Shoji Sadao, 15 Feb '66, p.2</p>
<p>RBF DEFINITIONS</p> <p><u>Spheric Experience:</u></p> <p style="text-align: center;">See <u>Geodesic Spheric Experience</u></p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Barrel:</u> <u>Kumasi Dome:</u> (2)</p> <p>"Thus it is found that 31 great circles act as the most effective 'spherical barrel' bands (where a 6 - 12 frequency, truncatable, icosahedronal pattern is employed) for each of the wires runs over the external surface centers of each of the octa-cork's triangular faces, thrusting each 'cork' inwardly toward the center of the system in such a manner that the tightening of the bands brings about a universal contraction of the sphere.</p> <p>"As the tensional great circle bands were contracted progressively at Kumasi, it was found most practical to first tighten the set of six great circles. This left the sphere with a set of 12 'dodecahedronal' 'mountain' bulges. We next contracted the 15 great circles. This brought the sphere into greater symmetry which was totally effective when the 10 great circles were also tautened.</p> <p>"Where the great circle wire bindings crossed, they had to be tied together but not tightly, i.e., they were run through rings. They didn't need to be tied tightly together, merely guided."</p> <p style="text-align: right;">- Cite Ltr. to Shoji Sadao, 15 Feb '66, p. 3</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical:</u></p> <p>"Having the form of a sphere; includes bodies having the form of a portion of a sphere; also includes polygonal bodies whose sides are so numerous that they appear to be substantially spherical."</p> <p style="text-align: right;">- Cite Patent No. 2,682,235, June 29, 1954 BUILDING CONSTRUCTION</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Barrel:</u> <u>Sphere as Complex Unity:</u> <u>Triangle as Simplex Unity:</u></p> <p>"Everything I have said here adds up to the fact that the sphere is 'complex unity' and the triangle 'simplex unity.' Here and here alone lie the principles governing finite solution of all structural and general systems theory problems. Local isolations of infinite open-ended plane and linear edged (seemingly 'flat' and infinite) segments of" what are "in reality vast spherical systems-- when taken out of context-- are hopelessly special-cased indeterminate situations.</p> <p>"Unfortunately engineering has committed itself in the past exclusively to these locally infinite and inherently indeterminate systems and have had to rely essentially on the test-proven local behaviors of small systems such as columns, beams, levers, et. al., opinionatedly fortified with 'safely guesstimated' complex predictions. Not until we have universal finite omnitriangulated nonredundant structural system comprehension can we enjoy the advantage of powerful physical generalizations concisely describing all structural behaviors."</p> <p style="text-align: right;">- Cite Ltr. to Shoji Sadao, 15 Feb '66, p. 5 <u>TENSEGRITY - SEC. 656.72</u></p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spherical Barrel: Fail-Safe Advantage:</u></p> <p>"It should elucidate also the increased fail-safe advantage accomplished with each increase of frequency of triangular module subdivisions of the sphere's unitary surface; i.e., failure of one triangular cork in an omnitriangulated spherical grid leaves a triangular hole which is utterly innocuous. Failure of one stave in a simple curvature barrel and the whole thing collapses.</p> <p>"Failure of two adjacent-arched openings which is stable and innocuous; likewise the failure of five or six triangles leaves a completely arched pent or hex opening which is circumferentially corked and innocuous. Failure of one spherical tension member likewise leaves an only slightly relaxed, two-way detoured, i.e., diamonded relaying of the throughway tensional continuity.</p> <p>Considerable relaxing of the spherical triangulated cork barrel system by many local tension failures can occur without freeing the corks to dangerously loosened local rotatability. The higher the frequency and the deeper the inter-trussing, the safer this type of spherical structure."</p> <p>TENSEGRITY - SEC 650.68 - Cite Ltr. to Shoji Sadao, 15 Feb '66, p. 5</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Excess:</u> (1)</p> <p>"Spherical excess is the amount of angle by which the three internal angles of spherical triangles exceed the constant internal angular sum of 180 degrees-- which characterizes all planar triangles."</p> <p>- Cite Undated Sheet: DYNAMION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION.</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Barrel: Radial Compression vs. Circumferential Tension:</u></p> <p>"This letter plus the structural portion of my discourse and illustrations of my Mexican speech to the U.I.A. (in WDSU Doc. II.) should make possible the elegant mathematical formulation of engineering theory governing the radial compression and circumferential tension behaviors unique and exclusively accomplished through three-way spherical gridding."</p> <p>- Cite Ltr. to Shoji Sadao, 15 Feb '66, p. 4</p> <p>TENSEGRITY - SEC 650.69</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Excess:</u> (2)</p> <p>"The internal angles of spherical triangles always add to more than 180 degrees and the larger the spherical triangles the greater the 'excess.' Convince yourself of this infraction of your planar thinking by drawing a meridian of longitude which is a great circle from the North Pole to the Earth's equator, which is also a great circle. Meridians and the equator always intercept each other at 90 degrees. Draw a line along the equator a quarter of the way around the world, which is 90 degrees. Then draw a line returning by meridian to the North Pole. You will have completed a spherical triangle whose three angles are each 90 degrees and add to 270 degrees, or 90 degrees 'spherical excess.'"</p> <p>- Cite Undated Sheet: DYNAMION AIROCEAN WORLD FULLER PROJECTIVE-TRANSFORMATION</p>
<p><u>Spherical Barrel:</u></p> <p>See Cork: Triangular Corks in Spherical Barrels Three-way Great Circling: Three-way Grid</p>	<p><u>Spherical Excess:</u> (1)</p> <p>See Equimagnitude Phases Minimum Spherical Excess</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Comprehension:</u></p> <p>"The second stage of [comprehension] is spherical..."</p> <p>- Citation and context at <u>Comprehension</u>, 16 Feb '73</p>	<p><u>Spherical Excess:</u> (2)</p> <p>See Fifteen, 22 Jun '72 Module: A Quanta Module & Basic Triangle, 20 Dec '73 Neutral Angle, 16 Dec '73 Projective Transformation, (4); (III)-(VII) Projective Transformation: Raleigh Edition, (1) Spherical Icosahedron, 13 Oct '71 Dynamion Airocean World Map, (2) Vector Equilibrium, 26 Aug '75</p>

Synergetics Dictionary

RBF DEFINITIONS

Spherical Field:

"Physics' discovery of universally-multifrequenced, periodic-event-discontinuity outnoss (in complementation to equally frequenced, event-occurrence in-negs) is inherent in the always-experimentally-verifiable, wave-duration frequency, photon-quantum phenomena; wherefore synergetics had to redefine both volumes and surfaces in terms of dense (high-frequency) aggregates of only pointally-positionable, energy events' geometrical formulations, with spherical 'surfaces' being in operational reality a dense, outermost, single-photon-thick, 'cloud' layer, everywhere approximately equidistant in all directions from one approximately-locatable event center. For this reason the second-power exponential rate of area gain is not to be identified as a continuum, i.e., with a continuous system, but only with the high-frequency outermost layer population aggregate of energy-event points. With numbers of photons and wave frequency per primitive volume, the relative concentration of given masses are determinable."

- Cite RBF rewrite of SYNERGETICS galley at Sec. 1052.20, 9 Jan'74

Spherical Grid:

See Tensegrity Geodesic Grid: Three-way Grid
Omnirational Control Matrix
Great Circle Subdivisions of Spherical Unity

RBF DEFINITIONS

Spherical Field:

David Bohm, Foundations of Physics, Vol. 1, No. 4, 1971, p.369:

"...Einstein did in fact very seriously try to obtain such a description in terms of a unified field theory. He took the total field of the whole Universe as the primary description. This field is continuous and indivisible. Particles are then to be regarded as certain kinds of abstraction from the total field, corresponding to regions of very intense field (called singularities)."

RBF Comments:

" $2pp^2 + 2$, where P = prime No and F = frequency."

"... of conceptualities. BF's segment 'scenario' of limited conceptuality."

- Cite RBF marginalia at QUANTUM THEORY AS AN INDICATION OF NEW ORDER IN PHYSICS, p.369, done Aug'73

UNIVERSAL INTEGRITY - SEC. 1052.33

Sphere = Icosa:

See O Module, 29 Sep'76

Spherical Field:

See Circumferential Field
Embracement
Halo Concept
Radial-circumferential
Sphere of Reference
Vector Equilibrium: Field of Energy
Spherical Point System
Unified Operational Field

RBF DEFINITIONS

Spherical Icosahedron:

"We can take an icosahedron and put a sphere congruent to each of the 12 vertexes and if we place a light inside and project the shadows of the chords out on to the sphere, the result is a spherical icosahedron. The 20 equilateral triangles of the planar icosahedron can be symmetrically subdivided into six small right triangles by perpendicularly bisecting each angle. The angles of each small triangle are 90°, 60° and 30° and therefore each of the sides is different in length. In the spherical icosahedron, however, the angles are 90°, 60° and 36° with the last angle 60° more than the corresponding angle in the planar icosahedron. This is due to spherical excess."

- Cite SYNERGETICS, "Numerology," p. 13, Oct. '71.

Spherical Gears:

See Gears: Spherical Gears

RBF DEFINITIONS

Spherical Icosahedron:

"An icosahedron 'exploded' onto the surface of a sphere; bears the same relation to an icosahedron as a spherical triangle bears to a plane triangle; the sides of the faces of the spherical icosahedron are all geodesic lines."

- Cite Patent No. 2,682,235, June 29, 1954
BUILDING CONSTRUCTION

Synergetics Dictionary

<p><u>Spherical Icosahedron:</u> (1)</p> <p>See Icosahedron Projective Transformation: Raleigh Edition Tensegrity Icosahedron</p>	<p>REF DEFINITIONS</p> <p><u>Spherical Interstices:</u></p> <p>"Synergetics Isotropic Vector Matrix omnisymmetric, radiantly expansive or contractive growth rate of <u>interstices</u> which are congruent with closest packed unradius spheres or points, are also rational. There is elegant, omniversal, metaphysical, rational, whole number equating of both the planar bound polyhedral volumes and the spheres, which relationships can all be discretely expressed without use of the irrational number π, (7), 3.14159, always required for such mathematical expression in strictly XYZ coordinate mathematics."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 970.13, 18 Nov'72</p>
<p><u>Spherical Icosahedron:</u> (2)</p> <p>See Sphere, 25 Feb'74 Central Ball: Central Sphere, 13 Nov'75</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Interstices:</u></p> <p>"A sphere is a convexly expanded vector equilibrium and all inter-closest-packed sphere spaces are concavely contracted vector equilibria or octahedra at their most disequilibrium pulsative moments."</p> <p style="text-align: right;">[13] - Cite SYNERGETICS draft at Sec. 970.14, 18 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Interstices:</u></p> <p>"When unit radius spheres are closest packed, they have a space between them whose volume is exactly tetravolume-1 as ratioed to the spherically occupied tetravolume-5 with a combined space occupancy of tetravolume-6."</p> <p style="text-align: right;">- Cite RBF Ltr. to William Hesse; 9 Jul'76 - Incorporated in SYNERGETICS 2 draft at Sec. 1032.101</p>	<p><u>Spherical Interstices:</u></p> <p>See Interstitial: Interstitial Spaces Sphers & Spaces</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Interstices:</u></p> <p>"All of [the jitterbug] stages are rationally concentric in our unified operational field of 12-around-one closest-packed spheres that is only conceptual as equilibrrious. We note also that per each sphere space between closest packed spheres is a volume of exactly one tetrahedron: $6 - 5 = 1$."</p> <p style="text-align: right;">- Citation & context at <u>Octahedron as Annihilation Model</u>, 30 Dec'73</p>	<p><u>Spherical Maximum:</u></p> <p>See Prime Dichotomy, (2)</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spherical Necessity:</u></p> <p>"Gravity has been described as the nostalgia of things to become spheres. The nostalgia is poetic, but the phenomenon is really more of a necessity than it is a nostalgia. Spheres contain the most volume with the least surface: gravity is circumferential: nature is always most economical. Gravity is the most effective embracement. Gravity behaves spherically of necessity because nature is always most economical."</p> <p style="text-align: right;">- Cite SYNERGETICS, 2nd. ed. at Sec. 646,21, 30 May'75</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Octahedron:</u></p> <p>"The <u>spherical octahedron's</u> three inside-out symmetrically unique diameters and the three unique external chords produce two unique sets of three nonparallel lines each, but with one set coordinating at 60 degrees and the other set coordinating at 90 degrees."</p> <p style="text-align: right;">- Cite SYNERGETICS draft at Sec. 527,23, 29 Nov'72</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Nostalgia:</u></p> <p>"Here we have clarification of the Copernican 'nostalgia' or synergetic proclivity of the circumferentially arrayed spheres to associate symmetrically around the nucleus sphere or the nucleus void which, as either configuration-- the vector equilibrium or the icosahedron-- rotates dynamically producing a <u>spherical surface</u>."</p> <p style="text-align: right;">- Citation & context at <u>Gravity</u> (1), 12 Jun'74</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Octahedron:</u></p> <p>"Each of any three great circles of a sphere not having common polar crossings must cross each other twice in a symmetrical manner in which the six crossings must produce either two similar polar triangles and six similar equatorial triangles, or must produce eight equilateral and equiangular triangles all cases of which are <u>spherical octahedra</u>, regular or irregular."</p> <p style="text-align: right;">- Cite SET X, p.10, Aug'72</p>
<p><u>Spherical Nostalgia:</u></p> <p style="text-align: center;">See Spherical Necessity, 30 May'75</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Octahedron:</u></p> <p>"When two force vectors operating in great circle paths inside a sphere impinge on each other at any happenstance angle, that angle has no amplitude stability. But when a third force vector operating in a great circle path crosses the other two spherical great circles, a great-circle-edged triangle is formed with its inherent 180° mirror-image triangle. With successive inside surface caromings and angular intervector impingements, the dynamic symmetry imposed by a sphere tends to equalize the angular interrelationship of all those triangle-forming sets of three great circles which, shunting automatically, tend averagingly to reproduce spherically closed symmetrical systems of omnisimilar triangles exactly reproduced in their opposite hemisphere, quarter-spheres, and octa-spheres. This means that if there were only three great circles they would tend swiftly to interstabilize comprehensively as the <u>spherical octahedron</u> all of whose surface angles and arcs (central angles) average as 90°."</p> <p style="text-align: right;">- Cite SET X, p.12, Aug'72</p>
<p><u>Spherical Observation:</u></p> <p style="text-align: center;">See Nucleus (1) Omnidirectiona; Physical Existence Environment Surrounda Vectorial Geometry Field, 22 Nov'73</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Octahedron:</u></p> <p>"Here we have a spherical octahedron made out of the three great circles. But you cannot make them by folding up three great circles. It is impossible to fold it and have it come out. But you can fold six great circles. You can bring those six together and they will have make the spherical octahedron, but it is all doubled up. Now that ought not to surprise you because you remember that when we took the vector equilibrium and collapsed it, it became the octahedron and all the vectors were doubled, so this is fairly logical. This is six great circles but the first that I could make. I couldn't make it with one, or two, or three, but I can make it with four. This is of six."</p> <p>"This is a very peculiar kind of folding . . . they never duplicate each other and never double up except in the one case where the octahedron made out of six are all doubled."</p> <p style="text-align: right;">- Cite Oregon Lecture #7, p. 269. + p. 270. 11 Jul'62</p>

Synergetics Dictionary

Spherical Octahedron:

See Sphere, 25 Feb'74
Octahedron: Eighth-octahedra, (1)(4)

RBF DEFINITIONS

Spherical Quadrant Phases:

"There is always a total of eight (four positive, four negative) unique
-- interpermutative,
-- intertransformative,
-- interequatable,
-- omniembracing
phases of all cyclically described symmetrical systems
(see Sec. 610,20), within any one octave of which all the
intercovariable ranging complementations of number occur."

- Cite SYNERGETICS, 2nd. Ed. at Sec. 1238,28, 9 Jul'75

Spherical Point System:

(1)

See Spherical Field

Spherical Quadrant Phases:

See XYZ Quadrant at Center of Octahedron

Spherical Point System:

See Basic Raft, Feb'50
Recede, 17 Feb'72

Spherical Reality Scribing:

See Vectorial Geometry Field, 22 Nov'73

Spherical Propagation:

See Probability, (1); 20 Feb'72

Spherical Sensations:

See Halo Concept, 22 Feb'72

Synergetics Dictionary

RBF DEFINITIONS

Spherical Structures:

"Because spherical sensations are produced by polyhedral arrays of interferences identified as points approximately equidistant from a point at the approximate center, and because the mass-attractive or repulsive relationships of all points with all others are most economically shown by chords and not arcs, the spherical array of points is all interconnected triangularly by the family of generalized principles being operative as Universe, which produces very high-frequency, omnitriangulated geodesic structures which are an aggregate of chords leading to all points whose angles always add up to less than 360° ."

* Citation at Halo Concept, 22 Feb'72
 - ~~Cite SYNERGETICS draft at Bell, 535-10, 14 Jan'72~~

RBF DEFINITIONS

Spherical Thinking:

"When we get into the sphere I find that relatively few people really think in terms of spherical thinking. Spherical thinking has not been used too much because calculus seems to take its place in many ways, and it is important to realize that in spherical thinking the angles don't add up to 180 degrees."

- Citation & context at Sphere (p.86), Jun'66

RBF DEFINITIONS

Spherical Tetrahedron:

"The least distorted transformational projection of the Dymaxion airocean world map is an icosahedron, but the simplest frame of reference is the spherical tetrahedron which provides the omnitriangulated grid, strip-wrapped tetrahedron. This is how you bring the omnidirectional into a flat projection. This is how the tetrahedron, the basic structural system of Universe, unwraps linearly into an infinity of varying frequencies of angle and frequency modulation. Here we have a conceptual model that you can program..."

- Citation & context at Omnidirectional Typewriter (4)(5), 10 Sep'74

Spherical Thinking:

See Sphere, (p.85) Jun'66*

RBF DEFINITIONS

Spherical Tetrahedron:

"When stressed with relative high internal pressure all polyhedra tend to transform toward defining the maximum volume with the minimum surface, i.e., toward the spherical convex-arc edge tetrahedra (the basketball and the baseball are tetra structured)."

- Cite PENNA. TRIANGLE, p. 11 Nov '52

RBF DEFINITIONS

Spherical Triangle :

"What you and I have been brought up on as a triangle is the most extreme case of the most local aspect of what is inherently a spherical triangle. Even if we imagine it, it is still special case. And when we make it conceptual the brain immediately makes it special case. The brain is designed for special case."

"I say to a child: Draw a triangle. And he says: Where? And I say: Draw a triangle. And he draws it on the ground. The triangle divides the whole Earth into two areas: the complementary very big triangle and the local little triangle. Concave and convex are not the same: ergo, we have inherently four triangles. And the four triangles mean the manifestation of our friend the tetrahedron which is always there for the accountability. There is nothing you can do without the tetrahedron being there."

"A plane triangle is just an extremely limited case of the spherical. If you learn the spherical the plane geometry is included, but not the reverse. It is starting with wholes. Plane trigonometry is an abstract ratio of edges to angles but spherical trigonometry is all ratios of angles to angles, which is much simpler."
 - Cite RBF at Bell Lab. videotaping, Phila., PA, 23 Jan'75

Spherical Tetrahedron:

See Baseball, 28 Jan'75
 Cosmic Neutral, 16 Dec'73
 Omnidirectional Typewriter, (4)(5); 10 Sep'74
 Sphere, 25 Feb'74
 Spherical Triangle Sequence, (VIII)
 Three-way Great Circling: Three-way Grid, 17 Feb'72
 Yin-yang, (1)
 Domain of a Line, 7 Nov'73

RBF DEFINITIONS

Spherical Triangle:

"Operationally speaking we always deal in systems and all systems are characterized projectionally by spherical triangles which control all our experiential transformations."

- Cite SYNERGETICS, "Operational Mathematics, One Spherical Triangle Considered as Four," 1971

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p>Spherical Triangle:</p> <p>"... Spherical trigonometry is a very different kind of trigonometry from the plane. I want you to get familiar with it because there is no plane flat surface on Earth. So therefore there are no plane triangles and we are always dealing in systems. Systems are characterized by triangles which are spherical triangles. These are the kinds of triangles which control our fundamental transformations."</p> <p>- Cite OREGON Lecture #6, pp. 205-6, 10 Jul'62</p>	<p>RBF DEFINITIONS</p> <p>Spherical Triangle Sequence: (1v)</p> <p>"each of which micro and macro otherness system integrity has its induced sixteen triangles for a cosmic total of 64."</p> <p>- Cite SYNERGETICS text at Sec. 1106.13, 26 Jan'73</p>
<p>RBF DEFINITIONS</p> <p>Spherical Triangle Sequence: (4)</p> <p>"No surface is conceivable without its inherent sphere as a truly flat Universe reaching outwards laterally in all directions to infinity, though illusionarily accepted as 'obvious' by historical humanity, is contradictory to experience. The surface of any system must return to itself in all directions and is most economically successful in doing so as an approximate true sphere which contains the most volume with the least surface. Nature always seeks the most economical solutions, ergo the sphere is normal to all systems experience and to all experiential, i.e., operational consideration and formulation. The construction of a triangle involves a surface and a curved surface is most economical and experimentally satisfactory. A sphere is a closed surface, a unitary finite surface. Planes are never finite. Once a triangle is constructed on the surface of a sphere-- because a triangle is a boundary line closed upon itself-- the finitely closed boundary lines of the triangle automatically divide the unit surface of the sphere into two separate surface areas. Both are bounded by the same three great circle arcs and their three vertexial links: which is the description of a triangle. Therefore both areas are true triangles, yet with common edge"</p> <p>- Cite SYNERGETICS text at Sec. 1106.12, 26 Jan'73</p>	<p>RBF DEFINITIONS</p> <p>Spherical Triangle Sequence: (I)</p> <p>"I spoke to you earlier today about our teacher at the school giving us some arithmetic and then saying she was going to teach us a little bit about plane geometry. She said, 'Don't worry, it's just plane geometry.' Then she taught us about the triangle as an area bound by closed lines: three edges and three angles. A circle is an area bound by a closed line of equal radius from a point. A square is an area bound by a closed line of four equal edges and four equal angles. Everything we learned about geometry were areas bound by closed lines. And then we learned about logic within those closed lines about that area. Reliability and understandability was all on one side of the line. A very nice small tight package, but it couldn't tell us anything about the other side of the line. Why? Because it is plane geometry and goes to infinity so the other side of the line is undefinable. What do you mean by infinity? It's infinite; therefore it can't be defined. So that we start the children off with this extraordinary prejudice that only on one side of the line is there reliability.</p> <p>"Your family is very reliable. The next family over there is"</p> <p>- Cite SIMS Address, U.Mass, Amherst, Talk 13, p.15, 22 Jul'71</p>
<p>RBF DEFINITIONS</p> <p>Spherical Triangle Sequence: (11)</p> <p>"boundaries. It is impossible to construct one triangle alone. In fact, four triangles are inherent to the oversimplified concept of the construction of 'one' triangle. In addition to the two complementary convex surface triangles appropriate to them and occupying the reverse, or inside, of the spherical surface. Inasmuch as convex and concave are opposites, they cannot be the same. Therefore, a minimum of four triangles is always induced when any one triangle is constructed, and which one is the initiator or inducer of the others is irrelevant. The triangle initiator is an inadvertent but inherent tetrahedron producer; it might be on the inside constructing its triangle on some cosmic sphere, or vice versa.</p> <p>"It might be argued that inside and outside are the same, but not so. While there are an infinity of insides in Experience Universe there is only one outside comprehensive to all insides. So they are not the same; and the mathematical fact remains that four is the minimum of realizable triangles that may be constructed if any are constructed. But that is not all, for it is also experimentally disclosed that not only does the construction of one triangle on the surface of the"</p> <p>- Cite SYNERGETICS text at Secs. 1106.12+13, 26 Jan'73</p>	<p>RBF DEFINITIONS</p> <p>Spherical Triangle Sequence: (11)</p> <p>"questionable now. As for those foreigners, well, they're awful. They're very unreliable. Now I want you to see how we really build prejudice, how easy it is in terms of the superficial assumption of the reality of this great plane-- that this is a safe place to start children off. Now I want you to realize that when we made that closed line we did it on a blackboard and I did it with a piece of crayon, and this blackboard ends and goes around to the other side. It has another side here [He knocks on it.] and it has edges on it. It is a system. This blackboard I can take it off here, and I find that it is a system. It has insideness and outsideness and is fairly thick-- about a quarter of an inch. And I'm still inside it. So it is a system even though it's an asymmetrical system. When I take a unit system it has a unit surface. When I draw a closed line on a system which is a unit surface I divide the whole area of that system, the whole surface area, into two areas. There is the rest of the board here that is an area bound by this closed line of three edges and three angles.</p> <p>"So this is white inside here and all the rest is green."</p> <p>- Cite SIMS Address, U.Mass., Amherst, Talk 13, p.16, 22 Jul'71</p>
<p>RBF DEFINITIONS</p> <p>Spherical Triangle Sequence: (111)</p> <p>"sphere divide the total surface into two finite areas each of which are bound by three edges and three angles, ergo by two triangles, but these triangles are on the surface of a system whose unity of volume was thereby divided into centrally angled tetrahedra because the shortest lines on sphere surfaces are great circles and great circles are always formed on the surface of a sphere by planes going through the center of the sphere, which planes of the three-great-circle-edged triangle drawn on the surface automatically divide the whole sphere internally into two spherical tetrahedra-- each of which has its four triangles, ergo inscribing one triangle 'gets you Eight,' like it or not. And each of those eight triangles has its inside and outside, wherefore inscribing one triangle, which is the minimum polygon, like 'Open Sesame,' inadvertently gets you 16 triangles. And that is not all: the sphere on which you scribbled is a system and not the whole Universe, and your scribbling a triangle on it to stake out your 'little area on Earth' not only begat 16 terrestrial triangles but also induced the remainder of Universe outside the system and inside the system to manifest their invisible or nonunitarily conceptual 'minimum inventorying' of 'the rest of Universe other than Earth'"</p> <p>- Cite SYNERGETICS text at Sec. 1106.13, 26 Jan'73</p>	<p>RBF DEFINITIONS</p> <p>Spherical Triangle Sequence: (111)</p> <p>"I'll paint this green all around, a green area which is bound by a closed line of three edges and three angles. You say it doesn't look like a triangle to me. And I say it [the outside green area-- EJA note.] must be; that's your definition of a triangle, an area bound by a closed line of three edges and three angles. Now the board being asymmetrical makes it more difficult for you for the moment, but I want you to think about our Earth. We had a circle which was an area bound by a closed line with equal radius from a point. Well, taking our Earth, I'm now going to make a closed line on it and it happens to be 90 degrees from each of the poles and you would call it the equator. It's a closed line on the surface and it divides the Earth into a southern hemisphere and a northern hemisphere. You credit both sides of the line. Now I'm going to take you up to 80 degrees north latitude and draw a lesser circle. It divides the surface of the Earth into two areas: a very large southern one and a very small northern. We can just call it the Arctic circle and the rest of the Earth. But you don't negate the rest of the Earth and you do recognize both sides of the line."</p> <p>- Cite SIMS Address, U.Mass., Amherst, Talk 13, p.17, 22 Jul'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (IV)</p> <p>"Now instead of drawing a circle on the Earth I'm just simply going to draw a triangle. Now I divide the whole surface of the Earth into two areas, a very large southern and a very small northern and they both are triangles so they're both bound by a closed line with three edges and three angles. And you say, 'Oh Mister, you're wrong, because I see 60 degree corners to that triangle, and this must be 300 degrees' outside the corner. And this must be 300 and this must be 300 and the sum of the angles of triangles are always 180 degrees. You say can that really be so. And I say yes it is so and let me demonstrate that to you.</p> <p>"Take, for instance, what we call a great circle. A great circle is a line formed on a sphere by a plane going through the center of the sphere. The equator is such a great circle. The meridians of longitude are just such great circles and they go through the center. 80 degrees north latitude is a lesser circle: it does not go through the center of the sphere. Now great circles are the shortest distances between points on the surface of a sphere. If you would like to demonstrate that we'll simply go up to 85 degrees north latitude-- it's really a very small little circle here-- and take the radius"</p> <p>- Cite SIMS Address, U.Mass., Amherst, Talk 13, p.17, 22 Jul'71</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (VIII)</p> <p>"your spherical trigonometry.</p> <p>"Now if I made another triangle bigger still, in which the 90° corners were 120° angles . . . that's exactly what you get with a spherical tetrahedron. If I put a tetrahedron inside of a sphere with the light I had last night, and have the shadows cast outwardly from the light at the center of the sphere, it would show you this 120 degree interaction at four vertices. So there would be a triangle where each of the corners would be 120° and it would add up to 360°. Now I'll simply say to you then, that when you draw a triangle on our Earth, even though it's very local-- and you draw a little tiny triangle here locally-- you divide the total surface of the Earth into two areas. And one is a very large triangle with corners of about 300° each, and there are these little local ones of about 60° each if you try to make it equilateral. The boy said, 'But I didn't mean to draw the big triangle.' I said, 'That's just the trouble. We keep drawing these big triangles and don't realize we are.' We've been thinking what's been called realistic. Let's get down to Earth, never mind that space stuff, but when we're all the time just a tiny little speck in space. It's nothing but a space program, which we'd better catch on to pretty quickly."</p> <p>- Cite SIMS Address, U.Mass., Amherst, Talk 13, p.20, 22 Jul'71</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (V)</p> <p>"of it in my dividers and I'll superimpose it on the equator. And, of course, the equator is A and B. And quite clearly it's a much shorter distance between A and B if you stay on the equator than it is to take this detour over 90 degrees, like this, and come back 90 degrees again.</p> <p>"So great circles are called geodesics. The word geodesic is old but it was revived by both Einstein and the Indian Riemann /sic/, and it means the most economical relationship between events in the Universe, and they are never straight lines. If, for instance, we see two airplanes in flight. They're independent of the surface of the Earth. They are steerable planets if you will. Photographs were taken at night of airplanes fighting during WWII at night with tracer bullets. Both were using machine guns with tracer bullets, and you'll see one of them hit the other and it goes inward to the Earth. You see the tracery is an absolute corkscrew. If you are for instance wanting to fire at a bird, which I hope you don't want to fire at one, but if you did want to fire at a bird you wouldn't hit it if you aim at where it is. You'd have to aim at where you think it's going to be. And gravity is going to start affecting it, even though it's a short"</p> <p>- Cite SIMS Address, U.Mass., Amherst, Talk 13, p.18, 22 Jul'71</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (a)</p> <p>"All this comes because man starts with the idea of over-simplifying. . . what seems to be reality. The Earth at that time seemed to be a plane going to infinity. So you were dealing in a plane. So you start your geometry with plane geometry. You start trigonometry with plane trigonometry. But in due course you discovered that it wasn't a plane, it was a sphere. A closed system, not an open system. And you found that you were only defining on one side of the line because the other side went on to infinity. So you learned about the triangle, and the circle, and all these areas bound by closed lines. And you learned that all logic and reliability is one one side of a line: the area bound. On the other side of the line-- you couldn't define it because it went to infinity-- therefore it is undefinable. So as geometry is taught to you, and trigonometry is taught to you, you can only deal with one side of the line.</p> <p>"But if you are operational, the way Einstein is, and say I've got to take into account all the conditions that obtain at the time of the experience, you can say that in drawing a line on a blackboard that the blackboard does not go on to infinity. It comes to its edge and the edge is a slate,"</p> <p>- Cite RBF tape Transcript, Carbondale Dome, pp.18-20, 1 May'71</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (VI)</p> <p>"distance and going through the atmosphere there's always a spin that's brought about by rotation. There is as a result pressure drafts on one side, and there's air in motion-- wind-- and all your traceries are always going to be corkscrew. But they are the most economical relationships and they are geodesics.</p> <p>"So geodesics are curved lines. And I've given you the most prominent geodesics like the great circles, the most economical relationships between events on the surface of our Earth. Now, understanding that, you will understand that our spherical trigonometry is always done with great circles. You were brought up with your plane geometry where a straight line is the shortest distance between two points. Now I gave you earlier today the non-straight line. . .</p> <p>"Here then is our Earth. I'm going to the north pole and I'm going to take a meridian which is a great circle and it's going to impinge on the equator at 90 degrees. So this meridian comes and impinges on it and here's the center of our Earth. It would go like that. And now, having impinged on the equator at 90 degrees, I'm going to leave the meridian and"</p> <p>- Cite SIMS Address, U.Mass., Amherst, Talk 13, p.19, 22 Jul'71</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (b)</p> <p>"or whatever it is, and you go around, its mild thickness, you go around its back. And whether you like it or not you have divided the surface of the blackboard into two areas. Anything that comes back into itself is a closed system. And all systems, in fact thinkability, does that. What we call thinking is trying to find out how it does return upon itself: What is the outline of that man? What is going on? What is of the other side of the Moon? I have got to get all the sides in order to understand it.</p> <p>"I think this Moon thing is typical of seeming to be a plane. You didn't have to think about the other side of it. This is typical of yesterday's way of thinking. Things were just a disc. But even if it was a disc you could have another side. As a coin does. Now, once you are operational, you realize that if you take the unit surface of any system, whether it is symmetrical, a nice regular thing like a sphere, or whether it is a blackboard with very thin edges but nonetheless it has surfaces and it has backs. It might be a triangular blackboard, a broken piece of slate, but it has this back. And when you then draw any closed line coming back on itself, whether it is a triangle or a circle,"</p> <p>- Cite RBF Tape Transcript, Carbondale Dome, pp.20-22, 1 May'71</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (VII)</p> <p>"travel on the equator. I'm going to go one-quarter way around the Earth. Then I'm going to take another meridian and ride up to the north pole again. And because I went a quarter way around the Earth, and then I left the equator at 90 degrees, looking down on top of what I've done, I went like this, and therefore the angle at the north pole must also be 90 degrees. So here is spherical triangle of 90°, 90°, and 90°, adding up to 270° in its corners. These are the triangles we really do deal with in our Universe.</p> <p>"If we were to bisect the edges of that triangle with great circles, interconnecting them, the angles would be about 72° at each corner. If I bisect them again and interconnect them with smaller triangles, the corners are around 63°. Then if I get a smaller one here that 60 degrees and some minutes, or maybe 60 degrees and some seconds-- but they never get down to exactly 60° in each corner. That is, it will always be a little more than 180 degrees. So the smaller the triangle, the more you approach the 180-degree-ness which you never arrive at. But the amount the triangles at the corners add up to more than 180 degrees we call the spherical excess, which you must always calculate when you're doing"</p> <p>- Cite SIMS Address, U.Mass., Amherst, Talk 13, p.19, 22 Jul'71</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (c)</p> <p>"automatically that closed line divides the total surface of the system into two areas, both of which are bound by that line. And you have only been looking at what is on one side of that line.</p> <p>"A bathing cap stretches around and you have the opening of the bathing cap where the little snap rests-- stretched around it. Packaged. Now, if it were a sphere you could see it a little better. I am going to draw a closed line on a sphere. It happens to be the equator. It divides the Earth into two areas, you say, the southern and northern hemispheres, and you can be perfectly happy about that. If I go to 65° north latitude and draw a latitude, a lesser circle. I divide the whole Earth into a very large southern and a very small northern. Now I am perfectly clear at this point that dividing surfaces you have to credit both sides. So if I drew a triangle on the Earth locally I divide the whole surface of the Earth into two areas, both of which are bound by my closed line, the three edges and three angles. And the boy said, 'Well, I drew a 60° angle here. . . and so I learned the sums of the angles of the triangles only'"</p> <p>- Cite RBF Tape Transcript, Carbondale Dome, pp.22-24, 1 May'71</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (d)</p> <p>"add up to 180°, so each of the other corners. . . seems to be 300° so it adds up to 900°. Well you have been taught the wrong way because the sums of the angles never add up to 180°, because you cannot make an absolutely flat plane. There is always something a little more. And this is a case where you really see how much more.</p> <p>"If you have a very big triangle, for instance, going to the north pole, taking a meridian to the equator, impinging on the equator at 90°; go one-quarter of the way back around the Earth and take a meridian back to the north pole; it leaves the equator at 90° and comes back where the two come together and the angle at the top will be 90°. So 90°, 90°, 90° is 270°-- that is the typical spherical triangle. And the sums of the angles of spherical triangles are approximately never the same. If I make a smaller triangle just inside of the one that I just talked about where there is 90°, 90°, 90°, the sums of the angles are going to be a little less. It approaches, but never gets down to 60°, 60°, 60°. It is always a little more. So the smaller they are, the more they approach 180°. And so in all our surveying around our Earth, doing geodesy, we are always dealing with what we call spherical excess,"</p> <p>- Cite RBF Tape Transcript, Carbondale Dome, pp. 24-26, 1 May '71</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle: Equator As Square:</u> (3)</p> <p>"If you make your small square a little bigger and your bigger one a little smaller by increasing the little one's edges to one mile each, you will have a local one square mile-- a customary unit of western United States' ranches-- and the big square will be approximately 24,999,999 square miles. As you do so, using great circle lines, which are the shortest distances on a sphere between any two points, to draw the squares' edges, you will find the small square's corner angles are increasing and the big one's corners are decreasing. If you now make your square so that it's area is one-half that of Earth 25 million square miles, in order to have all your edges the same and all your angles the same, you will find that each of your edges is approximately six thousand miles long and that each of the corners of both squares are 180 degrees each. That is to say that the edges of both squares lie along the Earth's equator so that the areas of both are approximately 12,500,000 square miles.</p> <p>"And so it would go with a triangle, a pentagon, an octagon, or any other equi-edged, closed line figure which you may draw on any system's surface. The closed line surface figure will always and only divide the whole area into two complementary areas."</p> <p>- Cite NEHRU SPEECH, pp.20-21, 13 Nov'69 <u>OPERATIONAL MATH SECS. 813-814</u></p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (e)</p> <p>"How much more do the angles add up to more than 180°.</p> <p>"All the great circles are the shortest distance between two points on spheres. Great circle triangles give simply what we say. There is a triangle there literally of 300° in each corner. 300° minus; and (60,60,60) 180° plus.</p> <p>"If I started you off with reality operationally, like Einstein, I couldn't ever start you off with a plane, but I would start you on a sphere. Once you do that you realize that what we call the edges of a triangle-- or arc-- is simply the central angle. You are dealing in central angles and surface angles. You are dealing all in angles and you have no incompatibility for your fractions. This is where we should have started all of our arithmetic and all of our geometry. We should have started with whole systems."</p> <p>- Cite RBF Tape Transcript, Carbondale Dome, pp.24-27, 1 May '71</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle:</u> (4)</p> <p>"That each human thus discovering this experimentally says spontaneously, 'I didn't mean to make the big triangle,' or 'the big square,' or indeed the big mess of pollution, in no way alters these truths of Universe. We are all equally responsible not only for the big complementary surface areas which we develop on systems by our every act, but also for the finite, complementary outward tetrahedron automatically complementing and enclosing each system which we devise. We are inherently responsible for the complementary transformation of Universe, inwardly, outwardly, and all around every system which we alter."</p> <p>- Cite NEHRU SPEECH, pp.20-21, 13 Nov'69 <u>OPERATIONAL MATH SEC. 814</u></p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle: Circle Version:</u> (1)</p> <p>"If we draw a closed line such as a circle around our Earth it must divide its total unit surface into two areas as does the equator divide our Earth into southern and northern hemispheres. If we draw a lesser sized circle on the Earth such as the circle of north latitude 70 degrees, it divides our Earth's total surface into a very large southern area and a relatively small northern area. If we go outdoors and draw a circle on the ground it will divide the whole area of our planet Earth into two areas and one will be very small and the other very large. If our little circle has an area of one square foot, the big circle has an area of approximately five quadrillion square feet, because our eight-thousand mile diameter Earth has an approximately 200 million-square-mile surface and each square mile has approximately 25 million square feet which, multiplied, gives a five followed by fifteen zeros-- 5,000,000,000,000,000 square feet. This is written by the scientists as 5×10^{15} square feet which, while compact, tends deliberately to disconnect from our senses. Scientists have been forced to disconnect from our senses due to the errors of our senses which we are now able to rectify. As we reconnect our senses with the reality of Universe, we begin to regain competent thinking by humans"</p> <p>- Cite NEHRU SPEECH, p.19, 13 Nov'69 <u>OPERATIONAL MATH SEC. 813</u></p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u></p> <p>"A triangle drawn on the earth's surface is actually a spherical triangle bounded by great circle arcs. If the triangle is drawn large enough, it is evident that the arcs divide the surface of the sphere into two triangles enclosed by common edges. The are apparently 'outside' one triangle is seen to be 'inside' the other. Because every spherical surface has two aspects-- convex if viewed from outside; concave if viewed from within-- each of these triangles is, in itself, two triangles. Thus one triangle becomes four when the total complex is understood."</p> <p>- Cite SYNERGETICS ILLUSTRATIONS, caption #18. 1967</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle: Square Version:</u> (2)</p> <p>"and thereby possibly their continuance in Universe as competently functioning team members-- members of the varsity or University team of Universe. If, instead of drawing a little one-square-foot circle on the ground-- which means on the surface of the spherical Earth-- we were to draw a square one foot on each side, this would give us the same size local area as before: one square foot.</p> <p>"A square as defined by Euclid is 'an area bound by a closed line of four equal length edges and four equal and identical angles.' By this definition our little square, one foot to a side, which we have drawn on the ground is a closed line of four equal edges and equal angles. But this divides all the Earth's surface into two areas both of which are equally bound by four equal length edges and four equal angles. Therefore, we have two squares: one little local one and one enormous one. And the little one's corners are approximately 90 degrees each, which makes the big square's corners 270 degrees each. While you are not familiar with such thinking, you are confronted with a physical experiment's results which have informed you that you have been laboring under many debilitating illusions."</p> <p>- Cite NEHRU SPEECH, pp.19-20, 13 Nov'69 <u>OPERATIONAL MATH SEC. 813</u></p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (A)</p> <p>"I often ask a young student to draw a triangle and, when he says, 'where shall I draw it?' I say, 'Draw it on the ground.' So he scratches a triangle and I say, 'You have drawn four triangles: when you draw on the Earth you must recognize that the Earth is a great sphere. As a sphere it is a closed or finite surface in contrast to the infinity of the plane. You will agree with me when I make a closed line around the middle of the Earth (that is, I delineate the equator) that this will divide the Earth into two finite and equally valid areas, a northern and a southern hemisphere. If I made a lesser circle north of the equator it would still run around and close back on itself and divide the Earth's surface into two unequal areas, a smaller northerly and a larger southerly area, simply because I have divided the total unitary and finite surface of the sphere into two sub-areas. So when a student draws a triangle for me on the unitary, closed finite surface of our spherical planet, he divides the total area of our sphere into two sub-areas, one very large and one very small, both triangular.</p> <p>"Now we begin the slide projections and as you will discover"</p> <p>- Cite BHIRUT Address, pp.23-26, May 4-6'67</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (B)</p> <p>"looking at my first picture that your eye does not want to see the bigger triangular area.</p> <p>"I find this biased concept very important because it plays such a big part in how competently or incompetently we conceive of and think about our environment.</p> <p>"Those are what we call <u>spherical triangles</u> and you probably are not familiar with spherical triangles because you have been educated to start with planar triangles wherein the sum of the angles . . . is always 180 degrees.</p> <p>"In a spherical triangle the angles never add up to 180°. To comprehend that fact let us go to the north pole and follow south along a meridian to impinge perpendicularly upon the equator, i.e., at 90°, and go along the equator a quarter of the way around the Earth. Then take a meridian back to the north pole. Taking the northbound meridian we leave the equator at 90° and, since we went a quarter of the way around the Earth, the two meridians followed-- first southbound and then northbound-- will form another 90° angle at the north pole. (Figure 1) Therefore we have"</p> <p>- Cite BEIRUT Address, p.24, 4-6 May'67</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (a')</p> <p>"I have a hypothetical sphere here now and you are looking at one spherical triangle on the sphere and these are the three radii to it. . . . Whereas in plane geometry, in the regular geometrical triangles of the Greeks, the sums of the angles were always 180 degrees in the inside of a triangle. In a spherical triangle the sum of the angles of the triangle are never 180 degrees, so that spherical geometry is a very different kind of geometry from the plane. I want you to get familiar with it because there is no plane flat surface on Earth and so therefore there are no plane triangles and we are dealing always in systems and the systems are characterized by triangles which are spherical triangles and these are the kinds of triangles which control our fundamental transformations."</p> <p>- Cite OREGON Lecture #6, p. 205-6, 10 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (C)</p> <p>"traveled a triangular course with three right angles, which means that this particular spherical triangle's angles do not add up to 180°. In fact, they add up to 270°.</p> <p>"This is a typical spherical triangle. The spherical triangle's angles add up to a variety of sums other than 180°. The amount that the spherical triangle's angles add up to more than 180° is called the spherical excess. The excess may vary all the way from 720° to 1°.</p> <p>"Now if we make the triangle bigger (Figure 2), we can go, for instance, to the regular spherical tetrahedron each of whose four spherical surface triangles has three corners consisting of 120° each. Its spherical excess is then 360° minus 180° which is an excess of 180°. If we draw one spherical triangle on the Earth's surface with each of its corners having 120° angles, it will divide the total spherical surface of the Earth into two areas each of which is bound by a closed line of three angles and three edges."</p> <p>- Cite BEIRUT Address, p.24, 4-6 May'67</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (b')</p> <p>". . . This is now a spherical triangle in which the angles are 120 degrees each. . . . Now this other spherical triangle has angles of 180 degrees each: what we call a circle turns out to be a spherical triangle. Remember there is a hemisphere up there and one down here; and quite clearly that is the equator. . . . Here we have the spherical triangle of 120 degree angles in the northern hemisphere of the sphere-- which you don't tend to see, simply because you tend to look at the smaller one. There is a tendency of man to look at the smaller one. In fact, I will draw a triangle on the board and one of the problems when I put two triangles together and got four, you remember, was because they turned out to be complementary triangles. I draw a triangle on the board here and you are used to the Greek way of just looking at the area bound by the three sides. In fact, the Greeks defined a triangle as an area bound by three lines turning upon themselves, a closed line of three increments. It happens, however, that I have divided the surface of the blackboard into an area on this side of the line and an area on the other side of the line and every time I put in a line it actually divides something. We have a tendency to be extremely biased and only to look at an area on one side of the line."</p> <p>- Cite OREGON Lecture #6, p. 206, 10 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (D)</p> <p>"This means then that the bigger of the two spherical triangles which subdivide the total closed surface of the Earth, has three more corners of 240° each.</p> <p>"In this next picture we see two spherical triangles which subdivide the sphere into two equal areas-- two hemispheres (Figure 3). Here each of the corner angles of the two complementary triangles covering together the whole sphere have 180° at each corner. This shows us that the equator of the Earth is the boundary between two spherical triangles, each with each of its three corners being 180°.</p> <p>"In this next picture what was originally the little spherical triangle at the top of the spherical-space model has become the big triangle, and what was the big spherical triangle has now become the little one. If you put those four pictures successively into the projector and then reverse the order and accelerate their sequential reappearance, you will begin to see both the triangles all the time and see the otherwise 'invisible' space sphere.</p> <p>"Now I must explain that because the sphere is concave as"</p> <p>- Cite BEIRUT Address, p.25, 4-6 May'67</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (c')</p> <p>"If I draw a triangle on the Earth . . . and I asked a student to do that . . . and I said all right, I see four triangles. And he said, I see only one. There is the little area, the area he has defined quite clearly. He has divided the surface of the Earth (which was unit before he drew the triangle) into two areas, the areas on either side of the line. The little local triangle and the big spherical triangle goes clear around the Earth. It is a closed area bound by a line of three increments. It was such a big one he didn't see it. And it is very typical of us to miss it. One of the most typical tricks I have found in humanity is to see the little one small one and miss the big one and the big one is the one that counts. Then I told him he drew four triangles and he said how did that happen. Well, they are spherical triangles and there is a concave little and a concave big as viewed from inside and there is a convex little and a convex big as viewed from outside. Convex and concave are not the same, so there are inherently four. In fact you will always find there are four there. Four is the minimum; and when we get to any kind of system, there is always four there. You will get used to that fourness and get used to not allowing yourself to become over confined and looking at the little ones."</p> <p>- Cite OREGON Lecture #6, pp. 206-7, 10 Jul'62</p>
<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (E)</p> <p>"viewed from the inside and convex as viewed from outside, and that convex and concave are not the same. Therefore, we have both large and small convex and concave spherical triangles always present. And that was my reason for saying to the boy, 'You have drawn four triangles,' when he thought he had drawn only one. You are not used to thinking of great circles in this way, but that is the way nature operates, so you had better get used to it from now on."</p> <div style="text-align: center;"> </div> <p>- Cite BEIRUT Address, p.25, 4-6 May'67</p>	<p>RBF DEFINITIONS</p> <p><u>Spherical Triangle Sequence:</u> (d')</p> <p>"When we get to the middle <u>of</u> the sphere you are more or less willing to concede both hemispheres, and then you get caught on to the fact that those were 180 degree triangles. . . . What had been the big one is now becoming the little one, and what had been the little one is becoming the big one . . . We get down finally to triangles where the angles are approaching 70 degrees, and they finally get down nearer to sixty degrees and so many minutes. They will never get to 60. Even the most local one will never be 60 degrees. So spherical triangles then do have a great variety of sums of their angles."</p> <p>- Cite OREGON Lecture #6, p. 207, 10 Jul'62</p>

Synergetics Dictionary

TEXT CITATIONS

Spherical Triangle on Earth's Surface = Four Triangles:

See: Ledgmont Lab. Address, pp. 52-55 [FRANCINA]
 Oregon Lecture #3, pp. 87, et. seq.
 Oregon Lecture #6, pp. 205-207
 ** MBF Tape Transcript, Carbondale Dome, 1 May '71,
 pp. 21-27 [Circle]
 * NLRHU speech, pp. 18-21 [Circle]
 ** Beirut, AUB Address, pp. 19-24 (rough); 24-25 (smooth). [Circle]
 SIRS Address at U. Mass, Amherst, 22 July '71, [Circle]
 pp. 10-1d. + 19-20. [Circle]

Synergetics, Sec. 810.00
 505.81 (2nd. Ed.)
 261.02 (2nd. Ed.)

538.11

Fig. 812.03

981.16-981.18 1106.10-1106.25

RBF DEFINITIONS

Spherical Unity:

"Systems are, in effect, spherical gears. Their internal-external pulsating and rotating teeth consist in reality ob both circumferential and radial waves of various frequencies of subdivision of spherical unity."

- Cite RBF draft of BRAIN & MIND, p. 8, 1971-

- Citation and context at Gear: Spherical Gears, May'72

Spherical Triangle on Earth's Surface = Four Triangles: (1)

See Probability Model of Three Cars on a Highway
 Social Highway Experience: Three Autos
 Triangle: Minimum of Four Triangles

RBF DEFINITIONS

Spherical Unity:

"The largest number of identical triangles in a sphere that unity will accommodate is 120: 60 positive and 60 negative. We can subdivide the surface of a sphere into 120 equilateral triangles by dividing the base of each of the 20 original triangles which made up the icosahedron, into six triangles. Being spherical, they are positive and negative, consisting of arcs which cannot hinge back. On is inside, concave and the other is outside, convex. So 60 positive and 60 negative triangles are the largest common denominator of unity."

- Cite SYNERGETICS, "Fundamental", p. 11, Oct. '71

- Citation at Basic Triangle: Basic Disequilibrium 120 I CD Triangle, 14 Oct'71

Spherical Triangle on Earth's Surface = Four Triangles: (2)

See Bias on One Side of the Line, May'65
 China, May'65
 Omnidirectional, 1954
 Operational, 3 Jan'72
 System, 10 Jul'62
 Three-way Great Circling: Three-way Grid,
 17 Feb'72
 Zoneness: System Zoneness, 8 Jan'55
 Background Nothingness, 2 Jun'75
 Windows of Nothingness, (1)

Spherical Unity:

See Great Circle Subdivisions of Spherical Unity
 Sphere as Complex Unity

Spherical Triangular Lattice:

See Dymaxion Airocean World Map, (b)

Sphere: Volume-5 Spheres:

See Triacotrahedron, 13 May'77

Synergetics Dictionary

<p><u>Spherical Wave:</u> (1)</p> <p>See Omnidirectional Shell Growth Rates</p>	<p><u>Sphericity of Whole Systems: Lawa Of:</u></p> <p>See Probability, 17 Feb'72; 18 Feb'72</p>
<p><u>Spherical Wave:</u> (2)</p> <p>See Mass, 14 May'73 Nuclear Sphere, 16 Dec'73 Photon, 26 Sep'73; 15 May'73 Tensegrity Sphere, 19 Dec'73</p>	<p><u>Spheroids:</u></p> <p>See Colloidal Chemistry, 1938</p>
<p>RBF DEFINITIONS</p> <p><u>Sphericity:</u></p> <p>"Compound curvature, or sphericity, gives you the greatest strength with the least material."</p> <p>- Citation at <u>Curvature: Compound</u>, 3 Oct'71 * Cite RBF to Eda, 3200 Idaho, Washington, 3 Oct, 1971.</p>	<p><u>Sphere: Spherical: Sphericity:</u> (1A)</p> <p>See Ball Balls Coming Together Bubble Celestial Sphere Cloud-island Spheres Closest Packing of Spheres Dome Equilibrium Sphere Embracement Geodesic Sphere Globe Ghostly Greek Geometry: Sphere Initial Sphere Linear & Spherical Analysis Line Between Two Sphere Centers Maximum: Spherical Maximum Nuclear Sphere Rhombic Dodecahedron #2: Fractionated Sphere Synergy Sequence: Two Massive Spheres</p>
<p>RBF DEFINITIONS</p> <p><u>Sphericity of Whole Systems:</u></p> <p>"Nature modulates probability and the degrees of freedom, i.e., frequency and angle leads to the tensegrity sphere; which leads to the pneumatic bag; all of which are the same kind of reality as the three automobiles. All the cosmic triangling of all varieties of angles always averages out to 60 degrees. That is the probability of all closed systems of which the Universe is the amorphous largest case. Probability is not linear or planar, but is always following the laws of sphericity of whole systems. Probability is always dependent upon critical proximity, omnidirectional, and only dynamically defined, three-way gridding pattern integrity..."</p> <p>- Citation and context at <u>Probability Model of Three Cars</u> (4)26Sep'⁷³</p>	<p><u>Sphere: Sphericity: Spherical:</u> (1B)</p> <p>See Trigonometry: Spherical Trigonometry Tetrahedron & Sphere Model Tensegrity Sphere United Sphere Spun Frequency = Sphericity Vertexal Accounting = Spherical Accounting No Sphere Integrity Domain of a Sphere Hex-pent Sphere Potential Sphere</p>

Synergetics Dictionary

Sphere: Spherical: (2)

See Association & Disassociation, 9 Nov'73
 Bow Ties, 6 Oct'72
 Chords, 22 Jul'71
 Dynamic, 1950*
 Focus, 22 Jul'71
 Gravity (d)
 Infinity & Finitude, Jun'66
 Integral, 16 Feb'73
 Prime Awareness, 18 Nov'72
 Tetrahedron, 26 Sep'73*
 Tidal, 31 May'71*
 Unity: Complex & Simplex, 15 Feb'66*
 Zero Condition, 14 Feb'66
 Haft, 3 Apr'75
 Unit, 1938
 Triacotrahedron: Great Circles Of, 27 Apr'77
 Triacotrahedron, 20 Jun'77
 Six Motion Freedoms & Degrees of Freedom, (A)B

Sphericity: (1)

See Curvature: Compound
 Halo Concept
 Omnidirectional
 Radial-circumferential
 Rollability of Polyhedra
 Sweepout: Spherical Sweepout
 Three-way Great Circling: Three-way Grid
 Experience in the Round

Sphere: (3)

See Sphere Center
 Sphere Integrity: ~~There-is No~~
 Sphere of Reference
 Spheres & Spaces
 Sphere Tangent with a Plane
 Sphere: Synergetics Formula for Area & Volume of a Sphere
 Sphere = Polyhedron
 Sphere of Unit Vector Radius
 Spheres & Vertices
 Sphere = Icosa
 Sphere: Volume-5 Sphere

RBF DEFINITIONS

Sphinx:

"Four planes of the tetrahedron going through the same point at the same time: The zero volume tetrahedron: Also this is the vector equilibrium:

Tetrahedron as simplest structure in Universe:

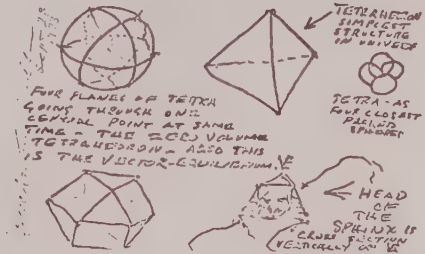
"Tetrahedron as four closest-packed spheres:

"Head of the Sphinx is cross section vertically of vector equilibrium:

- Cite RBF postcard to Peter Jahlin, 28 Sep'73

Spherical: (3A)

See Spherical Barrel
 Spherical Comprehension
 Spherical Excess
 Spherical Field
 Spherical Gears
 Spherical Icosahedron
 Spherical Interstices
 Spherical Nostalgia
 Spherical Observation
 Spherical Octahedron
 Spherical Point System
 Spherical Propagation
 Spherical Reality Scribing
 Spherical Sensations
 Spherical Structures
 Spherical Tetrahedron
 Spherical Thinking
 Spherical Triangle
 Spherical Unity
 Spherical Wave



Spherical Maximum: (3B)

See Spherical Maximum
 Spherical Necessity
 Spherical Quadrant Phase

Spider's Web as a Tool:

See Bird's Nest as a Tool, 6 May'67
 Mechanics, (2)
 Tools, 1967;

Synergetics Dictionary

<p><u>Spider's Web:</u></p> <p style="text-align: center;">See Environment Events Hierarchy (3) Industrialization, (A)</p>	<p><u>Spin Equator:</u></p> <p style="text-align: center;">See Critical Proximity, 15 Feb'73 Ommitopology, 19 Dec'73</p>
<p>RBF DEFINITIONS</p> <p><u>Spin:</u></p> <p>"When other scientists seemed to have language more valid than my own I accepted their terminology. But I held to my own terminology when I found it to be warranted, and when other claimants could not be justified. For example, quantum mechanics came many years after I did to employ the term <u>spin</u>. The physicists assured me that their use of the word did not involve any phenomena which truly <u>spun</u>. Spin was only a convenient word for accounting certain unique energy behaviors and investments. My use of the term was to describe a direct investment of experimentally demonstrable unique magnitude of rotation, an actually <u>spinning</u> phenomenon. This was a case when I held to my own terms. In most recent years it is beginning to be realized by the physicists as an actually spinning phenomenon-- as I had demonstrated it as actually occurring almost half a century ago. . . . In recent years I found the term <u>spin</u> being adopted by others; sometimes with the same meaning, sometimes with other meanings. But from the viewpoint of half a century there appears to be an increasing convergence of scientific explorations, epistemology, and semantics with my own evolutionary development."</p> <p>- Cite RBF to EJA, 20 Dec. '71 at SYNERGETICS text Sec. 250.04.</p>	<p><u>Spin-halving:</u> (1)</p> <p style="text-align: center;">See Prime Number Consequences of Spin-halving Dichotomy: Dichotomizing System-halving</p>
<p>RBF DEFINITIONS</p> <p><u>Spinnability:</u></p> <p>"Spinnability has to be totally independent of the system's local surface transformations."</p> <p style="text-align: center;">- Cite RBF rewrite of 24 Apr'76</p>	<p><u>Spin-halving:</u> (2)</p> <p style="text-align: center;">See Quarks, 22 Jun'77</p>
<p>RBF DEFINITIONS</p> <p><u>Spinnability:</u></p> <p>"Spinnability has to be totally independent of the transformations that it is entertaining."</p> <p style="text-align: center;">- Cite RBF to EJA, 3200 Idaho, Wash. DC; 23 Apr'76</p>	<p><u>Spinning & Orbiting:</u></p> <p style="text-align: center;">See Dancing, 6 Jul'62 Gravity (g) Sphere, 8 Aug'77</p>

Synergetics Dictionary

<p>RBF DEFINITIONS</p> <p><u>Spin Twoness & Duality Twoness:</u></p> <p>"Having identified (a) the constant additive twoness of the vertexial poles of the axial spinnability operative in all independent systems, and (b), the multiplicative twoness characterizing the concavity and convexity congruently operative in all independent systems, we find the first four prime numbers-- 1, 2, 3, and 5-- are the only variables present in the Eulerean topological inventorying of all the omnitriangularly, nonredundantly stabilized, symmetrical polyhedra.</p> <p style="padding-left: 40px;">"Spin twoness is additive.</p> <p style="padding-left: 40px;">"Duality twoness is multiplicative."</p> <p style="margin-top: 20px;">- Cite SYNERGETICS, 2nd. Ed. at Sec.s. 1074.31-.32, 27 Dec'74</p>	<p style="text-align: right;"><u>Spin: Spinning:</u> (1)</p> <p style="margin-top: 10px;">See Axis of Spin Additive Twoness Great-circle Spinnable Symmetries: Hierarchy Of Half Spin Motions: Six Positive & Negative Motions Twin-spin Rotate Spun Frequency</p>
<p><u>Spin Twoness & Duality Twoness:</u> (1)</p> <p style="margin-top: 10px;">See Twoness: Additive & Multiplicative</p>	<p style="text-align: right;"><u>Spin: Spinning: Spinnability:</u> (2)</p> <p style="margin-top: 10px;">See Cone, 22 Sep'73 Euler, 11 Jul'62 Line, 7 Nov'72 Omnidirectional, 1960 Sphere, 25 Feb'74 Synergetics, 10 Jan'50 Neutral Axis, 1 Jan'75 Triacontrahedron: Great Circles Of, 27 Apr'77 Four Intergear Mobility Freedoms, 2 Nov'73</p>
<p><u>Spin Twoness & Duality Twoness:</u> (2)</p> <p style="margin-top: 10px;">See Conception-birth, 27 Dec'74</p>	<p>RBF DEFINITIONS</p> <p style="text-align: right;"><u>Spin: Spinning:</u> (3)</p> <p style="margin-top: 10px;">See Spinnability Spin Equator Spin-halving Spinning & Orbiting Spin Twoness & Duality Twoness Spin Twoness</p>
<p><u>Spin Twoness:</u></p> <p style="margin-top: 10px;">See Cosmic Inherency, (2) Conception-birth, 27 Dec'74</p>	<p>RBF DEFINITIONS</p> <p style="text-align: right;"><u>Spinach:</u></p> <p style="margin-top: 10px;">"Copper taken directly by humans is toxic. When spinach grows in the presence of copper as in those great fields in Northern Michigan (near the copper deposits I got to know at Phelps Dodge), the spinach takes in the copper in a way that is structurally and mechanically geared with the metabolic gears of humans. Copper is all right and fills in a deficiency if it fits properly. Spinach accomplishes the gearing. A gear is designed to mesh with other gears. But one loose gear put into the machinery will strip all the others. When it is on the right pinion it meshes with the other gears and can bridge a gear-train gap. That's exactly what happens to copper and spinach. Henry Schroeder worked with the trace elements. He showed that one Chromium atom is the difference between a diabetic and a nondiabetic. The word diet makes for great confusion. It's not under-nourishment, it's just getting the right deficiency chemistry into the brain which may be lacking certain gears."</p> <p style="margin-top: 20px;">- Cite RBF to LJA, Pepper Tree Inn, Santa Barbara, 11 Feb'73</p>

Synergetics Dictionary

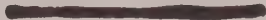
<p>RBF DEFINITIONS</p> <p><u>Spinach:</u></p> <p>"Copper if it is present in the soil where you are growing spinach-- spinach tends to inhibit the copper as a pattern and spinach that has inhibited copper also will inhibit some gold and silver and then the human being can inhibit the gold, silver and the copper in very small percentages, but they are literally inhibitable and apparently measurably to the advantage of the human being. Copper taken in other ways than being inhibited first by spinach can poison a man; it can be lethal. We find that copper taken in the right way can be beneficial and in the wrong way makes trouble. Remember now that we are dealing not in a thing but in a pattern. . . "</p> <p>"Apparently the human being can inhibit all the chemical elements if they come in at the right sequence, so as part of spinach, as part of that pattern, then it is tightening you up [see Monkey wrench] in a better way. . . "</p> <p>"Whatever spinach does it does it better if it has copper."</p> <p style="text-align: center;">- Cite OREGON Lecture #5 - pp. 166-167/9 July 1962</p>	<p>RBF DEFINITIONS</p> <p><u>Spiral:</u></p> <p>"Radiation's waves are non-self-interfering spirals."</p> <p style="text-align: center;">- Citation and context at ██████████ <u>Matter vs. Radiation</u>, 7 Nov'73</p>
<p><u>Spinach:</u> (1)</p> <p style="text-align: center;">See Copper Inhibit</p>	<p>RBF DEFINITIONS</p> <p><u>Spiral:</u></p> <p>"A <u>spiral</u> articulated in a direction perpendicular to our observation presents an illusory wavelinear planar profile."</p> <p style="text-align: center;">- Cite RBF marginalis, SYNERGETICS Draft (Conceptuality, Time) 31 May 1971, Chicago.</p>
<p><u>Spinach:</u> (2)</p> <p style="text-align: center;">See Heredity, 15 May'72 Metabolic Flow, (1)</p>	<p>RBF DEFINITIONS</p> <p><u>Spiral:</u></p> <p>"All the time processes^{processes} of physicists are linear."</p> <p>"All actions are <u>spirals</u> because they cannot go through themselves and because there is time. <u>The remote aspect of a spiral is a wave</u> because there are no planes."</p> <p style="text-align: center;">- Cite RBF to EJA Beverly Hotel, New York 8 March 1971</p> <p style="text-align: center;">- Citation at <u>Time</u>, 8 Mar'71</p> <p style="text-align: center;"><u>WAVELINEARITY: FIXES - SEC. 520.11</u></p>
<p><u>Spinnaker:</u></p> <p style="text-align: center;">See Geodesic Spinnaker</p>	<p>RBF DEFINITIONS</p> <p><u>Spiral:</u></p> <p>"An event trajectory Cannot 'go through itself.' A recycling event Can only produce a <u>spiral</u>, Which, when viewed axially Appears misinformedly To be a circle. You may say the hands of the clock Go round and around In the same circle. But as they go around So does the Earth On which the clock is situated; And as the Earth spins So also does it orbit the Sun Which is moving within the Galactic nebula; And the nebulae moving in respect In respect to other nebulae; And the pattern Made by the clock's hands in Universe Which is the minimum reality Is a very complex pattern."</p> <p style="text-align: center;">- Cite GENERALIZED PRINCIPLES, p.8, 28 Jan '69</p>

Synergetics Dictionary

RBF DEFINITIONS

Spiral:

"A triangle is a spiral and is one energy event."



- Cite SYNERGETICS ILLUSTRATIONS, caption #2.
1967

RBF DEFINITIONS

Spiralinity:

In tensors and vectors of equal magnitude, the spiralinity of the vector is shorter in overall spatial extent than is the spiralinity of the tensor. Compressed lines or rods tend to arcs of diminishing radius; tensed lines or rods tend to arcs of increasing radius."

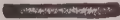
- Cite RBF to EJA
Blackstone Hotel, Chicago
25 March 1971

WAVILINEARITY: FIXES - SEC. 520.12

RBF DEFINITIONS

Spiral:

" lines
As curves
Cannot re-enter, or
'Join back into themselves,'
Therefore, the circling line
Can only wrap around
And over its earlier part - -
As the knot making
Sailor says it,
The circle when followed
Around and around
Results in a coil
Which is
An asymmetric spiral,
Which may be followed experimentally
Only as long as intellect follows."



- Cite HOW LITTLE, Pp. 59-60, Oct '66

Spiral: Spiralinity:

(1)

- See Circle
- Coil
- Cornucopia
- Minimum Spiral
- Wavilinearity
- Critical Spiral Path
- Tetrahelix
- Open Triangular Spirals
- Helix
- Flat Spiral
- Geodesic Spiral Tube

RBF DEFINITIONS

Spiral:

"Not even a graphed spiral is forever possible because the errors in a graphed line constantly dislocate the line and insist upon an ultimate intersecting contact."

- Citation & context at Line, 1938

Spiral: Spiralinity:

(2)

- See Matter vs. Radiation, 7 Nov'73*
- Rope, Dec'71
- Time, 8 Mar'71*
- Triangle, 7 Oct'71
- Triangle as A Priori Two, Feb'72
- Tetrahedron: Coordinate Symmetry, Nov'71
- Cheese Polyhedra, Nov'71
- In, Out & Around Experiences, (2)
- Line, 1938*
- Critical Proximity, May'71

RBF DEFINITIONS

Spiralinity:

"Regenerative precession imposes wavilinearity on vectors and tensors. Wavilinearity is spiralinity."
"All actions are spiral because they cannot go through themselves and because there is time. The remote aspect of a spiral is a wave because there are no planes."
"As with coil springs, in tensors and vectors of equal magnitude, the spiralinity of the vector is shorter in overall spatial extent than is the spiralinity of the tensor. Compressed lines or rods tend to arcs of diminishing radius; tensed lines or rods tends to arcs of increasing radius."

- Cite SYNERGETICS text at Secs. 520.101,.11,.12; Nov'71

Spirit:

See Life is Not Physical, (1)(2)

Synergetics Dictionary

<p><u>Spit-punctuated Monosyllabic Verbalism:</u></p> <p>See Conformity, 10 Oct'63 Reverse Optimism, Aug'64</p>	<p><u>Split Personality:</u> (2)</p> <p>See Basic Triangle: Basic Equilibrium 48 LCD Triangle, 16 Dec'73 Cosmic Discontinuity & Local Continuity, 15 Jan'74*</p>
<p>RBF DEFINITIONS</p> <p><u>Spit in Space:</u></p> <p>"If you spit in space the spit goes into orbit and you retro-orbit."</p> <p>- Citation and context at <u>Space Technology</u> (6)</p>	<p>RBF DEFINITIONS</p> <p><u>Spontaneity:</u></p> <p>"Compression behaviors are disassociative while tension behaviors are inherently associative and <u>spontaneously</u> cohering."</p> <p>- See CONCEPTUALITY OF FUNDAMENTAL STRUCTURES, Ed. Keeser, 1965, p. 45.</p> <p>- Citation at <u>Tension & Compression</u>, 1965</p>
<p>RBF DEFINITIONS</p> <p><u>Split Personality:</u></p> <p>"...This split personality +2½, -2½; +5, -5; +0, -0..."</p> <p>- Citation and context at <u>Cosmic Discontinuity & Local Continuity</u>, 15 Jan'74</p>	<p><u>Spontaneous Aggregates:</u></p> <p>See Tetrahedron as Conceptual Model, Nov'71 Unitary Conceptuality, 22 Oct'72</p>
<p><u>Split Personality:</u> (1)</p> <p>See Dichotomy Picasso Duo-face Painting Profile: There is No Half Profile Half Visible: Half Invisible</p>	<p><u>Spontaneous Deputies:</u> (1)</p> <p>See Coincidental Articulation Fuller, R,B: His Associates & Collaborators</p>

Synergetics Dictionary

<p><u>Spontaneous Deputies:</u> (2)</p> <p>See Cosmic Fish Sequence, (1) Depression: Great Depression of 1930's, (2) Sublimation, 21 Oct'71</p>	<p>RBF DEFINITIONS</p> <p><u>Spontaneous Truth of Childhood:</u></p> <p>"... Every child is born with faculties-- with ears, eyes, nose and mouth and the child says that is what I see.</p> <p>"You don't have to teach a child to say what it is that he sees; he tells you spontaneously.</p> <p>"In other words, truth is spontaneous, and the lying has been taught to the children by those who are afraid that the child's truthfulness will get them into trouble. So the fact that truth is spontaneous is equally mysterious as the fact of of mass attraction and gravity cohering our Universe; as is the phenomenon love. We experience so much of it we tend to take it very much for granted."</p> <p style="text-align: right;">- Cite RBF at SIMS, U. Mass., Amherst, 22 July '71, Talk 12, p. 16.</p>
<p><u>Spontaneous Education of Choice:</u></p> <p>See Montessori System, 1928</p>	<p><u>Spontaneity: Spontaneous:</u> (1)</p> <p>See Lecturing Piaget Jean: Child's Spontaneous Geometry Society: Spontaneity Of Teleology: Spontaneous vs. Emergency Thinking Out Loud Three-way Great-circling: Three-way Grid: Spontaneity Child's Spontaneous Interest in Totality Most Economical = Spontaneous</p>
<p><u>Spontaneous Equilibrious Model:</u></p> <p>See Vector Equilibrium as Starting Point, (1)</p>	<p><u>Spontaneity: Spontaneous:</u> (2)</p> <p>See Bridge, 13 Nov'69 Evolution, May'72 Life, 22 Apr'68 Structures, 16 Dec'73 Scheme of Reference, 24 Sep'73 Survival, May'65 Tetrahedron as Conceptual Model, Nov'71 Unselfishness, Jan'72 Most Economical, 3 Apr'75 Symmetry & Asymmetry, 11 Dec'75 Gravity: Speed Of, 21 Oct'72 Children as Only Pure Scientists, (1)</p>
<p><u>Spontaneous Tolerance:</u></p> <p>See Truth as Progressive Diminution of Residual Error, Oct'66</p>	<p><u>Spontaneity: Spontaneous:</u> (3)</p> <p>See Spontaneous Aggregates Spontaneous Deputies Spontaneous Education of Choice Spontaneous Tolerance Spontaneous Truth of Childhood Spontaneous Equilibrious Model</p>

Synergetics Dictionary

<p><u>Spool:</u></p> <p>See Omnidirectional Typewriter (1) Tetrascroll, (1)</p>	<p><u>Spring:</u> (1)</p> <p>See Coil Hexagonal Vector Pattern Spiral</p>
<p><u>Spoon:</u></p> <p>See Child Pushes Spoon Off Edge of Table</p>	<p><u>Spring:</u> (2)</p> <p>See Tools: Craft & Industrial, (2)</p>
<p><u>Sports:</u> (1)</p> <p>See Competition Game Hammer Thrower Pole Vaulter</p>	<p><u>Spun Frequency - Sphericity:</u></p> <p>See Sphere, 25 Feb'74</p>
<p><u>Sports:</u> (2)</p> <p>See Civilization, May'70</p>	

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