

CHAPTER XXXI

CONCLUDING REMARKS

Pitiless indeed are the processes of Time and Creative Thought and Logic; they respect the convenience of none nor the love of things held sacred; agony attends their course. Yet their work is the increasing glory of a world,—the production of psychic light,—the growth of knowledge,—the advancement of understanding,—the enlargement of human life,—the emancipation of Man. (264)

CASSIUS J. KEYSER

Yet the barbarians, who are not divided by rival traditions, fight all the more incessantly for food and space. Peoples cannot love one another unless they love the same ideas. (461)

G. SANTAYANA

The individual whose brutish desire for personal profit is unrestrained by the needs and rights of his fellows reverts to barbarism. If a bandit he is outlawed; if a politician he is—usually reelected, with resulting retrogression of the entire social organization. (221)

C. JUDSON HERRICK

. . . a "League of Sound Logic" is the best "League of Nations" because effective under the subtle inevitable laws of Logical Fate—Unified Doctrines Will Unify Man. (280)

A. K.

A little less worry over the child and a bit more concern about the world we make for the child to live in; an inclusion of the child in a life of which the aim is not merely to earn money so as to become independent of the job; more love for whole-hearted, creative work and progress that will make possible what we all can share in; with these conditions, the adult and the young both will have a better chance.* ADOLF MEYER

The present remarks were originally written for the last chapter of the whole volume, but a final critical survey of the material suggested the newly ordered sequence of the present three main divisions. Book I gives a general preparatory introduction which will help the reader to differentiate between the A and \bar{A} systems, and to evaluate properly the differences. Book II formulates the main \bar{A} principles which constitute an organic interrelated whole, to which the present concluding remarks belong. Book III gives some additional structural data about mathematics and physics which usually are not treated from the present point of view, but which furnish the essential structural material needed.

The writing of Book I, and particularly Book III, was very laborious and difficult. I often had the temptation to omit Book III entirely, and to refer the reader to other authors. After months of search, however, I found, to my sorrow, that, in spite of many excellent volumes, there were no books written from a structural and semantic

* What Can the Psychiatrist Contribute to Character Education ? *Rel. Educ.* May, 1930.

point of view. To refer the reader to other writers would necessitate the reading of a fair-sized library, because often from a whole book he would need only a few scattered paragraphs. This would involve a very expensive and laborious process of hunting, which very few would undertake; besides, it would not give a connected structural or semantic picture. I tried to induce some specialists to write a book on the structure and semantic aspects of mathematics, and another similar book on physics. I was told that it would be very laborious and difficult, if at all possible, and so I had no other choice than to try to write it myself

I earnestly suggest the reading of Book III, so that the reader may, at least, become acquainted with the existence of such problems. I hope that even specialists may find some suggestions helpful, because the structural and semantic aspects of science and mathematics are usually neglected, the neglect of which introduces needless difficulties in the teaching. The elimination of identification helps to solve many scientific puzzles, besides eliminating semantic blockages and so helping creative activities.

The world affairs have seemingly come to an impasse and probably, without the help of scientists, mathematicians, and psychiatrists included, we shall not be able to solve our urgent problems soon enough to prevent a complete collapse. Now those who are professionally engaged in human affairs, economists, sociologists, politicians, bankers, priests of every kind, teachers, , 'mental' hygiene workers, and psychiatrists included, do not even suspect that material and methods of great general semantic value can be found in mathematics and the exact sciences. The drawing of their attention to this fact, no matter how clumsily done at first, will stimulate further researches, produce better formulations and understanding, and ultimately create conditions where sanity will be possible.

Some of those who have seen my manuscript or with whom I have discussed the problems seemed to dislike the term 'copying animals in our nervous reactions' and also the explicit introduction of 'Fido'... As identification is found among animals, primitives, infants, and 'mentally' ill, it could be said that the introduction of 'Fido' was not necessary. I have given serious consideration to the eventual desirability of completely eliminating 'Fido' from my work and substituting the term 'primitive'. ; but, after mature deliberation, I decided that it will be helpful to accentuate the distinction between the reactions of animal and man. The main justifications of this are as follows:

1) My whole work and the formulation of a \bar{A} -system started with an attempt to produce a science of man, this necessitating a mod-

ern, scientific *functional, non-elementalistic, sharp* definition of man. Such a definition was given in my *Manhood of Humanity* to the effect that man differs from the animals in the capacity of each human generation to begin where the former generation left off. This capacity I called the time-binding function. This definition cannot be denied, and it fulfills the modern requirements.

2) The present enquiry originated in the investigation of the mechanism of time-binding, and is a further analysis of the sharp differences between the reactions of animals and humans, which became the psychophysiological foundation of a \bar{A} -system and a theory of sanity.

3) The further the investigation advanced, it became increasingly evident that the issues involved are extremely complex, and that in this field, from a structural and *non-el* point of view, practically nothing has been done. In general, all existing 'logics' and 'psychologies' are structurally misleading, since they are still thoroughly *el* and pre-A or A; these conditions necessitate the elimination of them, as well as other dependent disciplines, to prevent their being accepted as structurally fundamental. It was then desirable, in my pioneering enterprise, to keep a simpler and more obvious contrast between 'Fido', whom we nearly all know quite well and usually like, and 'Smith', whom no one seems to know properly. This method has proved very useful to the writer and I am convinced that many readers will find it equally helpful. I frankly admit that if I had not followed this simplified method, I could not have produced the \bar{A} -system and discovered in this psycho-logical maze the blockages introduced into our *s.r* by identification, elementalism, lack of consciousness of abstracting, improper evaluation. , and, in general, infantilism.

For these three main reasons it seemed advisable to retain 'Fido' as a most useful factor in my analysis, with all due apologies to 'Fido'.

I also admit that I did not realize the difficulties of the task and the magnitude of the undertaking. The last revision alone of the manuscript required more than a year. I am all too well aware to what extent the presentation falls short of my expectations and how much better it could have been written by some one more gifted, but the following rather unexpected developments sustained my courage.

1) Curiously enough, the principles involved are often childishly simple, often 'generally known', to the point that on several occasions some older scientists felt 'offended' that such 'obvious' principles should be so emphasized. Yet my experience, without any exception, was that no matter how much these simple principles were approved of verbally, *in no case* were they *fully applied in practice*. Slowly I understood that

we cannot train mankind in identification by all available means, which must prevent adjustment, and then live by non-identification. Thus, when non-identity is pointed out, even a moron will 'agree', or wonder at the silliness of an author who fusses about it; yet, because all of us were *trained* in a linguistic and semantic system based on identity, that infantile identification will unconsciously play havoc with all our *s.r* the rest of our lives, unless this semantic blockage is counteracted. Naturally, the 'simpler' a principle appears, to which we may pay lip service, but which we *never fully apply*, the more I became convinced that the discovery of new methods for the application of this simple yet neglected principle must be considered most important. Any reader may verify by himself to what extent identification introduces difficulties in his own life. In fact, the main difficulties we have can always be traced to some identification somewhere.

2) The experimental data of Doctor Philip S. Graven with the 'mentally' ill and those cases of semantic disturbances which, in the orthodox way, were not supposed to be un-sane, showed that a change from the A standards of evaluations involving identification to the \bar{A} standards without identification often either brought about a complete semantic reconstruction of an individual, or semantic, expedient, and lasting 'cures'. This fact again impressed me with the genuine workability and so human importance of a \bar{A} -system. If the old 'impossible to change', 'human nature' can be 'changed' by the new simple psychophysiological methods, this again suggests that this new system, no matter how imperfect, may be useful.

3) I was also very much impressed by the far-reaching power of the \bar{A} methods. As a rule, only mathematicians and epistemologists fully appreciate what the power of a method means. Thus, the differential methods were invented, and later we found that these methods were structurally applicable to all processes. A tensor calculus was invented, and we found that it gave us absolute, invariant formulations applicable to all physics. Many other methodological innovations could be cited, and always the generality of the applications gave the value to those new formulations. The present \bar{A} -system was formulated in a way independent of other disciplines, as it was the direct result of structural semantic researches *free from identification*. This led to the formulation of fundamental *general* principles which underlie all human 'knowledge', such as non-identity, requiring the recognition of structure as the only possible content of 'knowledge' and so leading to the formulation of 'similarity of structure'; non-elementalism as a general principle; the general principle of uncertainty; ∞ -valued general semantics, . It is

naturally very reassuring to find that the newest most important achievements of science have followed these principles unconsciously and have applied them *before* they were explicitly formulated.

From another point of view, a \bar{A} -system which could claim to be 'modern', should formulate general principles that all scientists in every field could follow. This was practically the case with the A -system until Francis Bacon. It is also the case with the present system except that different scientists have applied these new principles without having produced a *general formulation*. The fact that these principles had no general formulation was a retarding factor even in science and made the application of science to human affairs impossible. In the following examples, the different \bar{A} aspects overlap, and I am emphasizing only the most marked features. Thus Einstein-Minkowski's space-time, Einstein-Mayer's new unified field theory, the newer quantum mechanics, the new physics of high pressure, piezo-chemistry., the tropism theory of the late Jacques Loeb, the physiological gradients of C. M. Child., . . , exhibit clearly the application of non-elementalism. Heisenberg's restricted principle of uncertainty is also the result of the application of non-elementalism, based on the observation that the 'observer' and the 'observed' cannot be sharply divided. This principle becomes a particular instance of the general \bar{A} principle of uncertainty, which again is based on the observation that we deal actually with absolute individuals and speak in more or less general terms, with the result that all statements are only probable in different degrees.

The absolute individuality of four-dimensional events, objects, situations, *s.r.* , necessitates an indefinitely flexible evaluation requiring ∞ -valued \bar{A} semantics. Outside of daily life, the best examples are given in science by the newer developments in vitamins, the effects of radiant energy on heredity, but particularly by the bewildering possibilities disclosed by the developments of physics, physics of high pressure, piezo-chemistry, polymorphism, colloidal behaviour, and the application of colloidal knowledge to psychiatry. The Polish school of mathematicians has produced the extension of the traditional two-valued A 'logic' to three-, and many-valued 'logic'; Chwistek has based a new foundation of mathematics and a new theory of aggregates on his semantic methods; but even these writers disregarded the *general* problems of non-elementalism, non-identity, and the necessity for a full-fledged \bar{A} -system before their formulations can become free from paradoxes, valid, and applied to life.

All these issues combined are of particular interest to mankind in general, and to the medical profession in particular, because, obviously,

if mankind is to pass from an infantile stage of its development into an era of general sanity, this would require a serious collaboration of medical science. Unfortunately, medical science is one of the most laborious and difficult disciplines, and, of late, in spite of some specific advances, it is rapidly ceasing to be in general a modern science. Any one who attends medical congresses, scientific meetings, or follows up medical literature often wonders whether he listens to, or reads, scientific arguments, or sixteenth century religious disputes. Dr. F.G. Crookshank, in his chapter on *The Importance of a Theory of Signs and a Critique of Language in the Study of Medicine* in Ogden and Richard's *The Meaning of Meaning*, gives an excellent picture of the present sad state of affairs; but a \bar{A} analysis discovers deeper foundations underlying the difficulties in medicine, which would have to be remedied by the revision of medical education. In this connection, \bar{A} issues become very important. Organisms in general, and humans in particular, represent colloidal processes which involve tremendous pressure because of colloidal attraction for water. Dr. Neda Marinesco¹ has recently suggested that Ice VI constitutes an important factor in the human organism. Ice VI represents a new form of ice discovered by P.W. Bridgman² who found that water in bulk and at the temperature of the body may be found to crystallize by the application of high pressure. It is the notion of Dr. Marinesco that the forces of adsorption may be as high as the pressure used by Bridgman, so that in thin surface films the arrangement of water molecules may be much like that found in Ice VI. It may interest the reader to know that, among others, Professor Bridgman discovered that acetone becomes solidified at room temperature, albumen coagulates, , under high pressure.

Although physicians in their university days are well acquainted with colloidal chemistry, yet somehow, in practice, they have great difficulties in 'thinking' in colloidal terms. With the newest discoveries of physics of high pressure and piezo-chemistry, with their bewildering variety of physical manifestations, which, under different pressure, change with every individual material, a modern physician will have to 'think' not only in terms of colloids, but of colloids in combination with the data of high-pressure physics and piezo-chemistry. Now such 'thinking' is humanly impossible under the traditional two-, or three-valued A disciplines and becomes only possible with ∞ -valued \bar{A} general semantics. One of the immediate results of the use of \bar{A} disciplines is the elimination of the elementalism of 'body' and 'mind', 'intellect' and 'emotions'. , and the introduction of the *non-el* point of view as given in the present work. This requires every physician to be acquainted with

psychiatry, which acquaintance would eliminate many harmful cults. It should be fully realized that the older chemistry which dealt with different 'substances', having different 'properties', could have been treated by A subject-predicate and two-, or three-valued means. But not so in 1933; the older chemistry is gone, and today we deal only with a special branch of physics based on structure; the newer physics of high pressure show clearly that many of the older characteristics of 'substances' are only accidental functions of pressure, temperature, and what not, which vary in a bewildering way, requiring new semantic principles, new epistemologies. ; in short, a new *non-el* and ∞ -valued \bar{A} -system. In other words, whoever retains the A *s.r* is entirely unable to 'think' scientifically in the modern sense. If we want to have a science of man or a 1933 science of medicine. , the first step is to revise thoroughly the A -system.

In fact, many more interconnections and interrelations could be shown which would make still more obvious how a \bar{A} -system results from, and leads to, modern scientific results, which can be extended and *applied to all human concerns* only after a *general* formulation as a *system*.

4) If the difference between the animal and man consists in the capacity of the latter to start where the former generation left off, obviously humans, to be humans, should exercise this capacity to the fullest extent. If we fail to do this, we again 'copy animals in our nervous reactions', which copying is the very thing we should struggle against. This 'where the former generation left off' would not only include all science, but also epistemology and the 'wisdom' which through painful experiences each former generation has accumulated. , which, *in principle, should be given to every child*. Under the A conditions of our present education. , systems, and evaluational systems, this is completely impossible and may sound visionary. Thus, to acquire scientific knowledge in all fields, one would have to spend a lifetime devoted to science, entirely free from financial worries. , and even then he would only be able to acquire a small part of it. Before any older epistemological insight could be imparted, one should not only have special gifts, interests. , but should also have an enormous amount of knowledge before such an education could be attempted. Similarly with 'wisdom'. The older and the younger generations, by colloidal necessity, cannot fully understand each other and, to a large extent, have mutual mistrust, which, as yet, is an entirely normal A *s.r*. ,

In a *non-el*, \bar{A} -system this whole situation becomes radically changed. The impossible is made possible; I may say more, it is made

simple and easy, and becomes a necessary and unavoidable factor in the life of any child. A *non-el*, \bar{A} -system is based on the complete elimination of identification, from which it directly follows that the only link between the un-speakable objective levels and the verbal levels is found in *structure*. Structure, then, becomes the only possible content of all knowledge., and all scientific technicalities, admittedly laborious and difficult, become only a necessary tool in the search for structure, with little, if any, intrinsic value, and are unnecessary for 'knowledge' as soon as in a given case the structure is discovered. This structure is always simple and can be given to children.

It is meaningless and utterly useless to argue whether or not the world is 'simple'; as the world *is not* our understanding of it; but as our 'understanding' happens to be structural, our nervous system, through its abstracting capacities, makes it simple, once its structural content is discovered. As the search for structure involves similarity of linguistic and empirical *structures*, we readily understand that any language, which we cannot evade teaching our children, has structure and involves structural assumptions. In the *structural revision* of our language and the teaching of a few structurally appropriate terms, entirely abandoning a few structurally misleading ones, we directly impart all up-to-a-date fundamental knowledge to any child. We train him automatically in the appropriate linguistic structure, which builds up in him appropriate *s.r.* Mankind at large does not need scientific technicalities to absorb and thereby obtain semantic benefits from the structural results of science. These results are the only ones which really matter, and which can be given in an extremely simple way, automatically abolishing the primitive metaphysics, structural assumptions, and infantile *s.r.*

By abolishing the structurally false to facts one-valued identification, we automatically train in ∞ -valued differentiation leading toward consciousness of abstracting, which results in all the wisdom that epistemology and private experience can give us, being structurally a total result of racial experience. As structure is based on relations and *order*, structural training, when done consciously, becomes a physiological method, working simply and automatically.

In the *A*-system these semantic mechanisms were not consciously recognized, although they worked fatalistically with us. We were imparting primitive psychophysiological reactions to our children, who had to spend a lifetime to learn by very painful experience that something was wrong somewhere. Now we understand that the origin of the difficulty was in the lack of scientific investigations which would have analysed, non-elementalistically, the structural aspects of language and connected

s.r. All of which, let me repeat, works automatically, as experience and experiments abundantly show. Thus, an analysis of the mechanism of time-binding depends on the discovery of a sharp *non-el* difference between 'Fido' and 'Smith', and the formulation of means to make the time-binding characteristics of man fully effective with all except heavily pathological individuals.

By abolishing identification we generalize differentiation and so impart consciousness of abstracting, an indispensable factor in *proper evaluation*, and an absolute condition for adaptive and so survival behaviour. Thus a \bar{A} -system becomes a general theory of sanity and the general theory of time-binding, from which general semantics follow.

5) One of the most important features of the present \bar{A} -system consists of its *non-el* structural character. We may analyse problems in a scientific 'intellectual' way; yet this analysis, because *non-el*, structural, and semantic, appeals to, and affects, our 'feelings', 'intuitions'. , involving *psychophysiological* factors based on order. Thus, the structurally necessary translations of one level of abstractions into the others and vice versa, is enormously facilitated, while in *el* systems these translations were hampered by unavoidable semantic blockages. Accordingly, 'intellect', 'emotions', 'body', and 'mind'. , are not divided. The organism is affected *as-a-whole*, because structurally correct *non-el* means are employed, making many benefits of the system accessible to children, morons, and, perhaps, even superior idiots. The last results are to be foreseen, although they have not, as yet, been verified empirically.

6) But the most workable feature of the system consists in the fact that, being based on such fundamental principles as non-identification, non-elementalism. , it has an organic unity. The main issues are all strictly interrelated and apply to 'body', 'mind', 'emotions'. , in a *non-el* way, all working *automatically*, no matter from what angle we approach the training.

Thus, if we start with order, we are led to relations and structure; these establish differentiation and stratification, eliminating identification and 'allness', which result in consciousness of abstracting, necessitating ∞ -valued general semantics, indispensable to proper evaluation and adjustment. If we start with non-identity, we are led to order, relations, structure, differentiation, stratification, non-allness, consciousness of abstracting, ∞ -valued semantics, proper evaluation, and adjustment. If we start with differentiation or stratification, we are led to order, relations, structure, non-identification, non-allness, consciousness of abstracting, and proper evaluation.

It should be noticed that consciousness of abstracting and proper evaluation are complex end-results which cannot be imparted directly, but which become automatically lasting semantic states only after we have eliminated one-valued identification, or introduced order, ∞ -valued differentiation, stratification, . The *non-el* benefit of the system consists in engaging the organism-as-a-whole. Thus, four-dimensional *order* plays the role of a potent *physiological* factor in the process and becomes the foundation for psychophysiology. Non-identity is a term applied on the verbal levels, which, on visual and auditive levels, involves differentiation, ordering, and stratification. This system thus involves all necessary nerve centres and operates in a *non-el* way, as reactions on one level are easily and organically translated into the terms of other levels, making psychophysiology possible.

7) Finally, it is significant that many publications in the last ten years have shown efforts in a similar direction, which have received scientific and public approval. As I am more interested in creative work, rather than critical, I shall not analyse these strivings except to make one general remark that, because they are not based on order, structure, *non-el s.r.*, the complete elimination of identification. , they are valuable and useful to the selected few, but under no conditions could a psychophysiology or a theory of sanity be based on these works which could be applicable in general elementary linguistic and semantic education. If I am not mistaken, in this respect the present work differs radically from the others with which I am acquainted.

From a *non-el* point of view we can never disregard the effect the 'body' or 'emotions' have on the 'mind', and vice versa the effect that the 'mind' has on the 'emotions' and the 'body', . Identification and all its consequences involve seriously disturbing semantic factors with corresponding colloidal disturbances, and it seems that, as yet, the human race, outside of very exceptional cases, has never been free from these disturbances. What effect the elimination of such disturbances will have on the human race it is impossible to foretell at this stage, beyond expressing the expectation that the consequences must be highly beneficial.

We have already become acquainted with the terms 'conditional' and 'unconditional' reactions. In the example of the patient and the paper roses, we have seen that the pathological symptoms were 'unconditional'. They were compulsory, as in the case of the dogs mentioned in Part VI. In a healthy individual they would have been fully conditional reactions, under semantic control. The above terminology may be extended so as to apply to all 'mental' ills, for here that which in the 'normal' person is a fully conditional reaction becomes unconditional, or a *reaction of*

lower order conditionality (compulsory) beyond conscious control. Here we differ from animals and hospital cases. When our conditional reactions are not fully regulated by proper *s.r* and become unconditional, we copy animals, and so are in a state of arrested development or of regression.

The general therapeutic and *preventive* measures are clearly indicated by such considerations. Conditional reactions in man should become *fully* conditional and not fixed as unconditional, or conditional of lower orders. In other words, instead of 'fixation', we should have means and methods to preserve and foster *semantic flexibility*. *This last is accomplished by acquiring the semantic reactions connected with the consciousness of abstracting*. I recommend this last point to the attention of specialists, as it is impossible in the present work to go further into details. Flexibility is an important semantic characteristic of healthy youth. Fixation is a semantic characteristic of old age. With the colloidal background, the imparting of permanent semantic flexibility which every one acquires who becomes conscious of abstracting might prove to be a crucial neuro-physico-chemical colloidal factor of, at present, unrealized power. The colloidal behaviour of our 'bodies' is dependent on electromagnetic. , manifestations, which, in their turn, are connected with 'mental' states of every description. If the colloidal ageing, which brings on old age, 'physical' and 'mental' symptoms, and, ultimately, death, is connected with such 'mental' fixity, we may expect some rather startling results if we impart a permanent semantic flexibility. The 'ageing' involves electrical changes in the colloidal background, which must be connected with the older semantic states. The new fluid semantic states should have different electrical influences, which, in their turn, would bring about a difference in the colloidal behaviour on which our 'physical' states depend.

From a \bar{A} point of view, a new era of human development seems possible, in which, by mere structural analysis and a linguistic revision, we will discover disregarded semantic mechanisms operating in all of us, which can be easily influenced and controlled; and we will discover, also, that at least a great deal of prevention can be accomplished.

It seems, also, that we will discover more about the dependence of 'human nature' on the structure of our languages, doctrines, institutions. , and will conclude that for adjustment, stability. , we must adjust these man-made and man-invented semantic and other conditions in conformity with that newly discovered 'human nature'. This, of course, would require a thorough scientific 1933, physico-mathematical, epistemological, structural, and semantic revision of all existing human interests,

inclinations, institutions. , to be made by those specialized in a 'science of man'. If such a revision is produced soon enough, it will, perhaps, help to adjust peacefully the standards of evaluation and prevent the repetition of bloody protests of unenlightened blind forces against *equally blind* forces of existing powers and reactions.

The forces of life, humanity, and time-binding are at odds; in modern slang, a 'show-down' is imminent; it *will happen*, and no one can prevent it. To a \bar{A} understanding the only problem of importance is whether this 'show-down' will be scientific, enlightened, orderly, and peaceful, with minimum suffering; or whether it will take a blind, chaotic, silly, bloody, and wasteful turn with maximum suffering.

The problems of structure, language, and 'consciousness of abstracting' play a crucial semantic role. To be modern, one must accept modern metaphysics and a structurally revised modern language. As yet, these semantic problems have been *completely* disregarded as far as general education is concerned. This is probably due to the fact that in an infantile and commercial civilization we encourage engineering and applied sciences, medicine, biology. , to increase private profits. , and preserve or increase the ranks of buyers. But we do not encourage to an equal extent branches of science like mathematics, mathematical philosophy, linguistic, structural, and semantic researches. , which would not directly increase profits or the numbers of customers, but which would, nevertheless, discover structural means for more happiness for all.

Accidentally—and this is recommended to the attention of economists—the classical law of 'supply and demand' is structurally and semantically an *animalistic law*, which in an adult human civilization must be reformulated. In fact, an adult human civilization cannot be produced at all if we preserve such fundamental animalistic 'laws'. In the animal world the numbers of individuals cannot increase beyond what the given conditions allow. The animals do not produce artificially.

Not so with our human world. We produce artificially because we are time-binders, and all of us stand on the shoulders of others and on the labours of the dead. We can over-populate this globe as we have done. Our numbers are not controlled by unaided nature, but can be increased considerably. In the animal world the numbers are regulated by the supply of food. , and not by conditions imposed by the animals on that food supply. The animal law of 'supply and demand' is strict. In a human class of life, which does produce artificially, production should satisfy the wants of all, or their number should be controlled until the wants can be filled. The application of animalistic laws to ourselves makes conditions very complicated, and detrimental to most, if not all

of us. It is also easily understood why it should be so. Ignorant and A handling of powerful symbols has. proved to be dangerous when we do not realize the overwhelming semantic role and the importance of symbols in a symbolic class of life.

Another interesting application of the consciousness of abstracting is given in our attitude toward money, bonds, titles to property, . Money represents a symbol for all human time-binding characteristics. Animals do not have it. No doubt bees produce honey, but these products of the bees do not constitute wealth until man puts his hands on them. Money is not edible or habitable. It is worthless if the other fellow refuses to take it. The *m.o* reality behind the symbol is found in *human agreement*. The *value* behind the symbol is *doctrinal*. Fido does not discriminate between the different orders of abstractions. If we copy him, we worship the symbol alone. 'In gold we trust' becomes the motto, with all its identifications and destructive consequences. Smith should not identify the *m.o* reality behind the symbol with the symbol. It is amusing, when not tragic, to see how the so-called 'practical man' deals mostly with fictitious values, for which he is willing to live and die. When he has the upper hand and ignorantly plays with symbols, disregarding the *m.o* realities behind them, of course, he drives civilization to disasters. History is full of examples of this.

We see the utter folly of racing to accumulate symbols, worthless in themselves, while destroying the 'mental' and 'moral' values which are behind the symbols. For it is useless to 'own' a semantically unbalanced world. Such ownership is a fiction, no matter how stable it may look on paper. Commercialism, as a creed, is a folly of this type. Some day even economists, bankers, and merchants will understand that such 'impractical' works as this present one on structure, *s.r.* , lead to the revision of standards of evaluation and are directly helping the stabilization of an economic system. Meanwhile, in their ignorance, they do their best to keep the economic system unscientific, and, therefore, unbalanced. History shows clearly how the rulers have generally made life unbearable for the rest of mankind, and what bloody results have followed. Since the World War certain conditions are becoming increasingly more difficult, and the infantile and animalistic systems drive us fatalistically toward further catastrophes. Whether these disasters will occur, the unknown future shall decide; but out of this unknown, one fact remains a certainty; namely, that this will depend on whether or not science can take hold of human affairs; I hope it can, but the blind forces of identification are so strong and powerful that perhaps such

hopes are premature. Perhaps a new race can accomplish it after this one is extinct, with the exception of a few remnants in museums.

The problems of determinism and indeterminism are not purely 'academic' but influence, to a large extent, our theories and behaviour, and so are fundamental for adjustment. Historically, science has utilized determinism of the two-, and three-valued variety, which has lately, in the case of the newer quantum mechanics, proved insufficient. The lack of the formulation of ∞ -valued semantics, necessary for ∞ -valued determinism, seemed to indicate that even science tends to drift toward indeterminism, a tendency which was rather baffling and disturbing to many scientists.

Different 'ethics' and 'morals' have fought determinism throughout all our past on the ground that in a deterministic world all 'morals' and 'ethics' would be impossible. If a man is compelled to do something, then, we are told, he is not responsible. They state that the result would be undesirable licence, forgetting that determinism implies quite the opposite of licence.

We have already become acquainted with infantile self-love and self-importance. These infantile characteristics have not only shaped our semantic attitudes, but also our 'scientific' theories. Smith and this little earth were in many ways postulated as the centre of the universe. Scientific discoveries showed that such statements did not cover the facts at hand, and Smith was displaced from this primitive and infantile self-centred position. The Polish astronomer Copernicus was the first to give this rude shock. The little earth was no longer *the* 'centre of *the* universe'. Next came Darwin with another shock to such infantile pride. Smith was no longer a 'special creation', but belonged to the general series of living forms, none of which were 'special creations'. Finally, Freud developed the notion that even in semantic processes, determinism prevails. All our actions, psycho-logical and semantic states., have very definite conscious and unconscious psychophysiological 'causes' which activate us.

An infantile society had difficulties in abandoning their pleasing delusions, and these three men were duly persecuted, criticized, and bitterly attacked and hated by many.

The present situation may appear baffling because science discovers facts which would seem to lead to an 'undesirable' indeterminism in science, and to a determinism in 'mental' processes. The reader, by now, I hope, realizes that both 'undesirable' results are only undesirable because of identification and the confusion of orders of abstractions, which resulted in the ascribing of *undue generality and uniqueness* to the A

two and three-valued 'logic'. But once we realize that in a \bar{A} , ∞ -valued, more general system, the two-, and three-valued aspects are only particular instances, which apply to some instances but not to others, all our difficulties vanish. From a \bar{A} structural point of view we also understand that ∞ -valued determinism becomes a necessity of our *s.r* in the search and comparison of structures.

The result seems to be that the problem of determinism or indeterminism is not primarily a problem of the outside world, but simply one of our *s.r* and ignorance versus 'knowledge'. Abandoning elementalism and identification, we stop arguing '*is the world deterministic or not*'. ; but, by analysis, we find which semantics better fit, structurally, the facts and our abstracting capacities. The results we reach are not entirely new, but the semantic conflict is eliminated.

Science employs determinism because of the structure and function of our nervous system. We cannot do otherwise than preserve ∞ -valued determinism and step by step supply the missing links in our structural adjustments of language to the structure of empirical data.

Let us again repeat that the older problems of 'determinism' *in general* were the results of elementalism and identification and of a complete misunderstanding of the role of structure. Once these undesirable afflictions are eliminated, the artificial problems which they create are also eliminated. Structural considerations show clearly that determinism is a neurological necessity. If empirical facts lead to linguistic indeterminism, it is an unmistakable sign that the language used is not similar in structure to the structure of the world around us, and that we should simply produce a language of different structure. *Such determinism is a vital condition in the search for structure, and cannot be abandoned.*

Shall we, then, preserve the deterministic attitude in our 'mental' processes ? Are the objections on 'moral' and 'ethical' grounds serious enough to induce us to reinstate in our semantic attitudes the older structurally misleading 'indeterminism' ?

Let us, first, recall the facts. In our old *el* and infantile attitudes with identification we analysed a child or an adult in *isolation*. Determinism was applied to such a fictitious *non-existent* individual, and the old objectified and *el* speculations followed. If any one is inclined to challenge the above statement, let him perform an experiment and immediately after birth isolate a child 'completely'. He will find that this cannot be done with a human baby without destroying the child. Therefore, the old speculations deal with structurally *fictitious* conditions. The facts are that a baby is, from the first, subjected to a treatment based

on the semantics, structure of language, doctrines, understanding, knowledge, attitudes, metaphysics. , of his parents or their substitutes, which *shape his semantic reactions*.

If we abandon the problem of the two-valued 'determinism' in connection with such a fictitious, isolated individual, and apply ∞ -valued determinism to an actual, non-isolated individual, we see at once that the whole situation is different. If parents and society accept ∞ -valued determinism, they realize their own *responsibilities* toward the individual, and understand that the actions of parents, society. , are, to a large extent, responsible for the future development of the child on quite deterministic psychophysiological grounds. If an individual behaves in a way detrimental to others and to himself, and an enlightened society decides to do this or that with him, that is a different proposition. The main point is that, if we were to accept an indeterministic attitude, a great deal of harm would be done by parents, teachers, preachers, and society in general; harm which could be prevented. This is, to a large extent, unrealized, and in the old way no one was supposed to be *responsible* except the poor victim of 'free will'. Under such *A* conditions, we sponsor bitterness, cruelty. , under the labels of 'sin', 'justice', 'revenge', 'punishment', or whatever it may be. On deterministic grounds, when society and educators realize fully their own responsibilities, we should blame the individual less, and should more and more investigate structure, language, our systems, metaphysics, education, conditions of living, . Instead of a holy frenzy for 'justice', 'punishment', 'revenge'. , we would try to improve conditions of life and education, so that a newborn individual would not be handicapped from the day of his birth.

Since the organism operates as-a-whole and *no one* is free from higher order abstractions and structural assumptions, we see that the *keeping of savage-made metaphysics* must involve us individually and collectively in an arrested or regressive development. From the organism-as-a-whole point of view structural ignorance must result in some semantic defectiveness.

The objection that there are cases of great 'mental' brilliancy accompanied by very vicious tendencies is easily answered by the fact that the problem is formulated in an *el* way. 'Mental' brilliancy does not tell the whole story of the organism-as-a-whole. One may be 'mentally' brilliant, yet infantile or a 'moral imbecile'. In life, we deal with the whole non-isolated individual, who may be pathological in a great many ways. If it is objected that science is so complicated that it would be impossible to impart such knowledge to the masses, the answer is that, as this enquiry shows, science involves some structural metaphysics and seman-

tic components which, once discovered, are childishly simple, and can be given in elementary education.

Science represents the highest structural abstractions that have been produced at each date. It is a supreme abstraction from all the experiences of countless individuals and generations. Since the lower centres produce the raw material from which the higher abstractions are made, and these higher abstractions again influence the working of the lower centres, obviously *some means can be devised to put back into the nervous circuits the beneficial effects of those highest abstractions.*

The above statement may appear visionary, and many are likely to say, 'It cannot be done'. Now, the main contention of the present theory, verified empirically, is that it *can* be done in an extremely simple way, provided we study the neglected *non-el* aspects of mathematics and science; namely, their structural and semantic aspects. Such study has helped us to discover in a \bar{A} -system the means for affecting lower centres by the products of the higher centres of the best men we had. We have already discovered that all advances in science and mathematics supply us with an unbelievable amount of purely psycho-logical and semantic data of extreme simplicity, which, without any technicalities, can be imparted to the masses in elementary structural education. Such education allows us to give very simply to children the 'cultural results', or to impart the *s.r.*, which are the aim of university training, in a relatively short period and without any technicalities. These benefits, under an *A* education, are too rarely acquired even by university graduates, and impossible to impart to the masses, who are left helpless with archaic, delusional structural assumptions.

From one point of view the \bar{A} issues are childishly simple and obvious, but from another, because of the power of old established habits and *s.r.* are quite difficult for the grown-ups to apply. It seems evident that an infant must be under the influence of the standards of evaluation of those who take care of him, automatically connected with the structure of the language he is taught. Under such unavoidable conditions, it is obvious that to give the full benefit of a \bar{A} -system in the training of children, parents and teachers should, themselves, have entirely absorbed these new standards.

A \bar{A} civilization will require a unification of all existing human disciplines on the base of exact sciences. This unification will require all scientists, mathematicians, physicists, and psychiatrists included, to become acquainted and *fully* to practice \bar{A} standards of evaluation. A \bar{A} revision would have an international and interracial application, requiring a very thorough revision of all doctrines, a better acquaintance of

specialists in one field with the accomplishments in other fields, and an *up-to-date epistemology*. If we try to disregard epistemology consciously, we delude ourselves, as we cannot eliminate *some* epistemology as a foundation for our methods of evaluation, and, therefore, unconsciously retain some primitive epistemology which through inappropriate standards of evaluation, introduces semantic blockages.

Mach said long ago: 'Not every physicist is an epistemologist, and not every one must or can be. Special investigation claims a whole man, so also does the theory of knowledge.' The influence of Mach on modern science is well known; men such as the late Jacques Loeb, Einstein, the younger quantum pioneers., were deeply influenced by the writings of Mach, because Mach was a deep student of epistemology. But in a \bar{A} society his statement must be slightly reworded; namely: 'Not every individual knows or realizes the importance of, or seemingly consciously cares for, epistemology; yet every one unconsciously has one and acts and lives by it. Each individual has his own special problems, the solution of which always claims the whole man, and no man is complete, unless he consciously realizes the permanent presence in his life of some standards of evaluation. Every one has thus *some* epistemology. There is no way of parting with it,—nor with air, nor with water,—and live. The only problem is whether his standards of evaluation are polluted with primitive remains of bygone ages, in a variety of ways; or sanified by science and modern epistemology.'

The present work shows how any system involves a special epistemology which we accept unconsciously, once we accept the system. To evaluate a system is practically equivalent to formulating its epistemology. This is strictly connected with linguistic and structural investigations.

To centralize and co-ordinate the \bar{A} efforts, an *International Non-aristotelian Library* has been originated, which field embraces, ultimately, all known doctrines and human interests, the first publication being the present handbook. To facilitate the application of \bar{A} disciplines and to stimulate further researches, an *International Non-aristotelian Society* has been incorporated with headquarters in New York City and branches to be established in all cities of the world which have educational institutions. The main aims of the Society are scientific and educational for the study, by means of papers and lectures followed by discussions, of the \bar{A} aspects necessary for a revision and, therefore, a co-ordination of all existing sciences and concerns of man. As the aspects of science which are of interest to the Society would be *structural* and *semantic*, from the point of view of a *general theory of values*. the lectures would be of a general non-technical character on the level of intelligent laymen.

Science would not be ‘popularized’ but analysed from a fundamental \bar{A} epistemological point of view, compelling the speakers and authors of papers to analyse the deeper *non-el*, structural, and semantic foundations of experience, as well as of theories. The layman would benefit because he would be given a structural education readily understood, without being led astray by the older \bar{A} ‘popularization’. Later, if economically feasible, it is intended to issue a monthly *International Non-aristotelian Review*, and also to organize *International Non-aristotelian Congresses*.

The \bar{A} -system was the result of the *s.r* of the white race of more than two thousand years ago; it built up the doctrines, institutions, , appropriate to this system. In those days, knowledge was very scanty; the interconnection of different peoples, vague; the means of communications, very primitive, . It may be considered that science, and particularly mathematics, began a \bar{A} revolution by explicitly searching for structure and adjusting the structure of the scientific languages, which we usually call ‘terminology’, ‘theories’, . Modern conditions of life are, to a large extent, affected by \bar{A} science but exploited by the thoroughly \bar{A} doctrines of the commercialists, militarists, politicians, priests, lawyers, , which results in a bewildering chaos, resulting in needless, great, and imposed suffering for the great masses of mankind, as exemplified by such cataclysms as wars, revolutions, unemployment, different economic crises, .

\bar{A} disciplines, or science *as such*, are thoroughly beneficial to mankind at large; but an \bar{A} exploitation and use of these \bar{A} products are, and must be, a source of endless sufferings to the enormous majority of mankind, leading automatically to every kind of break-down. It is impossible to give a fuller analysis of this complex interrelation, as this would require a separate volume; I shall, therefore, tabulate only a few overlapping suggestions.

NON-ARISTOTELIAN, SCIENTIFIC, ADULT STANDARDS OF EVALUATION	ARISTOTELIAN, INFANTILE STANDARDS OF EVALUATION OF COMMERCIALISM, MILITARISM, .
<i>Biological Sciences.</i>	
Particularly medicine has discovered means of how to keep or restore health, how to eliminate suffering, how to save and to prolong life. ; but medicine also gives means whereby we may prevent the overpopulation of this globe and so teaches us how to avoid great sufferings through overcrowding, which results in bitter struggle for food, shelter, employment. , in turn, leading to wars, revolutions, unemployment, .	Commercialized medicine unavailable to great masses of poor people. Commercialism, militarism, infantile dreams of ‘world empires’ sponsor unintelligent breeding in vast numbers which runs up the prices of land and houses, lowers the price of labour, and sup-plies cannon-fodder, . The intelligent control of numbers of population is prevented by jailing and otherwise persecuting scientific workers, which persecution affects only the poor and uneducated.

NON-ARISTOTELIAN, SCIENTIFIC, ADULT STANDARDS OF EVALUATION	ARISTOTELIAN, INFANTILE STANDARDS OF EVALUATION OF COMMERCIALISM, MILITARISM, .
<i>Chemistry.</i>	
Antiseptics, fundamental for medicine and the control of the increase or decrease in the population.	Sponsoring of overpopulation by forcibly withholding knowledge from the masses.
Drugs, fundamental for medicine.	Use of drugs in war to allow a soldier to suffer twice. Commercialized drug pedlars.
High explosives, necessary for agriculture, mining, .	High explosives used for killing in the struggle for ultimately futile 'world empires'.
Production of food products. Alcohol, wine, beer, .	Food destroyed to keep up prices. Commercialization of drinking. The saloon, crimes, 'prohibitions', the financing of gangsters, corruption of government and justice, .
Poisonous gas, necessary for the elimination of insects.	Poisonous gas in wars.
<i>Linguistics.</i>	
Law, as expressing some standards of evaluation.	Interpretations by commercialized lawyers to evade law, and the influencing of the wording of the law so as to make evasion possible. Lobbyists.
Newspapers, magazines, ., giving most powerful educational means.	Commercialized newspapers, ., controlled by profits and advertisements, supplying stultifying, controlled material, stimulating the morbid potentialities of the mob, to increase circulation, .
Other public prints, giving necessary or useful informations.	Commercialized advertisements. Schizophrenic play on words, the promoting of infantilism, .
Religions represent primitive structural rationalizations, or primitive 'science'; intended, also, as guides for conduct and adjustment, under the structural assumptions of the epoch of their primitive origin.	Commercialized religions. Religions having outlived their usefulness, often become priestcraft as a source of income and control. The sponsoring of primitive and delusional standards of evaluation often for private gains. The imposition of primitive standards of evaluation involves pathological factors.
<i>Physics and Related Sciences.</i>	
Aeroplanes, as means of communication and scientific exploring.	Militarized aeroplanes, as means of destruction and murder.
Automobiles, as means of transportation and pleasure.	Militarized automobiles, as means of destruction and suffering.

NON-ARISTOTELIAN, SCIENTIFIC, ADULT STANDARDS OF EVALUATION	ARISTOTELIAN, INFANTILE STANDARDS OF EVALUATION OF COMMERCIALISM, MILITARISM, .
<i>Physics and Related Sciences(continued)</i>	
Machinery and tools, as means to eliminate avoidable efforts and to benefit fully through natural resources; to give greater comfort and sanitary conditions; to allow greater leisure for cultural pursuits, .	Commercialized machines, as means for larger individual profits and suffering for the increasing numbers of unemployed and starving masses. Mass production of guns, ammunitions. , for mass extermination and destruction, and larger profits for the manufacturers and investors.
Moving pictures, as powerful educational means.	Commercialized moving pictures, stimulating and satisfying the erotic and morbid crowds, and for private propaganda.
Radio, as powerful means of communication and education.	Commercialized radio, advertisements, private propaganda, often stimulating morbid inclinations of the mob.
Railroads, as means of public transportation.	Commercialized railroads, as means for private gains and the control by a few of large areas and many people.
Tractors, as means of transportation and sources of power in agriculture.	Tractors, as tanks and means of destruction and murder in wars.
<i>Public Servants.</i>	
Judges, as guardians of some standards of evaluation.	Commercialized politicians, as judges, corruption, lack of justice, .
Lawyers, as assistants in the administration of justice.	Commercialization and corruption of the legal profession. Means to evade or pervert justice.
Police, as an executive, regulating, safety-force.	Commercialization of police by politicians, corruption, combinations with the underworld, .
<i>Sports</i> , as means for preserving and building up health, co-ordinated orientation, fair play, and in a lesser degree recreation.	Commercialization of sports, elimination of benefits. Gambling. Lowering of educational standards, .

From a \bar{A} point of view, which eliminates primitive *s.r.*, it becomes obvious that mankind represents an interdependent time-binding class of life, and any group of people who possess physical means for destruction and still preserve infantile standards of evaluation become a menace to the culture of the whole race. Under such conditions we must have agencies for an international exchange and evaluation of our standards, as well as methods which would help us in adjusting these standards.

At present, we must admit that with the modern, rapid, and international advancement of science we have fairly well-established interna-

tional \bar{A} standards of scientific values. International Scientific Congresses are not only necessary for the advancement of science, but they also explicitly prove science to be entirely international.

The latest, most important \bar{A} institution is found in the League of Nations, which embraces practically the whole civilized world, with the exception of a very few nations who display infantile and A aloofness, using different self-deceptive excuses, and, to a large extent, handicapping the power and usefulness of the League.

As we have learned lately, not only human achievements, but also human disasters, are mostly interrelated and international, and are becoming more so every year. Obviously, with A narrowness, selfishness, shortsightedness, infantilism, commercialism, militarism, nationalism, , rampant, mankind, to prevent further major A disasters, would have to produce a special international body which would co-ordinate various structural achievements, strivings, , formulate and inform the great masses of mankind of the modern scientific \bar{A} , adult standards of evaluation.

At present, we already have the necessary agencies; but, as yet, they are inefficient and non-co-ordinated. These are to be found in International Scientific Congresses, and the League of Nations. The weak spots of these organizations are found in the fact that the Scientific Congresses are too cumbersome, expensive, non-co-ordinated and only periodic. The League of Nations, although a \bar{A} body in structure, is mostly made up of men who do not know any other standards of evaluation than A , and so they often lack the means to present a scientific, or \bar{A} argument, and usually do not realize the tremendous power they would have in a \bar{A} -system. In human affairs, for instance, there cannot be a neutral and innocent absentee. One such absentee with guns and battleships becomes a powerful blocking and so, ultimately, disrupting factor for the rest of civilization. Such an absentee is not, then, guilty by omission; but, from a \bar{A} point of view, becomes guilty by commission. The League, when definitely and fully allied with international science, will some day have the pluck to make such a declaration and act accordingly. A consciously \bar{A} League of Nations will not limit itself to the thankless and very often useless task of adjusting inevitable clashes of A standards of evaluation, but will, with the full co-operation of scientists, undertake the much more important, constructive, and unique duty of a guardian and leader of human culture. Such a League would become a scientific, professional, international, co-ordinating, cultural, time-binding advisory organization for all nations. National A govern-

ments, instead of only *instructing* their *A* representatives, would first *consult* with the new *A* *specialists*.

Many politicians and their followers often become all but hysterical at the mention of the League of Nations, which, in some mysterious way, they associate with a 'super-state' or 'control', . Let me say, at once, that a symbolic, or human class of life, is very largely controlled by ignorant, hidden, often pathological, . factors *beyond public control*, of which the majority are entirely innocent. In the human symbolic class of life no one is entirely free, but all our lives are entangled in an interdependence of human relations. The dependence on those powers which are now hidden, and *beyond public control*, constitutes a grave danger to all. Not so with a scientific, enlightened public opinion with adult standards of evaluation as formulated by a future co-ordination of science and the League of Nations. Such great majority-opinions will remain opinions, or statements of standards of evaluation, which any one member of the League may accept or reject; but, then, it would be necessary for him to state publicly his standards of evaluation and to decide consciously to act with or against, or to enlighten further the opinion of the human race. There is, of course, no question of 'super-states' or 'control' except the unified demand for a conscious and explicit stand on any important subject by any nation. Public opinion will do the rest, once it is convoked to act.

I am not a pacifist in the accepted sense. In an animalistic, infantile, or *A* society, this would be not only impossible but downright silly. Quite the contrary, I am disgusted with the infantile standards under which wars are conducted. Thus, our rulers and war lords, sponsored by commercialism, like little boys make a sort of game out of wars, and thus help to preserve them as an institution. In a consistent society, wars should be as ruthless as possible *to all*. If any one wants a war, he should consistently take all the consequences. But this would not suit our infantile rulers; they know that when little boys play at war, and one group becomes too rough, the other group refuses to play, and so the play at war ends.³ All these perverted 'humanitarianisms' only sponsor wars because, in an unlimited modern warfare, the people would soon come to their senses and would refuse to suffer for the benefit of the very few. So I am far from being an *A* pacifist.

But why our destinies should be dependent on the accidental and primitive structure of the language we use, . is beyond my comprehension. I grant that if we accept such and such postulates, two-valued, *el*, structurally false-to-fact *A* 'logics', 'psychologies', ., all the old, too famil-

iar consequences follow, which we, in our ignorance, have forced upon human life.

But if we put all systems and all 'logics'. , on new \bar{A} foundations, which are structurally closer to the facts of life (1933), all the older conclusions may even be reversed. The problem now before mankind is whether or not the new \bar{A} -system is more similar in structure to the world and our nervous system than the old. On the answer to this question, the future of civilization depends.

From the present point of view, we should establish with the League of Nations a permanent \bar{A} or scientific department, composed of a few of the best scholars from all countries, who would keep in touch, not only with the developments of their specialties, but would also co-ordinate them on general structural and epistemological foundations. This department would be the international authority on modern revised and co-ordinated standards of evaluation, which would be published in special proceedings. The present discrepancy and lack of co-ordination between different branches of knowledge becomes genuinely alarming and detrimental to mankind, because in 1933 it is humanly impossible for a single individual to attempt such a co-ordination. Members of this group would be selected by the universities of each country. In their researches, joint studies, and results, mankind at large would find the most reliable scientific and \bar{A} opinions produced at each date, and would have some definite and conscious standards of evaluation by which to orient themselves.

The modern 'voting' has some benefits in local affairs, but when its very limited validity is not understood, it becomes a serious danger to mankind. Thus, when we are ill, or when we want a bridge built, we ask specialists for their scientific co-operation; we would hardly depend on ignorant voters. Similarly, in a \bar{A} scientific civilization, the major problems of mankind would be analysed by scientific specialists, recommendations offered to be accepted or rejected, as the case may be; but the ignorant voter would have at his disposal an unbiased, impersonal, and responsible opinion of international scientific specialists to compare with the equivocations of some local ignorant politician.

To facilitate such future \bar{A} activities, the International Non-aristotelian Society has been established. It is hoped that soon the scientific, educational, 'mental' hygiene. , workers will begin to unite on a local and national \bar{A} basis. Later, International Congresses will unite the local societies, which ultimately will be embodied as a permanent institution, most probably in the League of Nations.

In the process of formulating the above system a curious observation has been forced upon me; namely, that statements which are, for instance, quite legitimate for the English language, even though they probably apply in general to all Indo-european languages, do not apply in a similar degree.

I am intimately acquainted with six languages, two Slavic, two Latin, and two Teutonic, and also with the psycho-logical trends of these groups. I have been led to suspect strongly that the finer differences in the structure of these languages and their use are connected with the semantics of these national groups. An enquiry into this problem, in my opinion, presents great semantic possibilities and might be the foundation for the understanding of international psycho-logical differences. Once formulated, this would lead us to a better mutual understanding, particularly if a \bar{A} semantic revision of these different languages is undertaken. To the best of my knowledge, this field of enquiry is entirely new and very promising.

It must be obvious to the reader that such a vast program is beyond the power of a single man to carry out, and the present author hopes for public interest in this enterprise.

If the \bar{A} -system has accomplished nothing more than to draw the attention of mankind to some disregarded problems; if it has done nothing more than point the way, not to panaceas, but to suggestions toward an expedient, constructive, and unified scientific program whereby future disasters may be avoided or lessened—the writer will be satisfied.