NUMEROLOGY AS THE BASE OF THE MYTH OF CREATION, ACCORDING TO THE MAYAS, AZTECS, AND SOME CONTEMPORARY AMERICAN INDIANS

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Vera Anderson

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Prof. Lanin A. Gyurko	Lan A. Gyurko	4/2/'93 Date
Prof. Charles M. Tatum	Charles M. Tatum	4/2/'93 Date
Dr. Kieran McCarty	Kieran McCarty	4/2/'93 Date
Prof. Kurt Just	Kurt Just	4/2/'93 Date
		Date

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Prof. Lanin A. Gyurko Lan A. Gyurko 4/2/'93
Dissertation Director Date

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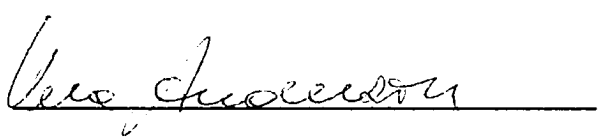
SIGNED: 

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ABSTRACT

This dissertation intends to demonstrate the impact of numerology in every aspect of the lives of ancient precolombian people as well as several contemporary American Indian tribes. For this reason numerology may be viewed as a true science, that is both an esoteric and a philosophical one. Thus, numbers may be looked upon not only as abstract signs, but as all inclusive entities in and of themselves.

To the ancients, numerical symbols had an occult connotation that transcended the restrictive boundaries of simple computation. For instance, numerology had an integral role in Maya, Aztec, and some contemporary American Indian religious ceremonies. As an example, the high priests were able to predict future events by making intricate numerological computations. Further still, Maya and Aztec calendars were so accurate that they demonstrated an extraordinary knowledge of astronomical events.

In order to accurately study the intricate subject of numerology it was necessary to divide the dissertation in several parts. These parts include a concise discussion of the Maya, the Aztec, and certain contemporary American Indian tribes. A general account of Maya, Aztec, and Contemporary American Indian culture and society was included, using the

available data of present day archeological and written documents, in order to accurately describe the philosophy of these people. From an examination of the life and culture of these ancient societies, the basis for their myths of creation and the impact of numerology on those particular myths may be easily ascertained.

The conclusion discusses how numerology shaped two great civilizations, that of the Maya and Aztecs, and how these basic esoteric numbers were absorbed and changed, to suit the needs and culture of some present day American Indian tribes.

INTRODUCTION

Numerology is generally considered as the esoteric science of numbers, or a system of occultism built around numbers, used also as a divination by numbers. Through its symbolism, numerology can be employed to interpret the mythological connotations found in certain ancient stories that described the creation of the world. It is therefore essential to demonstrate how numerology permeated every aspect of life for ancient precolombian people and how the values of these numbers evolved and changed for some of the contemporary American Indians.

For the Maya and Aztecs numerology had been accepted as a true science both from an esoteric as well as a philosophical point of view. Their civilizations viewed numbers, not merely as abstract signs, but as living entities with a significance that went far beyond their generally accepted qualities. Taking this into account one is thus able to make an in depth study of the character of these ancient societies and expound on the internal mechanism of their personal lives.

Numerical symbols connoted an occult meaning that transcended the restricted boundaries commonly associated with

the generally perceived values of all numbers. For instance, numerology was intricately connected with the religious ceremonies of ancient societies. The high priests used numerology to predict future events. They followed the course of the stars and constellations and, because of their deep knowledge of the heavens, they ably produced elaborate calendars that till now demonstrate the incredible mathematical abilities of such primitive people as the Maya and Aztecs.

In order to clarify and present a complete picture of this subject, one must focus on each of these civilizations separately, since each one, to a certain extent, followed the other. After the Maya declined and later disappeared, the Aztecs rose in power, and from them it is possible to assume that certain contemporary American Indians extracted numerical symbols that eventually merged with their own tribal customs.

To begin with, numerology was the basic ingredient in the Maya's myth of the creation of the world, their gods, and man. This is clearly demonstrated in the sacred books of the Maya known as the Popol Vuh and the Chilam Balam. These two manuscripts provide the primary sources for information on this lost civilization. To these books one must add the works of such eminent scholars as Michael Coe, J. Eric Thompson, and others. From such sources one learns of the emergence of the zero, a primary number of great significance in Maya religion.

From the Maya's description of the birth of the cosmos to the dawn of mankind numerology develops, expands, and justifies theories for the evolution of the gods, and planet Earth and its complexity of life forms.

The Aztecs were surely influenced by certain aspects of Maya philosophy. Numerology retained its role as the basis for what became the Aztec cosmogony, which provided a more detailed and expanded view of the nature of five epochs which were calculated as an integral part of the birth and death cycle of our planet. In particular the epoch known as *Four Earthquake*, or the Fifth Sun, which offered a glimpse into what they believed would be the future destruction of Earth by such cataclysmic events as earthquakes.

The Aztecs closely followed their two main calendars, which were known as the *Tonalpualli* and the *Xihuitl*. In turn, their high priests used numerology as a means of regulating the daily lives of their people. Celebrations, religious festivities, the planting of crops, decisions on the invasion of nearby tribes, all were based on certain numerological calculations. The approximately twenty codices, as presented by Bernardino Sahugún, Diego Durán, León-Portilla, Alfonso Caso, and others, are evidence of the Aztec's high regard for the value of numbers.

Later, when interpreting the myths of creation as perceived by such contemporary American Indians as the Papago,

the Yaqui, the Navajos, and some of the Indians of the plains, there emerges a new link with numerology, which although still considered important, took on a lesser role in the interpretation of the world around them. Still, many similarities in the value system of these more modern societies demonstrate how many contemporary tribes retained certain symbols and rituals from their ancient ancestors. Rites of initiation, religious celebrations, and many legends were still based on the sacred meaning of numbers. Life and death, sickness and health were often portrayed through numerological symbols. Thus, what was of utmost interest to the ancients to some extent still holds validity in the contemporary world.

There is every evidence to demonstrate the unquestionable superiority of numerology in the precolumbian civilizations, which, in turn, at least partially seeped into the tribal lore of some contemporary American Indians. The evolution of the esoteric principles of numerology changed from Maya to Aztec, and later became somewhat diluted in form for many contemporary American Indian societies. Yet, from the religious to the political, the basic tenets of life for these three vast and diverse groups of people took refuge in and considered explanations for events in the world around them by the manipulation of numerical quantities.

PART I: THE MAYA

CHAPTER 1

Mythology, for the ancient Maya, not only explained the present but provided them a clue to what the future held for all mankind. Numerology had been the value system by which these predictions could be made. For this reason numerical symbols provided what could be termed as a fertile background for Maya philosophy, encompassing their culture, their religion, and their daily concerns. These abstract concepts were not only mathematical figures with an intrinsic value, but were expanded in order to take into consideration the very essence of Maya religious thought, depicting the roles of their gods, their outlook on life and, of course, their mythological version of the cosmic creation of life on Earth.

In order to understand the importance of numerology, as an integral force in the Maya life experience, it is necessary to briefly review who were the Maya, where they came from, and where they lived.

The Maya were an ancient people whose ruins still remain in the jungles of Central America, in Yucatán, Guatemala, Belize, and part of the Mexican province of Chiapas. As to where they came from, the answer is still unclear. Michael D.

Coe, in The Maya, reports that one possibility was that "the very first Maya were a small Indian tribe of North American origin, distantly affiliated with some Indian tribes in Southern Oregon and Northern California, and more closely to the Totonacan and Zoquean speakers of Mexico" (22-23). Another theory, according to Daniel G. Brinton, in his book The Maya Chronicles, is that the Maya came from the East under the leadership of Itzamná, their hero-god (20), a god that was very much entrenched in Maya thought.

Eric and Craig Umland, the authors of a most unusual book, Mystery of the Ancients, present quite an extraordinary thesis. They reason that the Maya are so advanced and distinct from all other peoples of the Earth that their origin poses a very great problem... They do not seem to fit into the evolutionary scheme here on Earth (13). As an alternative the authors propose that there once existed a Planet X that long ago orbited around our sun between Mars and Jupiter. Some catastrophe had destroyed this planet, creating what is now known as the asteroid belt. Could this planet have once been a fertile world with intelligent life forms, they ask. According to the authors the answer is "yes". They propose that this Planet X blew up from some unknown physical force and that the Maya, aware of the coming catastrophe, left their planet of origin to inhabit the jungle regions of planet Earth. Such a notion would, no doubt, appeal to writers and

readers of science fiction. Yet, much has yet to be explained about the origins of the Maya people.

Several important points, regarding the Maya must inevitably be raised. For instance, how could their civilization have been so advance both culturally and scientifically? Why had they lived in virtual isolation from other tribes? And finally why had they so suddenly disappeared?

Alfonso Rodríguez reflects on the possibility that the Precolumbian Indians were the descendants of the lost continents of Lemuria and Atlantis (La estructura mítica del Popol Vuh, 22). This theory is shared by another writer, Modesto Martínez Casanova, who regards the origin of the Maya civilization with the following statement: "No se podría conocer - nunca - el pasado de América sin aceptar la existencia real de la Atlantida." Therefore, remnants of Atlantis were the lands that Itzamná described in El Popol Vuh (34).

On this subject Rodríguez and Martínez Casanova agree with a well known twentieth century American clairvoyant, Edgar E. Cayce, who was born March 18, 1877 and died on January 3, 1945. In a self induced-trance Cayce was able to give what was then called "psychic readings", where he pointed out that the Maya had come from the lost continent of Atlantis. He spoke of the final breakup of this land mass,

and how, before its subsequent disappearance, the Maya people were able to find a new home. In essence, Cayce suggested that these people were some of the last survivors of an immense catastrophe. He went on to explain that the original alleged Atlanteans were very advanced in all the sciences which, in turn, gave them a great many material and economic advantages. Consequently the Maya elites, who were the heirs to this scientific advancement, were able to dominate those people who were searching for purely materialistic benefits into following them.

According to this unique viewpoint, one might expostulate that a primarily materialistic society had been the cause of the break up of their continent (in this case Atlantis). Perhaps this same attitude may have been the cause of the destruction of Planet X as the Umlands have suggested. In both cases the sages and the High Ones of this advanced race had been the first to recognize the folly of their misguided ways and, in order to save themselves, left their land of origin and spread out to other areas, such as Africa and the Americas (Edgar Cayce on Atlantis, 110-113-114).

Of all the theories, the most laconic is the one presented by J. Eric Thompson who flatly declares that "of the origins of the Maya nothing is known" (The Maya Hieroglyphic Writing, 5). This simple statement leaves room for a variety of explanations, some as far fetched as to suggest a UFO

landing, in order to deposit on this planet its own surplus population and forming a new colony on planet Earth. Certainly the Maya were a very unusual people whose civilization was so complex that even today not everything about them has been either discovered or satisfactorily explained.

What is known, though, is the area which the Maya people occupied. This comprised the peninsula of Yucatan, the land of Guatemala, the territory of Belize (the former British Honduras), part of El Salvador and Honduras in the south west, and in the north-east it spread to the Mexican provinces of Chiapas and part of Vera Cruz. These lands had a diversity of features, ranging from the high mesas to the low planes, from deserts to tropical forests. Within these boundaries, the Maya built their cities, temples and monuments of unsurpassed grandeur, and developed one of the greatest civilizations on earth. When they finally disappeared, their buildings also vanished, buried in an intricate tangle of roots and foliage in the luxuriant tropical vegetation.

While the well known civilizations of this world--the Egyptian, the Greek, the Roman, the Hindu, the Sumerian--all thrived near great bodies of water, for example the Nile, the Ganges, the Tigris-Euphrates, or the Mediterranean sea, the Maya dwelled in relative isolation in an enclosed forest habitat, almost giving the impression of a desire to avoid

contact with other tribes. Here, in the midst of the jungle, water was collected in an innovative fashion. Almost no rivers ran above ground, but during the rainy season the water would seep through the porous terrain forming trenches and deep wells called *cenotes*, deriving from the Maya word *dzonot* (Coe, 15). Here water was collected and used not only for daily needs but also for ritual religious sacrifices.

The early Maya must, however, have had some contact with the Olmecs, who were their neighbors and predecessors, and who lived along the coast of Southern Mexico. The Olmecs were also an advanced civilization which reached its peak in the latter half of the Middle Formative period (approximately from 800 B.C. to 300 A.D.), and then disappeared (Coe, 35). It seems that from them the early Maya learned the use of hieroglyphs. It is also possible that from this same tribe the Maya copied the concept of a Long Count Calendar which was to become an integral part of Maya culture.

A deeper investigation of what kind of people were the Maya and what did their name symbolize provides us with some interesting answers. The word *Maya* first came to the attention of Columbus sometime in 1503-1504 on his fourth voyage to the Americas. During an expedition to explore the Gulf southwest of Cuba, Columbus came across a canoe laden with cotton clothing. These natives made him understand that they were merchants and came from a land called MAIA (Brinton,

10). The name itself is composed of two words: *Ma* which meant "no or not", and *Ya* meaning rough, difficult, fatiguing. The two combined formed the term *Maya* or not arduous, not severe. Brinton relates that

> [t]he natives of all this region called themselves *Maya uinic*, Maya men, or *ah Maya*, those of Maya; their language was *Maya than*, the Maya speech; a native woman was *Maya chupal*; and their ancient capital was *Maya pan*... (11).

One important group of Maya were the Quiché, whose name is composed of two parts: *Qui* meaning a "great deal or many," and *che* which stood for "trees". These words formed to represent the name for "forest dwellers." The Quiché are now still found in Guatemala, living mainly in the vicinity of Chichicastenango.

Physically the Maya had some unique characteristics peculiar to themselves. Sylvanus Morley, in his book The Ancient Maya, made a study of their particular features through available data, concluding that all evidence points to them being generally

> smaller in stature, broader in the shoulders, thicker-chested, with longer arms and smaller hands and feet...They are one of the broadest-headed peoples in the world...
>
> They have better teeth than ourselves; among the Maya of

> Yucatan more than 50 per cent of the individuals are entirely free from dental decay in their permanent teeth until after they are twenty...[T]he basal metabolism of the modern Maya is from 5 to 8 per cent higher than that of the average American; and their pulse rate 20 points lower... (20-21).

Judging by the remnants of Maya art one might assume that this race was a combination of several different peoples. For example, the depictions of their full lips may be indicative of their having some African blood. On the other hand their slanted eyes and epicanthic eye-folds are clearly more Asiatic characteristics. Also interesting to note was a decidedly peculiar Maya feature known as "the mongolian spot." This was a small, irregular shaped spot located at the base of the spine, which was apparently present at birth. The blemish was bluish to purple in color, and gradually faded away when the child reached the age of ten (Morley, 23).

Diego de Landa, a Spanish friar that came to Yucatan in 1549, wrote a detailed physical account of the Maya in his book La importancia de la relación de las cosas de Yucatán. He described the typically Maya trait of a long flat forehead as due to the placing of two boards compressed and fastened to an infant's head. Landa goes on to describe how "the Indians of Yucatán were tall, robust and commonly bow-legged from being carried astride by their mother.

De Landa later added how it was considered a graceful trait to be cross-eyed, which the Maya brought about artificially "by suspending a small plaster that fell from the hair down between the eyebrows, and reaching the eyes, resulting in the child becoming cross-eyed" (Ch.XX, 33).

By what has been found in their writing, one may conclude that the Maya were not particularly warrior like in nature, the opposite of the Aztecs, for whom war was the focal point of their lifestyle. In contrast, the Maya seemed to be basically an agrarian people. Agriculture was fairly primitive, and based on such staple foods as corn, beans, and squash. Some food has also been found in underground storage chambers where the Maya kept nuts and other crops which, Coe writes, could be used at a later date (19). This demonstrated their ability to preserve food stuff for future necessity.

By the time the Spanish arrived around 1520, all but a few of the Maya had disappeared. The reason for their having suddenly abandoned their cities is still unclear. There are several theories. Possibly their disappearance can be attributed to an unexpected famine, sickness, or perhaps even contact with the Aztecs, the warrior tribe that was rapidly growing in strength and dominance, taking over much of the territory previously occupied by the Maya. Whatever the explanation, in the early XVI century, the great Maya civilization had disappeared.

With the arrival of the Spanish Conquistadores, the remaining Maya faced even further problems. An epidemic of small pox and the very harsh treatment of their new masters, all contributed to the further decimation of the population.

At present, the surviving Maya have grown in number. The most important remnants of this ancient people are found among the Quiché-Maya in Guatemala, and the Lacandonians, who have adapted themselves to an almost primitive existence in the tropical forests, bordering with the Mexican state of Chiapas. However, the encroaching civilization on the state of Chiapas has caused the rapid destruction of parts of the great forests. These woodlands are now being gradually cut down for housing and necessary fuel, with no consideration to the plight of the remaining Lacandonians. With the disappearance of the trees and the wild animals that are an integral part of that ecological system, these tribesmen now find themselves in an environment which endangers their already precarious situation by restricting their sustenance and the very essence of their existence.

The original language of the Maya is still used today and spoken by the Quiché of Guatemala, and by other small communities all through the old Maya territory. Only the art of hieroglyphic writing has been lost forever. During the flowering of the Maya culture the writing of these glyphs was in the hands of a select few scribes, usually belonging to the

class of the high priests. The glyphs found on stelae, pyramids, and monuments referred to the life of a particular potentate of the period. Also further information on the lives of these rulers were written on papers which were folded several times over. Of these precious documents few remain today in their original form.

The Maya, their culture, art, and theocracy have disappeared, and now belong to the world of the past. Yet they are ever present in the minds and books of researchers that refer to the constant archeological discoveries that are still revealing new monuments, tombs, and works of art, and making us wonder at the greatness of these people of whom there is still so much to learn.

CHAPTER II

Among those books of the Maya that have been recovered are three codices, written in the original hieroglyphic style, on the bark of a tree called *copo*. These manuscripts were the Codex Dresdensis, the Codex Tro-Cartesianus, and the Codex Peresianus. All three treatises pivoted away from what could be considered historical fact. Far from chronicles of prominent events in the lives of the Maya, these ancient works were of a far more mystical nature. Morley categorizes their contents as follows:

> [t]he Codex Dresdensis, although it includes many horoscopes and some ritualistic material, is essentially a treatise on astronomy. The Codex Tro-Crotesianus, although it includes some ritualistic matter, is primarily a textbook of horoscopes to assist the priests in making their divination. The fragmentary Codex Peresianus, while it gives some horoscopes, is basically ritualistic, one side being completely given over to a katun sequence and its corresponding patron deities and ceremonies. But of history as we know it not a single event is described...(Morley, 297).

Furthermore the Codices were not found in the land where

they originated, but in Europe. For instance, the Codex Dresdensis, was discovered in 1739 in Vienna, Austria. From there it next appeared in Germany, where it can now be viewed in the State Library at Dresden (Sächsische Landesbibliothek Dresden), thus explaining its name. The former manuscript's value rested in its astronomical data, while the latter one, the Codex Tro-Cartesianus, as Morley stated, guided the high priests, in the interpretation of horoscopes.

The Tro-Cartesianus was discovered in Spain in the last century. It was written in two parts, one of which was found in the Extremadura, the native region of Cortés and that of many of his men. It received its name from a Spanish soldier, a captain, who it was believed to have brought it back to Spain. Both parts of the work are now found in the Museum of Archeology and History in Madrid.

The third codex, the Peresianus, which chiefly refers to the ceremonies performed to patron deities in the years 1224-1441 was discovered, by chance, in 1860 in the Bibliotheque Nationale of Paris, "in a basket of old papers in a chimney corner, black with dust, wrapped in a piece of torn paper with the word 'Pérez' written on it" (Morley, The Ancient Maya, 299), thus explaining why the codex was named Peresianus.

Other books that provide an interesting assortment of material for scholars are the Chilam Balam, the Rabinal Achí, and the Popol Vuh. These written documents were based on

original manuscripts which, at the time of the conquest, had all but disappeared. The loss of the primary works occurred for several reasons. One of which was the Indians' desire to keep hidden the powerful occult meaning from the Spanish invaders. Another reason was a fear of the systematic destruction of these manuscripts by fanatical missionaries who considered them the works of the devil. As such they had to be eliminated and replaced with the words of the newly imposed religion.

The books of the Chilam Balam are a series of historical chronicles, probably copies of pre-conquest Maya codices. They were named after the towns where they were recorded, that is Mani, Tizimin, Chumayel, and others. While *Chilam* meant priest, *Balam* referred to a jaguar. When the words are put together the name could be interpreted as "the book of the jaguar priest" (Morley, 302).

The jaguar was always considered a sacred animal by this ancient Indian civilizations. Since it belonged to the family of the felines, the jaguar was assumed to display such characteristics as wisdom, craftiness, shrewdness, agility, and mystery. These same features can also be attributed to the Egyptian Sphinx, the feline-woman, who symbolized the occult, the unknown, the supernatural. The Maya, and the Aztecs immortalized the jaguar in sculptures that even now are visible and recognizable in their monuments as a reminder of

the deep reverence these people felt for nature and its creatures.

The Chilam Balam of Tizimin related how two tribes of Northern Yucatan, the Xiu and the Chel, rebelled against their oppressors, the Spanish Conquerors, whom they called *Itza*, meaning "wise or skilled ones." Using European characters, the writers of the Chilam Balam of Tizimin, reported their story by using prophetic visions (Makemson, The Book of the Jaguar Priest, ix-x). Among these prophecies a most significant one referred to the advent of the coming of an alien people. In one of the translations of the Chilam Balam the following was related:

> five Ahau shall be the day of apportionment of food at your wells. Mountains shall descend. They shall descend in your midst, kindling the fire of great brightness. Foreigners shall descend from the sea as of old. Why do they come? They come to harass us!
>
> (Makemson, 191 ["The present translation of the Book of Chilam Balam of Tizimin was made from a microfilm, obtained from a photostatic copy in the possession of the University Museum, University of Pennsylvania", Foreword, x]).

As had been foretold, the strangers came and took away their land.

In another prophecy which related to religion the writers

of the Chilam Balam of Tizimin declared this:

> [t]here will be no good purpose served by the Christian bishop when he arrives. He will seek to destroy this generation. Likewise, he will restrict your beliefs. He will destroy you. He will eradicate your true knowledge in the end (Makemson, 191).

Friar de Landa, a Christian missionary, wrote in his introduction to La importancia de la Relación de las Cosas de Yucatan that "quiso hacer cristianos a los indios por la fuerza" (xii).

Not only did the conquerors, both military and religious, destroy the foundations of a great civilization, but they also, ironically enough, erected their own buildings over the ruins of ancient monuments. Either intentionally or unintentionally the Spaniards used sacred Maya ground for the construction sites of their Christian churches. Thus it was never clear whether the newly baptized Maya were coming to these chapels to worship the old gods or the new.

The Rabinal Achí was a drama and a ballet typical of the oral tradition. Like the Poema de mio Cid and the romances of the Carolingian cycle, the play was dramatized, after the Conquista, in the town squares. The name *Rabinal* stood for the homonymous town, while the word *Achí* meant a warrior. The Rabinal Achí described a duel between a warrior of Rabinal and a warrior of the Quiché. Although there were only two main

actors, the tragedy reflected the attitudes and nature of the people as a whole. The animosity between the factions of Rabinal and the Quiché of Gumarcaaj for the domination of the town of Zamaneb ended in a battle that took place sometime in the twelfth century (Rabinal Achí, 1).

The drama was divided into four acts, or better yet, four scenes, that covered more than three centuries of Spanish domination in Guatemala (xii). A captured Quiché warrior begs his captor for clemency, or at least a reprieve from death. In his heart the prisoner knows it will not be granted him. As events progress the captured warrior mentally reviews his life, remembering his native town, and his people whom he will never see again. With a silent farewell, he prepares himself for death, which he will meet honorably.

During the performance the two warriors speak with great respect and admiration for one another. At the end of one warrior's long speech, the same words are repeated, by the other. This repetition forms a chain, a link, a union between the man that will slay his captive and the one facing death, emphasizing a tie between the living and the dead. The symbolism makes clear that life and death are intricately joined together in an endless cycle from which neither man nor nature can elude.

The original manuscript of the Rabinal Achí probably existed, and might still be hidden somewhere near its place of

origin. The one that is now quoted and used is based on the memory of a native of Rabinal, a certain Bártolo Ziz, who in 1850 related his version to Charles Etienne Brasseur de Bourbourg, who was at that time the abbot of Rabinal. Brasseur did not know how to write in Quiché, so he asked the help of his young servant, Colash López, to help him translate the drama into Spanish. As a result, Ziz and López took twelve days to recount the drama to the abbot. Brasseur later reported:

> El uno y el otro se mostraron muy capacitados para el papel que se le confiara: no sabían nada de gramática, pero es algo increíble la lucidez con que explicaron las formas y la composición de las frases del drama indígena; porque después de cada página yo hacía una traducción al español, palabra por palabra, para la cual ellos me daban todos los datos posibles (18).

In 1856 Brasseur had the drama presented in Rabinal on the day the residents of the village celebrated the conversion of San Pablo.

The most important of all the Maya books, is the Popol Vuh, which is also known as the manuscript of Chichicastenango, the town where it was discovered. First printed in Latin characters and later translated into Spanish, the Popol Vuh is considered the bible of the Maya. Like the Christian Bible, its meaning is both symbolic and obscure, and

difficult to interpret. The writing in this great Maya book offers a variety of possible meanings. The use of such a cryptic form might have also been done intentionally by the translator or translators who themselves thought it better to hide from the reader their ancestors' powerful occultic meaning.

The title of the work, Popol Vuh, is itself a symbolic one. The word *popol* is comprised of two distinct signs, the first, *po* means a sage, a teacher, a wise man, while *pol* refers to the people. Combined, the two signs, can be interpreted to signify "the wisdom of the people". On the other hand, *vuh*, in Maya, refers to the divine. When you add *vuh* to *popol*, the end result can be interpreted to mean "Wisdom of the Divine People" (Modesto Martínez Casanova, 7).

The order of these words, however, should perhaps be transposed to read as: the Divine Wisdom of the People. In this second interpretation the *people* become the receivers, or the ones who are being acted upon by the spiritual, the esoteric, the all encompassing wisdom of the gods, as opposed to the first interpretation, where the people are envisioned as the actors, the originators.

This second interpretation is far more profound and seems closer to the original Maya views on life and its origin.

The Popol Vuh can also be read as an historical account, since it relates the story of the Quiché Maya, providing a

genealogy of the thirteen tribes from which the present day Quiché descend from. But even more than an history, the Popol Vuh is a record of the sacred teachings, the wisdom, and the infinite cosmic knowledge of the Maya. And it is here that numerology, as the very basis of Maya philosophy, becomes the supreme vehicle for the interpretation of their complex culture and religion.

CHAPTER III

Numerology, when viewed from the perspective of a science, and taking into account all of its mystic and cosmic complexity of meaning, had its foundation in the main book of the Maya known as the Popol Vuh. Here the myth of the creation of the world was presented with words and expressions that were often ambiguous. The purpose for its obscure symbolism, as previously stated, was probably an intentional one. Its hidden, most sacred meaning, must have been known only to those select writers of the Book of the Council.

In order to penetrate the Popol Vuh's figurative outer cover, it is necessary to, first of all, define what is meant by the word myth. Through a literal definition it will be possible to gain insight into what lies behind the description of the cosmic creation as was described by the Maya.

Raphael Girard, the author of Esotericism of the Popol Vuh, explains that "myth is an expression of the religious ideal of past, present and future epochs" (12). Bronislav Malinowski in Magic, Science, Religion, adds that "myth is not a dead product of past ages, [but] is a living force, constantly producing new phenomena, constantly surrounding magic by new testimony" (63). The expression of a religious

ideal from Girard's point of view, is expanded by Malinowski's definition of myth as a "living force", something tangible, something almost visible, no longer mystical, or elusive of human understanding. In this way myth can now be incorporated into the notion of time itself.

Taking this concept even further, Mircea Eliade, explains that "the function of the myth is to project the human being out of the historic time and put him in the great time that has no termination" (Alfonso Rodriguez, 13). Thus, the imponderable becomes ponderable. Myth and history provide us with an inalienable part of an infinite time, always present, always there, almost concrete, an elusive, yet almost tangible substance.

In addition to these concepts another interpretation must be considered. Myth should be seen as the seed of life, the beginning, the very principle from which everything forms, grows, and develops. This seed may be compared to the amoeba, or the first single celled creature, that then splits, giving birth to two new forms, which in turn continue to divide and subdivide. The seed, with its involucre, is the cradle, from which the tree of life, the *ceiba* (the Maya tree of life), sprouts with roots descending into the underworld, and branches spreading outward and upward touching the sky. In this way myth or the very seed of life, encompasses past, present, and future not simply as an expression, as Girard has

stated, but as a totality, as a whole, as history, as the eternal motion of life.

While a number of authors labor to find a definition for the word myth, the writers of the Book of the Council of the Quiché Maya, better known as the Popol Vuh, began their myth of the cosmic creation in this way:

> There is not yet one person, one animal, bird, fish, crab, tree, rock, hollow, canyon, meadow, forest. Only the sky alone is there; the face of the earth is not clear. Only the sea alone is pooled under all the sky; there is nothing whatever gathered together. It is at rest; not a single thing stirs. It is held back, kept at rest under the sky. Whatever there is that might be is simply not there: only the pooled water, only the calm sea, only it alone is pooled.
>
> Whatever might be is simply not there: only murmurs, ripples, in the dark, in the night (Dennis Tedlock, Popol Vuh, 72).

Through these images the reader has before him a vision of the embryonic world, the void, the empty space, the nothingness. From this characterization of nothingness comes forth tangible matter, energy, the creative force. And it is here that the Maya formed a basis for their numerological science, disclosing to the reader a complex religious and

cultural existence.

The writers of the Popul Vuh tell us that "only the sky alone is there... only the sea alone is pooled under all the sky; there is nothing whatever gathered together." At the very beginning is emptiness, an immensity of water and air held in one intrinsic symbol: that of the zero or null. The concept of zero, in the modern world, is represented as a circle, a "0", with no value, no meaning, a nothing. But that is not entirely the case here. In reality, zero is a number with an inestimable value, assuming in itself a mythical, along with a far reaching mystical application when considered as the embodiment of everything into one.

Taking an occult perspective, W. W. Wescott in Numbers their Occult Power and Mystic Virtue quotes Madame Blavatsky's work The Secret Doctrine, where she states that "the sacredness of numbers begins with the Great First Cause, the One, and ends with the nought or Zero - symbol of the infinite and boundless universe" (15). Still, on must take it even further, considering zero as the actual Great First Cause from which the unit one emerges as a representation of infinity and, therefore, that of the boundless universe.

Clearly, this simple circle, or zero, by definition, has no beginning and no end. Taken further, this symbolic circle widens to such an extent that it becomes an infinite line, a ONE, a vertical or an horizontal line that stretches ad

infinitum, all encompassing. The Maya envisioned this line through by the application of mythological concepts, which were depicted by a particular glyph, which was made in the form of a shell with three or four vertical lines inside it.

> [These] signs which indicate zero in the sequence were the subjects of much argument, many scholars holding that to the Maya these glyphs stood for completion, rather than nothingness... These "zero" glyphs represent shell, for which the generic Yucatec name is Hub (D. H. Kelley, Deciphering Maya Script, 25).

The first time this sign became known to the modern world was when Ernest Forstemann discovered it in 1885 when studying the Dresden Codex. Forstemann, according to Lizardi Ramos, interpreted the glyph as a symbol for zero.

In El Cero Maya the author writes that

> la identificacíon, aceptada en general por los investigadores de esos tiempos, sirvió para leer los números enormes de los manuscritos pictóricos mayas. Túvose entonces por demostrado que los mayas habían usado un símbolo cuya invención representa un paso gigantesco

en el progreso de la ciencia de los números (Ramos, "El Cero Maya", Cuadernos Americanos, 159).

The shell within itself contains two main elements: the calcareous material, of its external form, and the living creature inhabiting its interior, whose body is composed primarily of a liquid substance. The two elements, earth and water, though separate from one perspective, are actually a whole entity. When closed, the shell is one. When opened, it splits into two parts. By doing so, another element is introduced, that of air, and it too becomes an integral part of the shell.

Air is the substance of the sky, and is the sky. That is why the Popul Vuh tells us "only the sea alone is pooled under all the sky". And now these three elements, by reflecting each other's qualities, become as one. Then, since the shell lives in the water, a fourth element appears. This is the sound as formed by the waves of the ocean, the eternal, gently rolling movement of the sea. And this can be interpreted as the *voice*, the *word*, the *aum*, the *amen;* a vibration or an axiom from which everything stems, the eternity, the infinite, or God Himself.

In the Christian version of creation, as depicted in the Holy Bible, God speaks and creation takes place. Genesis tells us:

And God said, Let there be light: and there was light...

> And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters...
>
> And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear... (I,I).

Later still, in The New Testament's Gospel According to John, the concept of the word or sound vibration as the first creative impulse is confirmed. John describes the commencement of creation as:

> In the beginning there was the Word, and the Word was with God, and the Word was God.
>
> The same was in the beginning with God.
>
> All things were made by him; and without him was not any thing made that was made (1,1).

Here then the Word, or the sound, this quantity, this something that could not be seen or touched, but could be heard, was the beginning, or the zero, which was not a nihil, but that inestimable power that, from its cocoon, had produced a complete manifestation of God, encompassing the sky, and the sea, and the beginning of life.

In continuing this comparison of the creation of the world, as conceived in the Popol Vuh, and as described in Genesis, Chapter 1, certain similarities are evident. Where the Bible states that "in the beginning God created the heaven

and the earth...[and] the earth was without form, and void...", the Popol Vuh relates that "only the sky alone is there; the face of the earth is not clear". Genesis continues with "darkness was upon the face of the deep" and then "...the spirit of God moved upon the face of the waters." The Popul Vuh establishes that:

> Only the Maker, Modeler alone, Sovereign Plumed Serpent, the Bearers, Begetters are in the water, a glittering light. They are there, they are enclosed in quetzal feathers, in blue-green (Tedlock, 72-73).

Later in Genesis God initiates the beginning, by commanding: "Let there be light: and there was light... And God saw the light, that is was good..." The Popul Vuh explains:

> And of course there is the sky, and there is also the Heart of Sky. This is the name of the god, as it is spoken
>
> And then came his word, he came here to the Sovereign Plumed Serpent... He spoke with the Sovereign Plumed Serpent, and they talked, then they thought, then they worried. They agreed with each other, they joined their words, their thoughts... (Tedlock, 73).

These thoughts and which were connected, spoke, and willed produced the creation of the world. And, the Popol Vuh tells us that now there were three. And these three were:

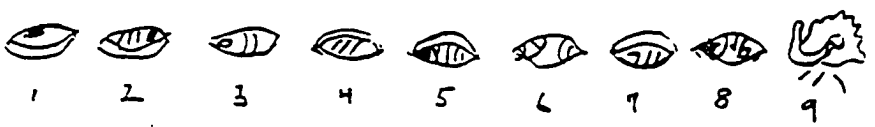
Thunderbolt Hurricane comes first, the second is Newborn Thunderbolt, and the third is Raw Thunderbolt.

So there were three of them... (73).

When the three discussed the creation they manifested their ideas into the concrete. And as the God of the Holy Bible was pleased with his work so was the Plumed Serpent, "it was good that you came, Heart of Sky, Hurricane, and Newborn Thunderbolt, Raw Thunderbolt... our work, our design will turn out well...(74).

The relationship between these two great books of creation is fairly obvious. Both describe the beginning as sprouting from a void, a nothing, a zero, that then manifested itself through sound.

Because of the nature of the creative force for the Maya, the glyph of the shell was a perfect embodiment of this initial idea. Yet, the shell was not the only glyph that signified zero. In reality this same sign was expanded to assume different forms. In La Flor Calendárica de los Mayas, Díaz Solís presents these drawings (138):



The above (marked 1,2,4,5,7) definitely could be recognized by its shape, that of a shell.

On the other hand, these three symbols (marked 3,6,8)

resembled an "anthropomorphized fish" (Thompson, The Fish as a Maya Symbol for Counting, 1).

The next glyph (marked 9), instead, is definitely made in the shape of a snail.

The fish and the snail have certain identifiable features. They both share the same contextual environment. Both creatures live in water. But while the fish is confined to water, the snail can also be a part of the land. Naturally in order to survive they both must avail themselves of the third element, the air. All three elements, water, earth, air or sky, are contained in one particular concept or principle. This idea can be summed as the one beginning.

The symbol known as zero, which is always represented by a shell, was depicted in various ways. For instance, sometimes it was designed with three vertical lines, and sometimes with four.

This is clearly demonstrated in the design below.

The number of lines must have had an inherent significance for the Maya. Probably the number of lines used depended on which scribe recorded a given moment or situation of importance. If the scribes were reporting these events during the Spanish occupation, then the three lines on the shell may have been influenced by a more Christian connotation (that of the Trinity). If the glyphs were drawn before the conquest, than the prevalence of the four lines may have had a traditional Maya interpretation as explained in the Popul Vuh.

In the Maya myth of creation the three lines must signify the three gods present at the time of creation. Those were the Creator, Tepeu, and Gucumatz. The three were one, as they were the three aspects of the Creator or the Heart of the Sky. The three gods, being the components of the One, were the beginning, the initial form of creation. The Heart of the Sky was also Tepeu and Gucumatz, also the Creator, all living in darkness: "Whatever might be is simply not there: only murmurs, ripples, in the dark, in the night" (72); or, as in Genesis, I "...darkness was upon the face of the deep."

In order to break through the darkness and commence creation the three gods considered how to fill the void with life. In this endeavour they asked for help from Huracán, a fourth god, who also was a part of the Heart of the Sky, a symbol of cosmic energy, manifested through its outbursts of lightning and thunder, destroying and creating new matter. The four gods willed that light would appear from the darkness. Therefore, the four lines on the shell must relate to the four gods that initiated creation, each one important, each one with a different function, with a different aspect, yet related to one another, all part of the one, of the zero.

Out of darkness, light appears, and with it, creation assumes a metaphysical sense. Zero, or the void, provided through its symbolism an intrinsic connection to the mythological connotation of creation. As zero, it contained in itself the one, the beginning, the foundation. As one, it included the principle of duality of which the Maya were conscious, and which was expressed in the following lines of the Popol Vuh:

> by the Maker, Modeler,
> mother-father of life, of humankind,
> giver of breath, giver of heart,
> bearer, upbringer in the light that lasts
> of those born in the light, begotten in the light;
> worrier, knower of everything, whatever there is:

sky-earth, lake-sea (72).

The duality of sea and sky; the silence of the nothingness ("...not a single thing stirs"), the sound of the voice of the Creator ("and then came his word"); the darkness that lets the light come in, is the source for the duality of night and day. Next, this duality manifests itself in the notion of "...mother-father of life, of humankind...", or the union of the male-female principle, which is the true origin of creation. With the light, life awakens and blossoms in all its wondrous forms, containing also in itself the specter of its opposite, death. Death, thus, is part of life, never a nihil, but providing in its basic significance, the very seed of life, of rebirth; another beginning, another cycle, another ring in the chain of eternity.

In the magic of creation, the Maya demonstrated the powerful potential of numbers. Zero, for them, was an embryo that transformed itself into one, then two, and later become three and then four, but was always a part of the one, though ultimately returning to zero. The symbol zero, then, was the very foundation, the sum total, of the creation of life, and the most essential number in what was the great Maya scheme of the forces that produced the world.

CHAPTER IV

In the beginning there was nothing. But this *nothing*, like the black hole in a dying star, was a force, an energy, a fire, bursting and boiling, ready to come forth and create a new world.

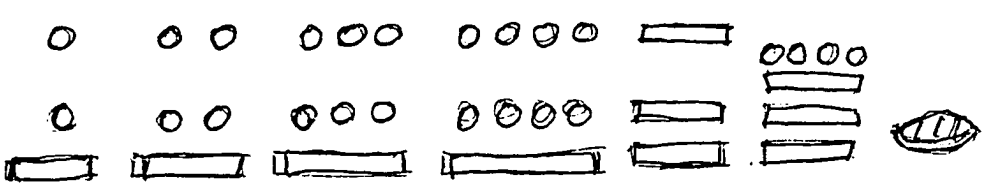
For the Maya, zero represented that cosmic black hole. It was the energy from which everything emerged and formed. In this sense it acquired the importance and the power of the principle of truth. Zero, therefore, must be considered, not only from a mythological point of view and its importance in numerology, but also from a simple mathematical perspective. From this all encompassing esoteric number all other numbers flowed, giving birth to life.

Several scholars, among them Thompson, regard the zero as a term for completion, mentioning the word *lub*, a Yucatec word signifying "the place where porters set down their bundles" (Maya Hieroglyphic Writing, 59). Another scholar explained that it was the "completion of one cycle and the beginning of another" (Leon-Portilla, Time and Reality in the Thought of the Maya, 51). These theories have not taken into consideration certain important points.

When studying the zero as the Maya people saw it, one

must ask how can zero represent completion when that same numeral stood for the cosmic beginning, the origin, the matrix from which all other numbers were born, evolved and developed in value. Completion connotes finality, a finality, which in this case, seems erroneous.

The Maya wrote with glyphs. Each glyph represented a different number. Quite often, several different glyphs were used to depict the same number. Since Maya calendars were an important part of their culture, the variation in glyphs was attributed to the particular calendar the scribes were working on. Numbers, from one to twenty, were often represented by simple signs, like a dot for one, a line for five, two lines for ten, a line and a dot for six, and so forth up to nineteen.



These signs are also carefully explained by Kelley in Deciphering the Maya Script. Here the author states that a bar or line in Maya stood for the number five, and a dot stood for the number one.

The validity of this system as applied to the codices was

shown by Förstemann who found that dates were marked in red and the intervals between them were marked in black. It was known from Landa and early colonial Maya books that the number permutation series in dates never went above 13 (21).

When the number twenty was reached the logical hieroglyphic sequence ended. Instead of using four lines to equal twenty, the Maya drew a shell, this was the same glyph used to connote zero. The abrupt change in glyphs occurred because the count was considered to start, not from one, but from zero. As a result the number twenty assumed the value of nineteen plus zero. Curiously, this line of reasoning may explain why in the precolumbian world, as well as in the Orient today, human age was counted from the moment of conception, so that at birth a child was considered already a year old.

Some frequently encountered Maya numbers, and their corresponding names, were: *Kin* or one, *uinal* or twenty, *tun* or 360 (20 x 18), *katun* or 7,200 (20 x 360), *baktun* or 144,000 (20 x 7,200), etc. All of these numerals had in common the vigesimal system, or the sum total of each human digit or all the fingers and toes. The ancients then divided the year into days and months in the following way. The *Long Count* calendar contained eighteen months, comprised of twenty days, making a total of three hundred and sixty days. An entire year was named *tun*. The Maya, however, were well aware of the fact

that it actually took three hundred and sixty-five days to make a year.

According to Raúl Pavón Abreu, the extra five days in the count of the tun, were called *Uayeb*. These days were considered to have a negative aspect, and were thus made part of another calendar called *haab* (Chronología Maya, LIII). Children unfortunate enough to be born on one of these negative days had their birth date changed to a more propitious one by either their parents or the priests, so that the children would be saved from contending with this adverse beginning for the rest of their lives.

The number twenty was part of the *tzolkin*, the sacred calendar. This calendar was divided into thirteen months, consisting of twenty days each, totaling to two hundred and sixty days. There are several theories as to the origin of this calendar. J. Eric Thompson, for instance, explains in the following way:

> 1) the theory (of the tzolkin) was based on the gestation period of a woman's pregnancy,
>
> 2) or nine lunar months of twenty-nine days or 261,
>
> 3) the interval that was between the passage of the sun across the zenith or the interval of 260 days (98).

The numbers twenty, eighteen, and thirteen were integrated into a complex system of calendars. In turn the high priests of the Maya interpreted the significance of these

calendars with painstaking calculations and astronomical observations. In this way they ably regulated the daily lives of their people, informed them when and how to conduct numerous religious festivities and observances, indicated when best to plant certain crops, and even predicted the future.

Another important number was the number nine. This symbol primarily referred to the nine layers of the Maya underworld, but was also linked to their lunar calendar. Girard sees it as a link of the "cabalistic number 9 with the lunar calendar, an association that is carried on in Maya computation..."; and that "the number nine was the beginning of the framework of the tun, [composed of 360 days], divided into two series of nine uinals" (241). The nine uinals, or the calculation of 9 x 20, corresponded to one hundred and eighty. But when one hundred and eighty was multiplied by two, the result was the tun, or three hundred and sixty days. One hundred and eighty days, (180), equaled 9, or 1 + 9 + 0, and three hundred and sixty days equaled 9, or 3 + 6 + 0. Both cases accentuated the remarkable importance ascribed to the occultic significance of the number nine.

The Maya were extremely gifted mathematicians. Their computations were often complex and ingenious. They were conscious of the value of each number. Thus, they ably worked out a system which clearly magnified the impact a certain

numeral had on their society as a whole. Therefore, the mystic significance attributed to these symbols dominated, influenced, and acted upon their perspective of life.

Below is an example of the intricacy of Maya computation. Take, for instance, the number 11.9.12.0.6, which can be broken down in the following way:

11 Baktuns	or	11 x 144,000	=	1,584,000
9 Katuns	or	9 x 7,200	=	64,800
12 Tuns	or	12 x 360	=	4,320
0 Uinals	or	0 x 20	=	0
6 Kin	or	6 x 1	=	6
			or	1,653,126

When the Maya used addition, and uinal was perceived as having no digits, they very often portrayed it by writing the glyph of the shell. And the shell, as we have seen, also symbolized zero. Uinal, as interpreted by the priests, derived from zero. Located at the beginning of the count, together with the subsequent nineteen numbers, it formed the number twenty. In this case, zero's appearance at the beginning and the end of the count to twenty, clearly demonstrated a mathematical completion, a beginning and an

ending.

Once again, the supremacy of the number zero, is apparent by its essential value, which comprises within itself a potential for all numbers, that is, from zero to one, then to two, to three, to four, and to twenty.

The glyph for one or *kin*, is pictured in the following way:

(Leon-Portilla, 19).

In the above glyphs, one notices a shared geometrical looking figure that resembles a square or a circle, inside which appears a flower-like design. The four petals symbolically touch the four corners, which were the four corners of the earth. This sign was known as *kin*, a word deriving from "Kinich Ahau" or sun-god (Thompson, 52), and which León-Portilla explains as "sun-day-time" (17).

When analyzing this glyph, and taking into consideration the careful examination of that symbol by León-Portilla in his book Time and Reality in the Thought of the Maya, it becomes

clear that in the words "sun-day-time," one sees that each word is an integral part of the other, and that all three words constitute one unit. This means that *kin* is not only a representation of the number one, but is also the number four, as shown in the image of four petals. The four petals, in themselves, depicted the sun's rays, covering the four corners of the world, or the four cardinal points.

The sun, as *kin*, starts its daily journey from the East to the West. León-Portilla notes how

> [t]he primary meaning of *kinh* is apparently "sun". From the time it rises in the east (*la-k-kin*) in Yucatec Maya: the (accompanying sun) until it sets in the afternoon (*chi-kin*: "the sun in the mouth," or "the devoured sun"), the sun's travel creates the day, marking its duration and existence (18).

But even though the human eye perceived the sun as sinking in the West and dying, the Maya believed that the sun continued on through the darkness, through the underworld, reappearing again in the East to start anew in an endless cycle.

Kin, as the day, had its beginning in the morning, or the dawn, continued until evening, or sunset, and later ended in night, only to return again the next morning. At first light, the sequence was repeated in an endless journey.

Kin denoted that time, was endless, perpetual, infinite, like the sun and the day, becoming thus the "life and origin

of all things" (86). Time progressing, revealed movement which, in turn, produced sound--the sound of the cosmos, the sound of shimmering light. All these three symbols, time-sound-light, were expressed with this one glyph, one sign with four petals, or four into one.

Four, then, having its own cosmic value and power, represented a totality reached through zero, and thus could also be viewed as an integral base in the myth of the creation of the world. The *kin*, as a single unit, assumed, as well, the qualities attributed to the digit four. As a consequence the number four became a constant that prevailed in the life and thought of Maya civilization.

The Maya viewed the world as a square, rather than a sphere, with four distinct corners, obtained by measuring the distance from each other with a cosmic cord:

> the fourfold siding, fourfold cornering,
> measuring, fourfold staking,
> halving the cord, stretching the cord
> in the sky, on the earth,
> the four sides, the four corners... (Tedlock, 72).

At the four corners, the Bacabs, or minor deities of the Maya cosmogony, held the sky, while the four Chacs (another group of minor deities) supported the earth at its four corners. In addition to these tasks, the deities had other ones, such as the making of rain in time of drought, and

unleashing the four winds when needed for farming.

The number four had been given such sacred qualities, that it soon became a major component in the perceptions of these precolumbian people. And so, too, the number four hundred, as a multiple of four, was used both in a general sense, signifying an unspecified amount, as well as in a "cabalistic cipher which intimately linked the [Constellation of the] Pleiades to the solar deity" (Girard, 238).

It is, thus, easy to see that four was in essence a formidable occult symbol, which encompassed every aspect of the Maya universe with all of its explosive supernatural significance.

CHAPTER V

It has been shown that the *kin*, or one, acquired the qualities attributed to the number four. The petals, designed inside the glyph, touched four points, and represented the four corners of the world. These corners were where the Bacabs held the sky. The Bacabs have been described as

> ...cuatro hermanos que fueron creados por inspiración divina para sostener el mundo indígena....
>
> Los bacabes--decíamos--tenían la misión de sostener las cuatro esquinas del Cielo y de la Tierra, como las cariátides o "atlantes" sostienen los arquitrabes y cornisas de algunos de los edificios o templos (Valentín Terrazas Zapata, El Mundo Geométrico y Calendárico de Los Mayas, 171-172).

At the same corners stood also the rain deities, the Chacs, or "...los [dioses] más imporantes que existían porque eran los encargados de proporcionar el agua para sus siembras y uso diario...", who watched the corners of the world (Zapata, 168). The Chacs were located where the four winds guarded the earth. Thus, these two distinct deities were considered to protect the world and its creatures.

The *kin*, with its flower like design, also became the

symbol for the number four, that provided, for the Maya, a mystical and magical conceptualization of the notion of creation. The number four, when seen as the foundation for Maya esotericism, assumed an important role in every facet of even their most mundane daily tasks. Four represented all those powerful forces of nature, and formed a union between heaven and earth. From its source of fluid energy, it indelibly linked these two aspects of creation.

The Maya, and later on the Aztecs, with a similar link in mind, constructed their pyramids. These great monuments expressed the all inclusive vision of a union of heaven and earth, or the spiritual with the material. Constructed on a square base, with its corners facing the four cardinal points, the pyramids stretched upwards, in a quest to unite themselves, symbolically, with the forces of the ether. In contrast to the Egyptian pyramids, which ended in a point, probably to enhance the value of the number three, the Maya monuments emphasized the power of the number four by cutting the top of their pyramids into a square and creating a platform. Here sacrifices were performed, along with mystic dances and chants to the gods that made up their cosmogony.

Maya towns were also built on the principle of the number four. In the exact center of their cities a large square was leveled and paved and surrounded by a crenelated wall with gates facing the four cardinal directions.

> These gates were the points of entry into the town. If they were not straight when the Mexica took over, they were made so for a distance of four or five miles, so that all roads of the province--indeed, of the empire--converged in straight lines on the central enclosure,... As it worked out, roads passing through outlying communities came to an end at the great pyramid that stood in the absolute center of the largest town (Padden, The Hummingbird and the Hawk, 33).

Here again the number four, represented by the four roads radiating from the central edifice, signified the four cardinal points, which were a part of the four petals of the *kin*.

Standing on the pyramid's platform, astronomer priests observed the night sky studded with planets and stars. From this vantage point they acquired an accurate knowledge of the movements of the celestial bodies. As an example, they ably computed the orbital phases of Venus and its relationship to that of the planet Earth, by studying its positions around the sun. Raúl Pavón Abreu, noting the complexity of this calculation, writes:

> un conocimiento semejante de la revolución aparente del planeta Venus, que tarda aproximadamente 584 días en su revolución aparente alrededor de la Tierra, permitió a los antiguo sacerdotes mayas predicir a sus feligreses

> que Venus aparecería como estrella de la mañana durante 236 días: que no sería visible después de retirarse del oriente en su viaje al occidente por espacio de 90 días (desparición en su conjunción superior); que volvería a aparecer en el poniente durante 250 días como estrella de la tarde, y por último, que tardaría 8 días en volver al oriente (desaparicíon en conjunción inferior) (XX).

The calculation resulting from these astronomical observations spanned five hundred eighty four days. And they were divided in this way: for two hundred and thirty-six days Venus appeared as the Morning Star, followed by a ninety day disappearance, before it appeared for two hundred and fifty days this time as the Evening Star. Of the five hundred eighty four days, Venus was late to appear in the east for a total of eight days.

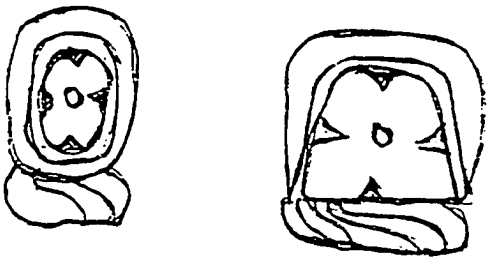
When the figures, 236, 90, 250, and 8, are added up the sum is 584. This is followed by the addition of 5, 8, and 4 to achieve the number seventeen. When computing the latter result to its fullest possibilities, the symbols one, and seven are then found to add up to eight, which is the double of four. Therefore, eight becomes the numeral that embodies the dichotomy of heaven and earth. Furthermore as a result of this extraordinary computation, the Maya discovered that the planet Venus was a perfect cosmic symbol for their sacred number four.

The glyph of *kin*, encompassed both one and four. It often contained a dot, placed in its midst, from which the petals, or the sun's rays, radiated outward in a symbolic embrace of the entire world. This central dot was suggestive of the earth's core, or the fifth point, that became the number five, which was another number of supreme importance in the Maya numerological system.

The Maya painted their four cardinal points with different hues. These colors were usually, red which stood for the East, yellow for the South, white for the North, black for the West, and for the central point green. (León-Portilla, 65) In this manner they dramatized the center, where the tree of life, the *ceiba*, grew. Portilla writes "...in each sector grows the primeval *ceiba* together with its corresponding cosmic bird" (65). Like an infant still in its mother's womb, this tree received nourishment, through a mystical umbilical cord. Its image, locked away in the recondite caves of the underworld, drew in the nutrients for its roots and branches that, above ground, stretched out to the sky. Under its protective umbrella, the *ceiba*, surely influenced and controlled aspects of the gods' act of creation.

From zero to *kin* the step, numerically, is a relatively short one, though symbolically its meaning is immense. Further still, the next essential number is five, which had been given a deep cosmic substance of its own.

This sequence is cleary shown by the designs given by León-Portilla.



(León-Portilla, 19)

Numbers, in the Maya numerological equation, had a variety of latent meanings, values, and powers. From the potential value of the number four evolved the number five, formed in the center of the design of kin. But the center of kin which was drawn in the form of a flower, was the sun itself, its luminous rays bathing the four cardinal points.

Interestingly enough, the glyph for five was often depicted as either a horizontal or vertical bar. This same design, also, symbolized one, and one, in turn, reverted to zero, or the very foundation of all life. Thus five assumed numerological significance when, in collaboration with the other numbers, it participated in the mythological story of the creation of the world.

The Maya believed that the gods created the earth and, with it, they constructed a place where they could reside and

dominate the world. Through their cosmogony, the ancients reasoned that there existed two distinct planes, comprised of thirteen levels of heaven, and nine of the underworld. Each heavenly strata was defined by a god that oversaw all human activities both religious and mundane. In the underworld Xibalbá "...in Yucatec Maya, Xibalbá is one of the names for the lord of the lowest underworld" (Tedlock, 369), or the god of the dead who, in this sector, reigned supreme.

The thirteen heavens were added together as 1 + 3, or four. Here, once again, the mystic importance of the number four, along with the painted directions, explodes with all its significance and force. Its symbolic impact is expressed in the Popol Vuh as a discussion of the soul's descent along the road to Xibalbá and, subsequently, the implication of the Maya version of a crossroads.

> And then they [One and Seven Hunahpu, or those characterizations relating to the movements of the planet Venus] descended the road to Xibalba, going down a steep cliff...
>
> And then they came to the Crossroads, but here they were defeated, at the Crossroads:
>
> Red Road was one and Black Road another.
>
> White Road was one and Yellow Road another.
>
> There were four roads.... (110-111)

An analysis of the number thirteen (or, 1 + 3 = 4) also

reflects the number of months listed in the *tzolkin*, the sacred Maya calendar of two hundred sixty days. The interpretation of this calender was mostly left to the priests, or shamans, also called the Chacs. These medicine doctor's duties, included, caring for the physical well being of their people. The four Chacs, as previously noted, were also the rain gods. As such, the Chacs were considered givers of life. Through water, the *ceiba* grew and so did the crops planted for the good of humankind. Girard states that "they were the equivalent of Tzakol, Bitol, Alom, and Cajolom of the Popul Vuh; gods of the four sectors of heaven..." and adds that they "are the owners of the wild plant and animal life of the earth" (334). This analogy may relate to the deep knowledge that the medicine doctors had of the therapeutic value of plants and herbs.

Zero, four, five, nine, thirteen, and twenty integrated to form the essential numbers of the Maya cosmogony. They were the mystic symbols, that derived one from the other, starting from the all encompassing zero, the beginning, the everything, and then evolving into a multitude of forms. But there is far more to be gleaned from this incomparable numerical quantity. For zero, the originator, always returned to its point of origin which, in a sense, stood for the life and thought of a great civilization, the Maya, now vanished, but whose physical presence is still felt through their many

monuments, and artifacts which are still being disembodied from the bowels of the earth.

PART II: THE AZTECS

CHAPTER VI

The preceding chapters described the Maya, who they were, and the impact of numerology on their daily lives. It was also clearly shown that this numerical science tremendously influenced the very essence of those Mayan myths which related to the creation of the world. After the Maya had disappeared a new civilization replaced them, and these new people in their own right, became just as mighty as their predecessors. These people were called the Aztecs.

Just as little is known about the origin of the Aztecs as is known about the Maya. After the Spanish conquerors fought and subdued this great civilization in the sixteenth century, some of the surviving Aztecs desired to preserve what was left of the knowledge of their origins. As a consequence, some of the more enlightened Spanish fathers, like Motolinía and Sahagún, helped and encouraged these Indians to remember their legends, the words of their elders and relate the ancient myths that had been told them by their priests so long ago. The Spanish fathers motives were not altogether altruistic, and for the most part had their own alterior reasons for writing down the wisdom of the ancients.

Friar Bernardino de Sahagún, in his Historia General De las Cosas de Nueva España, wrote that he had two reasons for his interest in the indigenous people's legends. They were:

> el celo religioso con que ansiaba la conversión de los indios idólatras al cristianismo, y el otro fué la curiosidad linguística, el deseo de conocer los secretos todos de una lengua tan bella como la Náhuatl, cuyo perfecto dominio, por otra parte, sería tan provechoso para doctrinar a los naturales, desarraigándolos de sus antiguas supersticiones (XXXVI).

Nonetheless, these recollections were carefully transcribed, providing information about these indigenous people for both the descendants of the Aztecs and, later still, for scholars who wanted to learn more about their world. From what they could remember, the remaining Aztecs spoke of a place where their ancestors first appeared and where they lived. The area they spoke of was called Aztlan, a place surrounded by water (Nigel Davies, The Aztecs, 5).

In the description of this locality, especially the mention of the presence of water, may be said to have had a certain likeness to the lost continent of Atlantis. Padre Durán, who wrote down some of these memoirs, hazarded his own particularly Christianized assumption as to these peoples' origins. Davies tells us that he suggested "that they came from the lost tribes of Israel" (4). Nothing in the text was

very clear, and most of the descriptive details of the original home of the Aztecs was altogether too vague and imprecise to enable one to draw any serious conclusions. Yet, many of the descriptions tended to demonstrate a number of similarities to the legends of the lost continent of Atlantis, beginning with the name adopted by the tribe, whose civilization was so advanced that it gave the impression of having been already established a long time ago. Nigel Davies writes that

> even today, differences have persisted as to Mexican origins and as to the location of Aztlan. Some placed it as far off as the Southern United States, others as near as the Valley of Mexico itself; certain writers have insisted that it never existed at all. [While] some have also favored the coast of the Gulf of Mexico as a point of departure (5).

There were a number of other legends, one of which mentioned an unspecified place, referred to by the Aztecs as the Seven Caves. This was the starting point from which they believed to have emerged. George C. Valiant in his book Aztecs of Mexico, writes of these divergent accounts, noting that "some have the Tenochcas [the Aztecs] starting off on their travels with several other tribes from a group of caves in which they originated" (106-107). Were these caves real, or perhaps an allusion to the mystical womb of mother earth,

from which everything, according to the ancients, had originated? For instance, certain writers, like Gene S. Stuart, in The Mighty Aztecs, stipulate that "...caves were considered the womb of earth, and many myths of origin tell of ancestors emerging from caves" (27).

No matter how far fetched the theories or how vague the places of origin, be it the North, the lost continent of Atlantis, or the Seven Caves, the Aztec culture was eventually mixed with that of the people that preceded them and which they encountered along the way. Not all the tribes were primitive. Some like the Toltecs and, prior to them, the Olmecs, and the Maya, had an advanced civilization, which left an indelible imprint on the new people. This premise is backed up in part through some of the Aztec sculptures and monuments, which obviously reflected the artistic influence of other tribes. For example, there is evidence of borrowing in the case of the astounding warrior columns of the temple of Quetzalcoatl, in Tula. Here the "Aztecs glorified ties to the imperialistic Toltecs and to Chichimec ancestors to embellish their past and to emphasize their might (Stuart, 27-28-29, seen also in Bradley Smith, Mexico, a History in Art, 121). The treasures of the Templo Mayor also provided a diversity of style in Aztec effigies. The same mixture of artifacts coming from previously older cultures, is evident in the Chac Mool found in the Great Temple of Tenochtitlan, that is very

similar to Toltec forms (Stuart, 76-78).

In the course of their exodus the Aztecs must have encountered a great deal of rivalry from numerous groups of people, who were also searching for a place to settle. Some of their neighbors animosity may have been due, in all probability, to the bellicose nature of the Aztecs who willingly fought other tribes in order to appease their warrior gods. Eventually the Aztecs reached what is now the Valley of Mexico which, at that time, was covered by five lakes. Immediately, they recognized that the center of these lakes could provide a better sanctuary from enemy attacks, than open ground. So they decided to build here their new home.

The Aztecs were originally a nomadic people, always in search of a new and more propitious location. They were also, not just one people, but a conglomerate of several tribes. In fact, initially, "[they] were a concentrated population of independent groups living in the Valley of Mexico and later welded into an empire, whose authority [later on] reached out to dominate much of central and southern Mexico" (Vaillant, 26). Fighting those whom defied their will, the Aztecs ably incorporated a variety of lesser tribes. By the time Hernán Cortés and his soldiers reached Tenochtitlan, the Aztec civilization dominated the entire Valley of Mexico and was still spreading rapidly outward.

Though now commonly known as the Aztecs, they were also recognized under the name of *Mexica*, a name that derived, in all probability, from the Nahuatl word *meztli*, one of several names for the "moon" (Davies, 7). Thus, it may be assumed that from the word *metzli* came the name for the country Mexico and its inhabitants.

Judging by the drawings of the nearly twenty Aztec codices (Codex Mendoza, Codex Borbonicus, Codex Borgia, Codex Chimalpopoca, to name a few) that had been found, depicting the life, custom, and religion of these people, they appeared to have been fairly tall and dignified, and impressed the Spaniards with their vigorous daily activities, whether religious or commercial (Codex Mendoza, 92-99).

Aztec cities were bursting with movement, people selling products cultivated on the cinampas ("...small artificial island[s], made by scooping up mud from the marshy borders of the lakes and...holding them in place by...reeds and later by trees..." (Vaillant, 136)), boats floating in the lakes loaded with a variety of flowers, people going to and from the already crowded roads, and the construction of new imposing buildings. All this intense activity must have had its effect on the visitors, leaving them fascinated and spellbound. Spanish soldiers, viewing this sight for the first time, were enormously impressed, describing it in this way:

...por la mañana llegamos a la calzada ancha y vamos

> camino de Estapalapa. Y desque vimos tantas ciudades y villas pobladas en el agua, y en tierra firme otras grandes poblazones, y aquella calzada tan derecha y por nivel cómo iba a México, nos quedamos admirados, y deciamos que parescía a las cosas de encantamiento que cuentan en el libro de Amadís, por las grandes torres y cues y edificios que tenían dentro en el agua, y todos de calicanto, y aun algunos de nuestros soldados decían que si aquello que vían, si era entre sueños,...ver cosas nunca oídas, ni vistas, ni aun soñadas, como víamos (Bernal Diaz del Castillo, Historia Verdadera de la Conquista de la Nueva España, 178).

What the Spaniards witnessed was a spectacular, almost dream like scene, something unexpected, and incomparable with the activities in their own country. One of the few European cities of that period that had any similarity to Tenochtitlan was Venice, Italy. However it was doubtful that these soldiers were familiar with any large cities outside of Spain.

In contrast with the select few written documents and archeological excavations found on the Maya, information on the Aztecs is considerably richer, and primarily based on documents, texts, and books which were written after the Spanish Conquest. In the latter case, the writers were mainly men of the cloth. Fray Diego Durán and his Historia de las Indias de la Nueva España; fray Bernardino de Sahagún and his

Historia general de las cosas de la Nueva España; fray Bartolomé de las Casas and his Apologetica historia de las Indias, were several of the more noted names that provided information about the Aztec civilization. Bernal Díaz del Castillo, on the other hand, as a member of the conquering army of Hernán Cortés, when writing the Discovery and Conquest of Mexico, provided a soldier's view of the conquered people. Everyone of the writers, had a tendency to use their own European origins as a basis for their perspective of the strange Indians they met and eventually subjugated. Still they left behind the first documents and records of "The people of the Sun," as Alfonso Caso named them later on, whose great civilization was brutally trampled and consequently forced to disappear into the pages of history.

All of the documents later found, that is, the codices that had survived burning and destruction, the books that had been written after the coming of the Spanish Conquistadores, gave scholars and readers a relatively thorough description of the Aztec civilization. Furthermore, these written works provided a vehicle for the discussion of the complex nature of numerology, and how it affected the lives of the Aztec people who, in turn, applied this numerological system in such a way as to furnish an account for a mythological approach to the creation of the world and man.

CHAPTER VII

Numerology was that one important facet that permeated the mythology of the Maya, especially for its essential function in their understanding of the creation of the world and their basic philosophy of life. The same may be said for the people who followed the Maya, in this case the Aztecs. One notable difference, however, was that while the Maya had a very clear concept of creation, as described in the Popol Vuh, the Aztecs expostulated several theories, based on the gods whom they considered the most profitable and appropriate to their religious thought.

The Aztecs did not have only one myth pertaining to creation, but instead relied on a variety of myths. Thus they presented a myth for the creation of their gods; while another one referred to the appearance of man on earth; and yet another one portrayed the creation of the sun, the stars, and the heavens. Notwithstanding the apparent differences, all of these myths, like pieces of a puzzle, formulated a complete picture of the Aztec world. This unity of thought, this coordination of vision, revealed the uncanny ability that the high ones had to create a situation where they were able to rule their people with precision and order.

The numerological perspective of the Aztecs differed from that of the Maya. Certain of these dissimilarities were obvious. For instance, while for the Maya zero stood for the base, the beginning, the all enfolding concept of the creative forces, for the Aztecs the number that best summarized this same principle was the number two.

The esoteric value of the number two becomes self evident in the Aztec myth of the gods' creation of the world. This creation took place in Omeyocan, the *place two* (Alfonso Caso, The Aztecs, People of the Sun, 9). The word Omeyocan derived from *ome* signifying two, and *can* as one of the many Náhuatl words for place. Here in Omeyocan dwells Ometéotl, "the beginning and end of all things" (Jesús Constantino, El Pensiamiento Mítico de los Aztecas, 15). The god two, was then the creative force who assumed dual aspects, that of the masculine or Ometecuhtli, and the feminine of Omecíhuatl. So that the one, Ometéotl, is transformed into two. Constantino describes this concept by stating:

> Nadie ha sabido jamás del principio y creacíon de Ometéotl; él es el que siempre ha estado allí, en el treceavo cielo, en el omeyocan. A él nadie lo manda, nadie lo aconseja, porque él es "moyocoyani", el que se inventa a si mismo, el que hace las cosas por su propia voluntad (15).

The god two, represented the creative principle through its

dual nature, or that of one which was also two. Thus, this dichotomy manifested itself as the very foundation of the Aztec's numerological and spiritual cosmogony.

One myth that dramatized the significance of the number two was that of the creation of the sun, whose "... daily appearance of the celestial orb, so infinitely important to the existence of all life, made sun worship an essential part of the Aztec religion" (Vaillant, 180).

At first, it was said, the world was shrouded in darkness. As yet there was no potential for light. So the gods came together in order to change the state of the world. They consulted one another. At the conclusion of their discussion they decided to start a bonfire. Afterwards two gods were chosen to sacrifice themselves for the good of the world. These two gods were Nanáhuatl, sometimes known as Huehuetéotl, an old and sickly individual, and Tecuciztécatl, a rich and powerful being. Tecuciztécatl tried to jump into the fire, but a feeling of fear made him hesitate. It was said that "porque estaban las brasas tan rojas y encendidas, que tuvo miedo y se volvió atrás" (Constantino, 33).

Next the poor, sickly Nanáhuatl, perhaps because he had nothing to lose, quickly jumped into the burning flames. Suddenly, almost magically, the sun, Tonatiuh, appeared in the sky. Then Tecuciztécatl, ashamed of his initial fright, followed Nanáhuatl's example. This resulted in the appearance

of Meztli, the moon.

Still, not everything in the world was satisfactory. The unsatisfactory situation had to be solved. It was necessary for the heavenly bodies, overlooking the earth, to move across the sky. But at the moment the sun was still. To the consternation of all

> [i]t hung on the horizon and seemed reluctant to start on its journey. The other gods sought the reason, and terrible was the reply. The sun demanded that the other gods, the stars be offered in sacrifice (Caso, 18).

This terrified and angered the remaining gods. But the sun won its point and the stars and planets (such as the planet Venus) soon appeared in the sky. Now the sun illuminated the world in the daytime, while the moon provided the more muted light of nighttime. Through this example the polarity of the sun and moon, of day and night, was established. As a result of this ensuing relationship the number two was used to demonstrate its powerful mystic significance.

Another myth, that of how the earth was created, was based on a mythical monster called Cipactli. Cipactli could have referred to several creatures. According to Caso it was an alligator (33). Other writers believed it to be a crocodile, "a creature which lounges in the sun, creating nothing" (Peter Tompkins, Mysteries of the Mexican Pyramids, 391). For Sáhagun, Cipactli "quiere decir un espadarte, que

es pez que vive en el mar..." (Libro IV, 305). Cipactli's importance rested in its depiction as the first sign of the days in the Mexican calendar. Here it was drawn as

> ...una cabeza de animal, con una larga mandibula superior, y sin mandibula inferior, o reducida ésta a una simple voluta. El animal en el Códice Borgia y en otros manuscritos, se representa completo y tiene cuatro patas y cola; la rugosidad de su cuerpo se indica por medio de espinas, o de placas; se le concibe entonces como un lagarto...(Caso, El Calendario mexicano, 43-44).

No matter how it was described, Cipactli usually assumed the form of an amphibious creature, and therefore belonged to two realms, that of water and earth.

Cipactli played a central role in the myth of the creation of the earth. The story, described by B. Brundage in The Fifth Sun, began this way:

> Quetzalcóatl and Tezcatlipoca--here cast as demiurges--assumed the form of serpents. Coiling themselves about Cipactli, as she lay on the surface of the sea, they squeezed her into two parts. The upper part they elevated to make the sky, the lower part remained to become the earth (31).

In this myth the supremacy of the number two once again becomes clear. The tale began with two gods. These gods turned themselves into serpents or, better yet, formed into

amphibians, stressing their dual nature. Cipactli also was divided, through the efforts of the gods, into two parts, forming into a representative of the opposites of heaven and earth.

The Aztecs revered the sacredness of numbers, and effectively used a numerological system to guide them in their daily lives. Above all, they established the number two as a numeral of immense cosmic potential. In their cosmology, light derived from darkness, life was succeeded by death, and good counterbalanced evil. Duplication became a norm, especially in the case of the Aztec gods who manifestated the notion of doubleness. This duality, however, was not always depicted as an absolute contrast in natures.

An example of the multiple aspects of the gods was Quetzalcóatl, the pure, the good one, whose negative aspect was projected in the form of his brother Xólotl. Another example is that of Yaotl, one of the youngest Aztec deities who was often an expression of the number two. Brundage writes that "Yaotl was a warrior, his youth was also stressed and in this transfiguration he becomes Tepochtli, the Young Male, conceived to be virgin" (87). Most important of all, when referring to this remarkable figure, was the way in which he was worshipped. The stress placed on duality was obvious when considering,

...the two centers for this young god's worship outside

> the Great Basin. One was in the valley of Toluca, where he was venerated as the god Tlamatizincatl... The other was more famous and possessed a celebrated shrine on the outer slope of Mount Popocatepetl (87).

Still another representative of the notion of duplication was expressed by "Huehuetéotl, Old God, [who was] a synonym of Xiuhtecuhtli," the "Lord of the Year, Fire God..." (Vaillant, 188).

The cultural and religious life of the Aztecs was best expressed through their use of the number two. For instance, they were influenced by two calendars, which were probably inherited from previous civilizations. These calendars were the *Tonalpualli*, the sacred one, and the *Xihuitl*, that "existed only to measure the agricultural year and to mark the proper places for the rituals of the many gods; it was a practical social instrument" (Brundage, 20). While the former was based on a count of two hundred sixty days, the latter was comprised of a count of three hundred sixty days, with five days that were not considered, the *nemontemi*, who had a negative connotation.

Vaillant writes about the impact these *bad* days had on the people as a whole. He notes that

> during the five useless days (*nemontemi*) of the final year the people let their fires go out and destroyed their household furniture. Fasting and lamentation were

> the order of the day while the populace awaited catastrophe. Pregnant women were shut up in granaries, lest they be changed into wild animals, and children were marched up and down and kept awake, for fear that sleep on that fatal evening would result in their turning into rats (204).

The Aztec high priests daily consulted the *Tonalpohualli* which proved to be an extremely complex task. The interpreters of this sacred calendar also made an in depth study of the cosmos. This was done because the *Tonalpohualli* was "the charter of the heavenly state, the written constitution of the heavens, and, one might almost say, the central principle of coherence in the Aztec cosmos" (Brundage, 16). Stars, planets, the Milky Way, the constellations, were familiar sights to these priest-astronomers who, in the course of their studies, attempted to interpret the desires of the gods. By relating to their people the express needs of the various deities, the priests had the power to decided that which was best for the community as a whole.

Due to the complexity of their society, the Aztecs found it useful to institute two particular schools that educated young boys in the necessary arts. One school was called the *Calméca*. Here the sons of noble parents were instructed on how to become either high priests, warrior chiefs, judges or even kings. In order to achieve these prestigious positions

the students were required to learn what was known, at that time, about astronomy, the importance and influence of the constellations, the comets, the Pleiades, and anything concerning the day and night sky. These studies were considered an essential part of the necessary skills future leaders were expected to have.

Together with the studies of the cosmos, the children had to learn all about the art of war. This was perhaps the toughest part of their education, since the boys had to follow an harsh regime, punctuated by hardening their feelings and their bodies through self inflicted wounds. These were done by using cactus thorns to puncture their bodies so that blood would liberally flow to appease the gods. The *Calméca* was, thus, under the protection of the god Quetzalcóatl (Caso, The Aztecs, 29), who expected strict obedience and ready sacrifices from his neophytes.

The other school, the *Telpochcalli*, was geared towards children of the lower class. Under the auspices of the god Tezcatlipoca (Caso. 29), the emphasis was on making the boys good warriors. They started school

> at the age of fifteen for formal instruction in the duties of manhood teaching them the usage of different weapons. Drill, in the sense of the accurate movement of modern troops, did not exist, but the great monthly ceremonies called for military demonstrations in which

> warriors showed their abilities and performed sham manoeuvres. Each recruit followed an experienced warrior in battle, much as a medieval squire served an apprenticeship to a knight in full standing (Vaillant. 219).

The required curriculum of these two schools is in itself strong evidence for the assumption that the predominant aspect of the Aztec character was an overwhelming inclination for soldiering. Hence one may deduce that religion and militarism had become the solid foundations of Aztec culture.

Warriors, in their turn, formed into two distinct groups named after the animals that best reflected the qualities most admired such as courage and respect for the gods. These brotherhoods were named the Knights of the Jaguars and the Knights of the Eagles. Both the Eagle and Jaguar warriors were famed for their dexterity in the military arts, and often practiced mock battles to the admiration, fear, and enjoyment of the crowd. Just as in medieval Europe, the Aztec paladins demonstrated their propensity for aggression in tournaments held in public arenas. Sometimes, Vaillant explains,

> selected Eagle and Jaguar Knights, took part in a dance dramatizing the sacred war wherein the sun is slain, to be reborn the following day. The dance culminated in a gladiator sacrifice. Armed with real weapons, the knights slew a captive warrior, chosen for his military

> distinction, who was tethered to a circular stone representing the sun's disk and who defended himself with a dummy weapon only (205).

The division into two schools and two warrior clans, once again, validates the importance of the number two.

Emphasizing the supremacy of the number two, the great pyramid of the Templo Mayor, erected in the center of Tenochtitlán, had on top of its platform two constructions, which were, more or less, chapels, dedicated to two main Aztec gods, Huitzilopochtli (also representative of the sun) and Tlaloc (also representative of water). These artistic manifestations could be viewed as a

> ...union between Tlaloc and Huitzilopochtli... [And here as well] the two seasons of the tropical world, wet and dry, were also thus united. The Temple suggests too the expression *atltlachinolli*, literally 'water-conflagration,' used by the Aztecs to mean warfare, especially sacred war (Mary Ellen Miller, The Art of Mesoamerica from Olmec to Aztec, 206).

The bipolarity of Huitzilopochtli and Tlaloc provided the Aztec people with both a benevolent purpose, as these gods were the initiators of life on earth, and a pernicious one, for these same beings demanded ruthless sacrifices for their appeasement.

In conclusion the symbolism fundamental in the number two

served as a focal point for the Aztec civilization, though not the only one. Just like the zero for the Maya, the number two mutated, forming into other numbers as well, which were then shaped into socially acceptable combinations. Among them, one of the strongest examples of these correlations can be found in the essence of the number four, which, in its development become one of the second most numerologically influential figures in the Aztec cosmology.

CHAPTER VIII

The Aztecs superseded the cosmic value of the number two with that of the number four. In it they saw the completion of their cultural experience. Four, representing the double of two, was considered perfection in itself. Therefore all the yearly religious and public ceremonies and festivities of the Aztecs were based on that number.

When examining the myth of the gods' creation of the world, Ometéotl, the *god two*, was also expressed as "el señor y la señora de nuestra carne" (Constantino, 16). This was in essence the masculine Tonacatecuhtli, and the feminine Tonacacihuatl. In turn these two gods "represented the central direction, or up and down, that is, the heaven and the earth, while their four sons were assigned to the four directions, or the four cardinal points of the compass" (Caso, 10).

The four sons were known as the Tezcatlipocas. This conceptualization of four gods could be compared to the Maya Bacabs, that held the sky, or the Chacs, the deities that were posted at the four corners of the earth. As with the Maya, the four sons or demigods, in turn, assumed different cosmic manifestations, defined by their individual colors: red,

black, blue, and white, corresponding to the East, North, South, and West (10).

As an example of this relationship of color to deity, the blue Tezcatlipoca, representing the South, was also represented by Huitzilopochtli. On the other hand the white Tezcatlipoca, or the West, had a double in Quetzalcóatl. The red Tezcatlipoca of the east was often portrayed as the god Xipe Totec, or Camaxtli. And finally, the North, with its black color, kept the name of black Tezcatlipoca (Vaillant, 181). The *nahual* of the black Tezcatlipoca took "the disguise of the jaguar" whose spotted skin resembled the heavens with their myriad stars (Caso, 14). It is interesting to note that each Tezcatlipoca had a double in another god with whom he shared also the color of the direction he represented. Here again, the cosmic value of the number two--the one god and his other manifestation--and the number four, the Tezcatlipocas, emphasized the predominance of these particular numbers in Aztec thought.

When the emperor Moctezuma heard of the landing of the Spaniards, he remembered the prophecies told about the god Quetzalcoatl who was to return to the land of the Mexicas, via the East. In order to give a proper welcome to the alleged god, Moctezuma sent his ambassadors to meet the newly arrived soldiers, loaded with gifts. These consisted of the

treasure of Quetzalcoatl, [or] the god's finery: a

> serpent mask inlaid with turquoise, a decoration for the breast made of quetzal feathers, a collar woven in the petatillo style with a gold disk in the center, and a shield decorated with gold and mother-of-pearl and bordered with quetzal feathers with pendant of the same feathers... Motecuhzoma also gave them [the messengers] the finery of Tezcatlipoca.... Then Motecuhzoma gave them the finery of Tlaloc... There was also a golden shield, pierced in the middle, with quetzal feathers around the rim and a pendant of the same feathers, the crooked staff of Ehecatl [god of wind, and also another representation of Quetzalcoatl] with a cluster of white stones at the crook, and his sandals of fine soft rubber (León-Portilla, The Broken Spears, 23-24).

There were four different categories of gifts delivered, each represented by one of four gods, that is Quezalcatl, Tezcatlipoca, Tlaloc, and Ehecatl. This demonstrates, once again, how the Aztecs used the number four as the focal point of their rituals and a means of self expression.

Moctezuma's messengers, however, did not receive the welcome they had expected. The Spaniards were not to be trusted. While the proferred gifts were immediately accepted, the conquistadores allowed their vicious mastiffs to tear apart the poor envoys. Witnesses of this event later said,

> [y] a tres sabios de Ehécatl (Quetzalcóatl), de origen

> tetzcocano, los comieron los perros. No más ellos vinieron a entregarse. Nadie los trajo. No más venían trayendo sus papeles con pinturas (códices). Eran cuatro, uno huyó: sólo tres fueron alcanzados, allá en Coyoacán (Visión de los Vencidos, XXVI).

At the culmination of this terrible encounter only one envoy survived. This confrontation should have been interpreted as a warning of what was to come.

The Aztecs believed that the world was created, and destroyed, four times. These cataclysmic events, depicted on their sun calendar, were representative of the ages of the sun. The ancients proposed that these different ages through which the world passed through were composed of epochs that reached a peak and then declined at given times. Every age was ruled by a different god. The Great Stone calender read that

> the first era, Four Ocelot [or Four Jaguar], had Tezcatlipoca as the presiding god, who at the end, transformed himself into the sun, while jaguars ate up the men and giants who then populated the earth. Quetzalcoatl was the divine ruler of the second era, Four Wind, at the expiration of which hurricanes destroyed the world and men were turned into monkeys. The Rain God, Tlaloc, gave the world light in the third epoch, *Four Rain*, brought to a close by a fiery rain.

> Chalchiuhtlicue...was a Water Goddess who presided...over the fourth Sun, Four Water, wherein a flood came, transforming men into fish (Vaillant, 177).

Each age saw the creation of the earth, plants, animals, and man. After each destruction, new life arose, with new creatures and beings appearing, evolving, and struggling to obtain permanency on the planet. The gods, who presided over each epoch, also brought upon it the upheavals that erased old life forms and eventually substituted them with new ones. At the moment, according to the Aztecs, we are living in the age of "Four Earthquake,...under the control of the Sun God, Tonatiuh, and it will be destroyed, in time, by earthquakes" (177).

Every age and its subsequent destruction had been accorded a date that corresponded to the cause of its decline. The first date was named *Four Jaguar*, as it had been destroyed by animals resembling giant jaguars. The second was named *Four Wind*, because it referred to great hurricanes that, in violent bursts, lifted everything into the air producing immense devastation. The third date was named *Four Rain*, since it was supposed to have been devastated by heavy rainfall. The last epoch was *Four Water* and was "represented by a jar of water from which emerges the bust of the goddess Chalchiuhtlicue." (Caso, p.33). This epoch may have also been a reference to the time of the great flood. All these

destructions were caused, most likely, by atmospheric changes, which the Aztecs tended to interpret as the wrath of the gods in response to man's evil ways.

Contrary to the Maya, who believed in only four stages of the world's creation, the Aztecs perceived a fifth age, which they named the *Age of the Sun*, and which corresponded to the present time we live in. It is most interesting that these epochs perfectly correlated with what is known today as the geological times of the planet earth. These long segments of time have been named the Precambrian, the Paleozoic, the Mesozoic, the Cenozoic, and the present era (W. Kenneth Hamblin, The Earth's Dynamic System, 109).

The designated name of this fifth age, as previously stated, was *Four Earthquake*, when the world would be destroyed by earthquakes. This prediction should, perhaps, be studied further as it seems to apply to the present state of the world. Earthquakes have become, in fact, more frequent and more damaging to the earth and its inhabitants. Only, that while the Aztecs would have attributed this turmoil to the various Tezcatlipocas or other gods of the Aztec pantheon, modern man now finds a more prosaic explanation for such events, that of the movement of tectonic plates. This should not detract, however, from the possibility of some sort of global upheaval, as predicted by the ancient Aztec astronomer-priests.

Coe, goes so far as to give us a date in which the world might be annihilated. In his explanation he writes that:

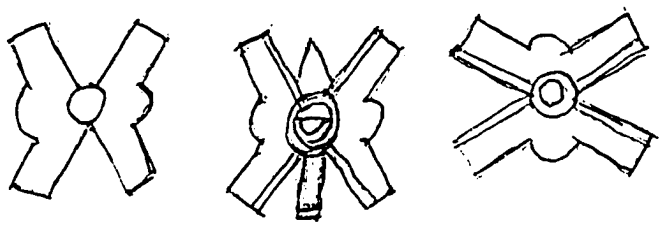
> the idea of cyclical creations and destructions is a typical feature of Mesoamerican religions... The Aztec, for instance, thought that the universe had passed through four such ages, and that we were now in the fifth, to be destroyed by earthquakes. The Maya thought along the same lines, in terms of eras of great length... There is a suggestion that each of these measured 13 baktuns, or something less than 5,200 years, and that Armageddon would overtake the degenerate peoples of the world and all creation on the final day of the thirteenth. Thus,... our present universe would have been created in 3114 BC, to be annihilated on 23 December AD 2012, when the Great Cycle of the Long Count reaches completion (Coe, 151).

Till then, we can prepare for the meeting with the goddess Tlazoltéotl, and our final confession.

Wisely enough the Aztecs chose a glyph, whose very design, appropriately depicted this last age. The glyph was called *Ollin*, or "ulin", a name deriving from *hule a word* that signified "goma elástica, que metaforicamente significa movimiento" (Romero Quiroz, El Huehuetl de Malinalco, 47).

The picture that represented the glyph of *Ollin*, with its four directions was clearly recognizable. It was drawn in

this particular way:



(Romero Quiroz, 47).

When observing this symbol, one notices its similarities to the kinh of the Maya, which was sometimes known as *sun-day-time*, with its rays covering every corner of the world. Here, again, there is evidence of an interrelationship between the Maya and the Aztecs. Together with the four cardinal points, the four suns, the Aztecs also had the four winds and the four ages of man. These concepts demonstrated the all encompassing versatility of the number four.

Every four years the Aztecs, with great pomp, celebrated the old god of the year and the god of fire. The most grandiose and elaborate of these celebrations happened at the completion of a fifty-two year cycle. That event occurred when the first day of Tonalpualli, or the sacred calendar of two hundred and sixty days, coincided with the first day of Xihuitl, or the calendar of three hundred sixty days. The ceremonies took place at nighttime and were exceedingly complex. In El culto a los astros entre los Mexicas, González

Torres describes these festivities by stating the following: "todos los fuegos del Valle de México se apagaban y se esperaba la culminación de la Pleyades [the constellation that the Maya regarded as the 400 boys of the Popol Vuh, while the Aztecs considered it as the 400 brothers of Huitzilopochtli], para sacar fuego nuevo sobre el pecho de un cautivo" (44).

At the end of the ceremony four prisoners (men who were usually captured by Aztec warriors during one of their many battles with local tribes), were made to dress up in the colors of the four suns whom they were supposed to represent. The captives were then forced to ascend the great pyramid and subsequently sacrificed.

The number four had an esoteric meaning far beyond the boundaries of the ancient Aztec world. For instance, in the Orient people were well aware of its significance. Matila Ghyka reports how the Chinese viewed the number four by noting that

> le quatre, nombre féminin par excellence, etait pour le Chinois le signe de la Terre, parfois de l'Impératrice, dont le symbole commun était un cube allongé percé d'un trou cylindrique. Le cube était aussi le symbole de la Terre pour Platon (Philosophie et Mystique du Nombre, 16).

In Japan, for instance, the number four (shi) was regarded as a symbol of death. For this reason, quite often,

the numeral was skipped or omitted. An example of this can be seen in the way houses are numbered even today. The sequence is broken up, and thus addresses are written starting from 1, 2, 3, then the next house begins with the number 5.

As has been shown, the number two provided a basis (that is, two was a factor of four) for the emergence of the number four, which consequently assumed an equal numerological and cosmic potency. This concept was embodied in the mystical stone disk, the Aztec Calendar, that could be compared to the *rosetta stone* of the Egyptians. While studying the *rosetta stone* egyptologists discovered the key to Egyptian hieroglyphs that permitted them to read and understand the life and culture of the ancient Pharaohs. From the Aztec stone disk mesoamerican scholars ably interpreted the significance of each of its corners, what each god represented, the dates of the destructions of the world, and also recognized that in the center, Tonatiuh, the Sun god, dominated, controlled, and regulated the events in his domain. The discovery of this disk had far reaching consequences, allowing scholars to extract knowledge about a civilization that was so advanced that even now it has not been fully understood. And these in depth studies must continue until many more mysteries associated with the disk can be solved.

The representations of the sun was an important feature in the study of Aztec society. As with all their other gods,

Tonatiuh was also known under several different names, which were given him in accordance with the different positions of the sun. Therefore, "in the morning, as he rose into the sky, he was called Cuauhtlehuánitl, the 'eagle who ascends'; in the evening, he was Cuauhtémoc, 'the eagle who fell,'" a name that so well described the last Aztec emperor and his tragic ending (Caso, 33). Appropriately, in nahual the zoomorphic representation of the god Tonatiuh was an eagle, a regal bird, soaring in the sky with wings stretched towards the sun as if in prayer.

Another example of the extraordinary value given to the number four can be found in the Aztec conception of a day made up of twenty-two hours, that is thirteen hours of daytime or light, and nine hours of night or darkness. As may be expected the number twenty-two is, in essence, composed of two plus two, which equals four. The number twenty-two is obtained by adding thirteen and nine, which equals twenty-two, or four. The sum of four and nine is thirteen and, again, when these numbers are added together, the sum is four, stressing anew the remarkable versatility of this numerological symbol.

Further still, the nine hours of night also corresponded to nine steps, or layers of the Aztec underworld, or Mictlan, the residence of the dead. Here souls underwent nine tests before the completion of four years when the final resting

place would be attained. The image brings to mind Dante's Inferno, where, according to the transgressions of an individual while still living, the soul at death was assigned to one of nine circles to endure eternal punishment, but alas, had to wait a good deal longer than four years for the final day of judgement.

The number four influenced not only Aztec religious rites, but their daily life as well. What regards the latter, even the favorite game of *the ball* or *tlachtli*, was played in a special court, designed with four distinct corners, and explained by W. Bray, in Everyday Life of the Aztecs.

> It was played in a court laid out in the form of a capital 'I' with exaggerated cross-pieces... From the mid-point of each side-wall a stone ring (with a hole just big enough to allow the six-inch rubber ball to pass through) projected at right angles over the body of the court at a height of about 10 feet above the ground. The floor was of smooth plaster, and in the Codex Mendoza is shown divided into four quarters each of a different colour (42).

The illustrations of this game can be seen in the Codex Mendoza, on two different pages: 27 and 113. The game itself was very complex and dangerous. It consisted of four players who vigorously fought one another to the increasing excitement of the crowd. At the end of the game the winners were praised

and received many honors, while the losers were usually sacrificed.

Another popular game was the one of *voladores*. Here four young men climbed a "tall, slick pole, near the top of which was fastened a square wooden frame" (Caso, 80). The four players tied their legs to the frame and, jumping down started it moving, just like a wheel. In the meantime, a fifth man, stood at the top of the pole, playing the flute. Occasionally, in modern Mexico, during some particular religious festivities, a pole is erected for the *voladores* in the middle of a square, attracting a large crowd from the neighboring villages. Perhaps, this is now done in deference to those ancient gods of the past.

It is essential to question the reasoning behind placing such an enormous value to such a relatively low digit number as four. The Aztecs, however, viewed the number four not only from a mathematical perspective, but also for its mystical power of containing in itself a representation of the four corners of the earth and the cosmos.

On those corners stood the gods. The world was created. Man was made in the likeness of his creator. On those same corners sacrifices were offered to thank or placate the divine majesties that ruled over the Earth. And for those reasons, four natuarally expanded in significance. It symbolized cosmic power, expressed and referred to a vision of the

creation of the world and, along with the number two, represented the good and the bad, the living and the dead, in what is the never ending cycle of life.

CHAPTER IX

When examining the comprehensive approach taken by the Aztecs in regards to the creation of the world, of their gods, and of the sun, moon, and earth, both the numbers two and four particularly stand out and demonstrate their immensely complex roles. Examples of this dichotomy is most suggestive in such instances as in the way the gods were conceived, named, and attired, as well as in the many rituals that permeated this ancient society. For example, the name Omeyocan or *the place two*, where Ometecuhtli resided, was composed of *Ome* or two, and *can* a place.

Quetzalcoatl, one of the Aztecs primary gods (and one who may have originated in the Mayan cosmogony), through the many forms attributed to him, was basically divided into two forms. Girard relates that "...Quetzalcoatl [was] the Creative deity, whose name embodies the mythical bird and serpent, who creates men with its own blood and cares for them by feeding them with maize" (256). The god's name reflected his dual image. The first part, or the *quetzal*, referred to that of the bird, and the last part, or *coatl* meant a serpent. Here the bird could be contrasted to the serpent. The bird manifested the element of air, the spirit, and therefore the breath of heaven, while

the serpent took on the characteristics of the double image of water and earth. Earth, in turn, applied to the lower forces, since it consisted of the material with which the world was comprised. These two opposing forces of heaven and earth combined into one.

The image represented by these opposing forces can be broken down even further, especially when viewed in its relationship to some of the more powerful gods. For instance, Nigel Davies, regards that this duality

> is conceived in the form of an eternal struggle between the Plumed Serpent (Quetzalcoatl), a basically beneficent god,... and Smoking Mirror (Tezcatlipoca), the dark and all-powerful Lord of the Night Sky. The latter is a god greatly to be feared, but in some respect good as well as evil - a kind of creator-destructor (143).

Other significant aspects of the duality of the Aztec gods were clearly depicted in the Codices. Alfonso Caso's intricate description of the goddess of the sea and lakes, Chalchiuhtlicue, is a case in point. Carefully noting her form and dress, he writes:

> her attire consists mainly of ornaments of paper made from the amate [the bark of this tree was used to make paper], painted blue and white and tinted with melted rubber. The blue and white band with two large tassels, one hanging down on each side of the face, is an ever

recurring feature in portrayals of this goddess (44). Here, once again, the number two is distinctly delineated.

The Aztecs sculptured Mother Earth, better known as Coatlicue, into a huge statue that inspired horror and wonder. Caso has said that "the colossal statue of Coatlicue in the National Museum of Mexico surpasses in expressive force the more refined creations of peoples like the Mayas, whose concepts of life and the gods were expressed in more serene forms" (53).

Coatlicue, the goddess with "la falda de serpientes," revealed the perfect dichotomy of life and death. When her statue was unearthed in 1790 she provided an interesting study into the Aztec character. Bray relates that

> she wears a skirt of intertwined serpents held up by a belt in the form of a snake, and as mother and nurse of the gods she is shown with her breast bare. Her hands and feet have claws, for she feeds on corpses, and on her chest hangs a skull-pendant suspended from a necklace made of alternating human hearts and hands. Her head has been severed, and from the neck flow two streams of blood... Her other aspects were Cihuacoatl, goddess of childbirth, and Tlazolteotl (Eater of Filth) to whom penitents confessed their sins (163).

Coatlicue's task was to give life and take it away, reflecting the perennial cycle assigned to man and nature. The two

streams of blood flowing from her neck gave evidence of such opposites as life and death. And these contrasting characteristics broke down even further.

For example, one of the Aztecs most influential deities, was Tlazoltéotl, the goddess who was defined as one of three representations of Mother Earth. Her function was that of creator and destroyer. As Coatlicue, she was the lady of the skirt, of the serpents, and the Mother of the gods. As Cihuacóatl she was the serpent woman and the patron of women who died in childbirth. Finally, as Tlazoltéotl she was the goddess of filth. Vaillant writes of Tlazoltéotl in this way:

> she was extensively worshipped and was also synonymously known as the 'Mother of the Gods'. Primarily an earth-goddess, she, alone of the goddesses, had a moral significance, since in eating refuse, she consumed the sins of mankind, leaving them pure (185).

In the guise of the goddess of prostitutes and disease, Tlazoltéotl also manifested the positive traits of compassion and generosity towards all mankind, which permitted the cleansing of the soul, if not of the body, through the act of confession. Unlike the notion of confession in the Catholic Church, confessions to this goddess were only made once in a lifetime. Because of this stipulation, and because the Aztecs were a practical people who understood the weaknesses of the flesh, the unburdening of one's transgressions was usually

done at the time when death seemed inevitable.

After confession, the soul was considered to be cleansed and, therefore, able to start a new existence. This was conceived as a state of rebirth, in the same way that nature renews itself during the spring cycle of each year. Here then, Tlazoltéotl assumed the dual role of dirt and cleansing, of new and old, of regression and progression.

In the same way the creator god Xipe Totec also represented the renewal of life. This god was celebrated during the second month of the calendar year of three hundred and sixty days. The month was called Tlacaxipehualiztli and the first day of the month was dedicated to the god Tótec, also called Xipe, a day when slaves and prisoners were killed and flayed (Sahagún, Book II, 85). Xipe Totec had a large cult following among the Aztecs. This was because

> he was one of the creator gods, identified with the Red Tezcatlipoca, and his clothes and ornaments were red. His face, too, was painted red with a decoration of yellow bands, and he is often shown wearing a flayed human skin, symbolizing the covering of new vegetation with which the earth was clothed each springtime (Bray, 160).

Expressing duality through the many manifestations of their gods, the Aztecs revealed the complexity of their philosophy, and their ability to conjure the unseen into

something tangible and seeable. The Aztecs found their gods in the forces of nature and the supernatural. Each deity was a conglomerate of one and many. Each had different personalities, masked in different forms, thus stressing the qualities best suited to a particular situation. Even more important, each god represented and manifested traits which were judged most useful by the high priests and the ruling class. Only these individuals had the authority and the absolute power to interpret signs from above. And due to this prerogative, they were able to influence and compel their people, to accept the will of the gods.

In order to better understand the Aztec people, and how their lives were intricately involved with their deities, it is essential to relate certain myths and ceremonies through which the personality and conduct of the people were clearly delineated. For instance the myth of the creation of man was a clear example of such a relationship.

The god Quetzalcóatl, with his brother Xólotl, descended into the realm of the dead to collect the bones of man. The god of the underworld, Mictlantecuhtli, gave them the bones and then immediately regretted having done so.

> El cual dios del infierno le entregó solamente un hueso de una vara de largo, y tan pronto como lo hubo entregado, se arrepintió mucho, pues ésta era la cosa que más quería de todo cuanto poseía (Constantino, 30-31).

But by then Quetzalcoatl and Xólotl had run away. In anger, Mictlantecuhtli sent a group of birds after them. The birds caught up with the two gods and relentlessly began pecking them. In order to defend themselves from the attack they dropped the bones, shattering them into many pieces. After seeing what had happened, the remorseful Quetzalcóatl poured his blood over the bones and, by magic, the broken pieces formed into human beings of different genders and shapes.

In this myth the god Quetzalcoatl had given up his own blood for the creation of mankind. For that reason it was considered only proper that man should show his gratitude by offering himself in sacrifice. One sacrifice that was considered most befitting was the offering of the human heart, the ultimate gift, the most precious part of the body, in appreciation for the life received. Human blood was also used in sacrifice in order to ensure that Tonatiuh, the sun god, or "el luminoso o el que calienta" (Gonzales Torres, 52), would appear again in the sky to bring light to the world.

Small children were often sacrificed to Tlaloc, the rain god, who was considered to have the power to bring needed water in times of drought. This life giving attribute played an essential part in the life of the Aztec people.

Vaillant notes that Tlaloc shared one of the great temples with Huitzilopochtli and "his control of rain made the attraction of his powers essential to survival on the Mexican

plateau" (181-182).

The Aztec gods, in their many manifestations, demanded sacrifices. These bloody rituals were considered necessary in order to avoid incurring the wrath of the deities. So human immolations, whether of captured prisoners of war, or of slaves, or of the citizens of Tenochtitlan, were performed daily. Probably because of the regularity with which the rituals were performed, those who were spared became apathetic and indifferent to the slaughter.

The Aztecs, as a people, were notoriously courageous, especially when facing death. This same sort of courage was expected of their prisoners, captured during the endless skirmishes with neighboring tribes. These fights were primarily initiated for the main purpose of providing fresh victims for the insatiable gods.

The combative nature of the Aztecs was reflected in the myth of the cosmic birth of Huitzilopochtli. One day Coatlicue, Mother Earth, was sitting on a mountain top when a ball of feathers "fell on her and made her pregnant" (A. Hultkrantz, The Religions of the American Indians, 282). The child she was carrying was Huitzilopochtli. Though still in his mother's womb, the unborn god detected the jealousy that the pregnancy had created in his sister, Coyolxauhqui, and his four hundred brothers, and planned his retaliation. The instant he came out of his mother's womb, he was brandishing

a spear, "the Serpent of Fire (Xiuhcoatl) symbolic thereafter as the weapon of the god" (Davies, 15).

After birth Huitzilopochtli first threatened his brothers by chasing them into the sky where they became stars and formed the constellation Pleiades (thus through the image of the four hundred brothers the symbol of the number four hundred assumed, a large, unspecified quantity). Later, to complete his revenge, the implacable god found his sister Coyolxauhqui, decapitated her, and threw her body down a cliff.

With this final violent act, Huitzilopochtli manifested for his worshippers all the traits of a god of war. The Aztecs, in worshipping this god, became imbued in his bellicose nature. As a result, they developed into a militaristic society whose belligerent values were zealously followed usually to the detriment of neighboring tribesmen.

Mythology was an integral part of the Aztec philosophy. Through it the gods were given different names and aspects. Here the esoteric value of the number two expanded to acquire a variety of other values. These other numbers possessed a numerological and cosmic importance that permeated every facet of the lives of these ancient people.

By the middle of the sixteenth century both the Maya and the Aztecs had all but disappeared, taking with them their former influence. In order to answer the question of how

these great civilizations could have so quickly vanished, one must delve into a number of complex events. For what concerns the Maya, much is as yet unknown. Certainly, the answer must lie in the region where they once lived and flourished. The areas which they dominated reached from the Tropic of Cancer to the twentieth parallel, a zone of intense heat, sudden downpours, and a great forest of primordial importance. In order to construct their great cities, the Maya relied on a simple system of slash and burn when needing to create open spaces. Here farmers dedicated themselves to the difficult task of producing enough food for an ever expanding population, and here also the Maya built their immortal monuments.

Atmospheric conditions were inclement. The rains were frequent and so violent that they stripped the soil of its natural minerals, while generously dousing an already all too dense tropical forest. The Maya rulers and high priests, at some point in time, must have felt the futility of their situation. Their battle with the powerful forces of nature was a tough one, and one they were sure to lose.

Sometime between the fourteenth and fifteenth centuries, or maybe even earlier, the Maya had come in contact with their newest neighbors. The most agressive of which were the Aztecs. The militaristic nature of this new tribe may have in part contributed to the eventual downfall of the Maya. For

this, as well as other still speculative reasons, the Maya abandoned their cities and the land. Only a few villagers remained eking out a substandard living from a sterile soil, until they too disappeared either through famine, death or by absorption into the Aztec civilization, or that of other nearby native tribes.

J. Eric Thompson notes that "we shall...never know the Maya as we know sixteenth-century Spain or Elizabethan England" (The Rise and Fall of Maya Civilization, 13). In this he may be quite correct. Still Thompson postulates the most logical theory. He writes that "the attacks of uncivilized tribes in the remote north were...the indirect cause of the eclipse of Maya civilization, its gradual decline, and final collapse" (304).

In contrast, reasons for the collapse of the great Aztec civilization is far easier to explain. By the time Hernán Cortés landed around Vera Cruz in 1519, the Aztecs were already in a state of decadence. Bloodthirsty ritualistic slaughter was increased to the point that wars were fought to acquire new sacrificial victims. Like ancient Rome, they had reached an apex both culturally and philosophically. Thus the same people that had once built majestic pyramids were already in decline.

The reign of King Nezahualcóyotl, the philosopher who searched the stars for wisdom, was replaced by the emperor

Moctezuma, who had become obsessed by omens that predicted the end of his kingdom. To prevent his own downfall, Moctezuma accepted the dictum of his high priests who called for numerous blood sacrifices to placate the fickle gods. It has been said that "aside from his religious convictions, Moctezuma was superstitious and sensitive; he was also an amateur 'wizard' who dabbled in astrology" (Meyer and Sherman, The Course of Mexican History, 91). The King's constant requirement for the spilling of blood must have, not only antagonized the population of Tenochtitlán, but neighboring Indian tribes, who were continuously raided to provide prisoners for the ghastly sacrificial rites.

By the time the Spaniards arrived they had little difficulty in conquering the once valorous Aztecs. Gone was Cuauhtémoc, the last of the Aztec emperors who was tortured and killed by the Spanish. Having lost their latest ruler, the Aztec people had nothing more to fight for. The old world empire was replaced by its European enemy. The conquerors not only maimed and destroyed but brought with them new sicknesses, which decimated the native population. For the first time the Indians were exposed to such alien diseases as smallpox, venereal disease, and tuberculosis, that helped reduce a once vigorous empire.

Nahuatl, the native tongue of the Aztecs, had been replaced by a romance language, which was taught in

combination with a newly imposed religion. Life under these new masters was full of hardship. Everything from religion to custom was different and bewildering. Families, or what was left of them, had to separate. Most of the men were sent to work in the mines to satisfy the Spanish Conquistadores' lust for gold and silver. All these factors contributed to the eventual decimation of these proud and vigorous nation.

It is said that after every war, every revolution, the old guard is systematically replaced by the victor's own people. The Spaniards followed this same principle by eliminating the hierarchical leadership of the vanquished Aztec society. Those who remained and desired to survive had no choice but to meekly follow imposed directives and accept their new situation.

The Maya had already vanished. The Aztecs were soon to become a part of the past. The monuments of these two advanced civilizations were either buried in the tropical forest, or partially destroyed by invaders. With the merciless course of time much was lost. Soon a new epoch took shape. And now perhaps it is up to modern man to resurrect these ruins and piece together an history of societies long dead and gone.

PART III: SOME CONTEMPORARY INDIANS

CHAPTER X

Numerology as a basis for both the Maya and Aztec culture had an immense impact, not only on the myths of the creation of the world, but also on the myths that referred to these ancient's multiple deities. It has been shown how the great civilizations of old considered certain specific numbers as sacred, perceiving them as having a specific cosmic significance. The numbers were primarily zero, two, and four. While these particular symbols dominated, there were others of equal importance, like nine, thirteen, and twenty, that were also integrated into the philosophy of these people.

The numerological values that influenced the culture of some the contemporary American Indians is linked to the historical background of the two main civilizations that flourished in Central American and eventually disappeared. Their descendants later spread out among the many tribes that existed in Mexico, in parts of Central America, and all across the United States. Yet, while the previous civilizations' myths of the creation of the world were primarily contingent on numerology, the tribes of some of the contemporary American Indians seem to have somewhat deviated from this perception.

What is known of contemporary Indian beliefs, regarding a cosmic creation of the world is fairly limited, and there are several important reasons for the lack of data.

First, the number of tribes in the United States is extensive. Each tribe has its own language or dialect. Each one interprets the origin of life according to their immediate environment. After all, some of the Indians were hunters and gatherers while others were more agriculturally oriented. Hunters and gatherers were nomadic, following the large herds that moved in search of good grazing lands. In contrast, those who were primarily farmers lived a far more sedentary existence. All of these factors influenced the various American Indian tribes, especially in regard to their perception of the universe as described by myths and legends.

Second, the researcher (in this case, the *White Man*) interested in learning about a particular tribe or tribes encounters enormous difficulties. He or she has to become fluent in the language of the targeted group. And even then numerous obstacles must be overcome before the investigator can be accepted as an equal. In order to reach this status the researcher has to live among the Indians for a long period of time, has to show a sincere interest in their culture, and a desire to learn all about their customs, and above all to demonstrate no prejudice towards an often alien way of thinking. Only after the researcher sufficiently proves

himself or herself, will the tribe accept that individual on more or less equal terms, and perhaps reveal to that person its most sacred mystic truths. Ruth M. Underhill, who has had long term contact with the Indians of the United States of America by living for extended periods of time on numerous reservations, writes, in Red Man's Religion, that,

> the origin myth, in tribes that follow the old customs, is not lightly told to any who ask for it. Here I do not mean the adventurous and comic tales, mostly about animals, which may be entertainment and reminders of the tribal ethics...
>
> The actual genesis story was sacred and known only to specialists, something like the chained Bible in the medieval church (31).

Logically, what is kept secret from members of the tribe is even less likely to be revealed to an outsider, especially the *White Man* who, in most cases, represents the cruel defeat suffered by the Indian nation.

Third, American Indians have historically been the victims of persecution, either by the Spaniards, the conquerors of the Aztecs, or the French in the northern parts of the continent. There is overwhelming evidence of this kind of persecution in the case of the Yaqui in the Southwest, as well as certain tribes situated in the Eastern part of the United States or Mexico, where those considering themselves of

Spanish blood, ostracized and persecuted Indians still living on Mexican soil.

Fourth, one must look to the White Anglo-Saxon Protestants (or Catholics), perhaps the worst offenders, who, considering themselves superior to the Red Man, did everything they could to eliminate most of the Indians residing in the territories. In this manner the growing population of the United States, encountered few obstacles in their determination to take possession of the western lands beyond the Ohio river.

It is no wonder that the Indians found it exceedingly difficult to trust outsiders. To open up and reveal their innermost thoughts to a stranger was likened to giving themselves up entirely to the enemy.

Finally, what remained of the original philosophy of the Maya, Aztecs, and American Indians became very much diluted with time and distance. The great leaders were gone. What could be considered the *intelligentsia* had been eliminated and, with it, much of the sacred knowledge. The new people that emerged from these devastating events, had only vague memories of the past, which were now obscured, covered up, and substituted by the new customs and religious rites of their conquerors. Having been labeled as idols and works of the devil, the old gods were no longer there for the people to pray to.

Memories tend to fade in the course of time. Yet something of the past remains deeply entrenched in the hearts of the surviving American Indians. Stories and rituals often help to bring back lost memories of the past.

For the above as well as many other reasons, contemporary American Indians are in most cases very reluctant to share with the uninitiated what is to them most sacred and hidden. Among the Indians themselves, only the shamans, or those who have reached wisdom and knowledge, know the myths and the legends connected with their particular tribe. For the most part, the people themselves, respectfully follow the enunciations of their wise men.

Indians had inhabited the American continent since the last ice breakup, at which time the two continents, America and Asia, were one, making it easy for migration from one large section of land to another. Eventually atmospheric conditions changed, bringing a warmer climate. The ice melted and the Bering Strait appeared. The journeys from the western shores stopped. People now living on the American continent, began to spread south and east, while some remained in the frozen north, where the Eskimos still make their home. Yet migration into the interior continued until each tribe found the land best suited for its needs.

Today we find Indian tribes in every state of the United States, but the land they now occupy has been considerably

limited to the specific boundaries of their various reservations. For most tribes life is harsh, since the reservations allotted to them by the government were also the roughest and least profitable terrain, the soil which the white man found useless. The arid lands, better known as the *bad-lands* of the Southwest produced little, so that the living conditions were meager. Nowadays, many of the younger Indians leave the reservations to find work and opportunity outside their world. The ties with the tribe often break and, with it, they lose touch with the culture, community, and religion provided by the group.

The world of the *White Man* lures many youths with promises of luxury, and a blatant materialism, missing on the reservations. But whatever gains they think they might make, is at the expense of losing something far superior, which even the poorest tribe can offer its people, that of a simple life of unity and mutual respect.

The word *tribe* broadly signifies a *nation*. In this way one is apt to speak of the Sioux nation, the Cherokee nation, the Athabascan nation, and so forth. The tribes, in turn, subdivide into clans, or societies, each one separated, each with its own myth and legends, songs and dances, yet fully integrated with the tribe itself. For instance, in The Iroquois Book of Rites, H. Hale described the clan as

...simply a brotherhood, an aggregate of persons united

> by a common tie, sometimes of origin, sometimes merely of locality. These brotherhoods were not permanent, coalescing, vanishing (51).

In turn the clans or brotherhoods had a complex inter-relationship within the tribe as a whole. Robert H. Lowie points out that

> ...the clan differed from the family in being a unilateral group; whereas the family takes cognizance of both parents, a clan system one-sidedly ignored either in favor of the other... Though the clan neglected either patrilineal or matrilineal kindred, this does not mean that the people as a whole did so... What is meant, then, is simply that for certain specific purposes only one half of one's relatives counted, while in respect to other matters the half excluded from one's clan might be quite as important. For instance, the Omaha had patrilineal clans, so that a mother's bother was never in his sister's daughter's clan; yet he had to be consulted when his niece was to be married. On the other hand, the Crow clans were matrilineal; nevertheless, the father's relatives were entitled to respect and to gifts from their brother's children (Indians of the Plains, 90).

Furthermore, some of these clans or groups named themselves after an individual who had distinguished himself for some specific reason.

The exceptional individual may have had a vision which inspired him, or through which he may have obtained a gift, personal or supernatural. But through some form of supernatural occurrence he was considered able to either cure illnesses, give directions to his people, or foresee the future. These diviners, prophets and miracle-workers then became the medicine men or the shamans of their tribe, a word that originated from the Tungus in Siberia (Underhill, 85).

Though each tribe has its own language, many of these groups have certain similarities of expression according to their language's structural and phonetic characteristics. As an example, the group of the Huron-Iroquois comprise the tribes of the Mohawks, the Oneidas, the Onondagas, the Senecas, and also the Wyandots whose languages have much in common, thus permitting the various members to understand and make themselves understood to each other (9-10).

Another similarly constructed linguistic group is the Uto-Aztecan, which included not only the people from the Sierras of Sonora, but all the tribes populating the land between the Pacific Ocean and the Gulf of Mexico (D. Brinton, The Myths of the New World, 42).

Some characteristics that are suggestive of the common origins of most Indian tribes are the artifacts that archaeologists have uncovered in their many excavations. These pots, baskets, bows and arrows, and everyday tools,

though varied in design and coloring have basic, underlying similarities. The variations are primarily in the materials used, and these were due to the plants and minerals found in the surrounding village terrain while the shapes of the artifacts are nearly always identical.

On one point, there is almost an universal consistency between the Indian tribes, and this is in regards to an understanding, and a deep appreciation of nature. A branch of a tree, a bird, an insect, a rock is each in its own way a living thing, that can *speak*, that can appear in visions to the initiated, and become a guide and an inspiration to the group when conducting their daily affairs.

Nature is the mother that can be benevolent or cruel to her children. Therefore one must pray to her, respect and love her, while appreciating her many moods. It is in this compliance and comprehension of their immediate surroundings where numerology appears, most obviously in the many myths and legends of the creation of the world and humankind as perceived by some contemporary American Indians.

CHAPTER XI

De la tierra el origen
el mito de la creación
de las criaturas que aparecían,
¿A donde está la numerología?
(V. Anderson)

When referring to contemporary American Indians, one answer to the above question can be found in the works of such scholars as Daniel G. Brinton who writes that

> in effect a myth of creation is nowhere found among primitive nations. It seems repugnant to their reason. Dry land and animal life had a beginning, but not matter. A series of constructions and demolitions may conveniently be supposed for these. The analogy of nature, as seen in the vernal flowers springing up after the desolation of winter, of the sapling sprouting from the fallen trunk, of life everywhere rising from death, suggests such a view (234).

Perhaps this approach is far too extreme. Most of the American Indian tribes have a myth of creation. The myth might sound more like a legend, like a story which is

recounted by the elders in the form of a song usually accompanied by a dance. Yet these tales are still in essence vague myths, undefined, perhaps at times seemingly naive, but all the same sacred and respected by the whole tribe.

The tribal myths which related to the creation of the earth were known by very few people. Those who knew the stories were basically "the priests, the heads of clans or societies who learned the narrative from their predecessors" (Underhill, 31). These stories were often told only at winter time "during the four days of the winter solstice, when the sun stands still" (Underhill, Papago Indian Religion, 8). This was understandable as in the cold months of winter work around the villages subsided. More time was left for sitting in the tents in the evenings, while the bad weather outside made people appreciate the warmth of the fire, around which, the storytellers recounted the past, the power of the Spirit, the glory of their heroes.

The old myths relating to creation differed from tribe to tribe. Each interpreted these tales in their own way, applying their own viewpoint which also reflected a particular tribe's values. The storyteller knew what had to be stressed, what should be omitted, how to emphasize a certain part of the narrative in the hopes of it leaving a more lasting impression. The story, in this way, became not only part of the people's heritage, it also served as an instructional tool

in lieu of regular schooling for the young.

The mystical stories also referred to those places where the tribes had dwelled or, more than likely, where their ancestors first settled. For this reason if the original settlement happened to have been near water, be it an ocean, or lake, or river, the myth tended to project the earth's creation as originating from water. If the tribe occupied the lands of the interior, then the creation tended to be seen as an emergence from below ground.

When comparing the intricate cosmogony that formulated Maya and Aztec myths of the origin of the world with those of the contemporary American Indians, the basic differences are obvious. While the two more ancient and complex civilizations had a clear concept of creation based primarily on numerology, contemporary American Indians had an imprecise, often ill-defined, and confused explanation for their cosmic beginnings. Thus, numerology had, by this time, acquired a secondary position, which may best be explained after relating some of the popular myths of the earth's creation, as recounted by the Indians themselves.

One other noticeable difference between the Aztec-Maya culture and that of some contemporary American Indians, is in the latter's absence of the use of a specific deity as a focal point for the explanation of the origin of the beginning. Where an Ometéotl, a Creator, or a Tezcatlipoca, provided a

stimulus for the creation of the ancient's world, contemporary American Indians construct their myths with numerous, less specific deities. For example, Hultkrantz explains that,

> in the Indian world of religious conceptualization the supreme position is held by a divinity who surveys the course of events from his high abode in heaven. This is a being who many times appears only vaguely outlined and, as a result of his remoteness and the rarity of his interference in the immediate concerns of mortals, recalls a *deus otiosus* created by philosophical speculation and not inherently linked to religious belief. Neither cult nor mythology seems to give him much attention (15).

Sometimes this Supreme Being was envisioned as the Sun, high and remote. The sun was not, however, the deity of a totally heliocentric society. This god was represented in several different ways, depending on a specific American Indian tribe. Brinton suggests:

> the myths of creation rarely represent the sun as anterior to the world, but as manufactured by the 'old people' (Navajos); as kindled and set going by the first of men (Algonkins); as freed from some cave by a kindly deity (Haitians and Quichuas); as obtained by a god sacrificing himself on the fire (Nahuas) [reminiscent of the Aztec's creation of the sun myth]; as molded and

> started on its journey by the Light-god (Muyscas)...[and so forth] (167).

The Creator was conceptualized in other ways as well. Certain west coast Indian tribes viewed the beginning of the world from a slightly different perspective. Underhill relates that

> in the beginning, there was nothing at all. A Being floated about in nothingness and finally made the world by wishing, by commanding, or by using pieces of his own body (Red Man's Religion, 33).

She goes on to explain that the Zuni regarded the Creator, Awonawilona, as having "thought himself into being" (33). Finally, for some others, the Creator is "envisaged not indeed as a person, but as a Power in the sky to be treated with continual reverence (38). Essentially, American Indians viewed their Supreme Being under the many guises that suited their particular tribal philosophy of life.

There are other concepts of creation and the creator. One rather interesting depiction of a Supreme Being is that of the cosmic pillar. Hultkrantz explains that "the cosmic pillar, [was] perceived by numerous tribes to be the world tree as well, and symbolized in the cult system by the sacred pole" (23).

The notion of a cosmic pillar surely ties in with the thoughts of both the Maya and Aztecs, especially in reference

to the center of the kin or of the Aztec stone. This center was the fifth point, and was the place where the sacred tree of life, the Ceiba, sprouted and grew. Here then, contemporary American Indians, provide a similar allusion. Hultkrantz describes the cosmic pillar as

> ...uphold[ing] the vault of heaven...a notion of circum-Polar range, in America best exemplified among the plateau and coastal Indians in western Canada. The Bella Coola, for example, imagine on the western horizon a mighty pole, which supports the sky and prevents the sun from falling down on the earth. On top of this pole, which was erected by the highest god, is seated an eagle (23-24).

Here there is an obvious duality between the sky and the earth, the tree with its roots deep in the ground and the bird on top of the tree. The bird, likened to the spirit of heaven, contrasts with the roots growing deep into the earth.

Numerology acquires a greater significance in view of this duality, where the cosmic number two stands out clearly. The number two and the symbol of a bird also appears in the legends of the Indians of coastal Alaska and western Canada. The Athabascas, for example, and most of the northern tribes, believe the Creator to be a bird, usually a raven. His creation is described as follows:

> ...a Raven, a mighty bird, whose eyes were fire, whose

> glances were lightning, and the clapping of whose wings was thunder. On his descent to the ocean, the earth instantly rose and remained on the surface of the water. This omnipotent bird then called forth all the variety of animals (Brinton, 229).

Since the Athabascas lived along the northwestern coast of America, they proposed that the creation of earth and man originated from water. The raven, as the Supreme Being, is the spirit, the air, the force that from the height of heaven has the power to descend to earth and create it. Once more a numerical definition applies to the syncretism of heaven and earth, and, as it was with the Aztecs, the Creator is depicted zoomorphically, in this case, as a bird.

It has been shown how various American Indian tribes viewed the creative force that molded the earth. From an abstract Supreme Being to the more concrete raven, American Indians place great stress on nature. Nature takes on the cloak of the powerful, beneficent mother who is both the giver and taker of life, much like the goddess Coatlicue, yet far less grotesquely depicted.

The myth of the creation of the earth as envisioned by the Crows, again manifests the belief that creation originated in water. This myth had several versions. In all its variants, however, the Supreme Being is referred to as Old-Man-Coyote, who looks upon a world encased in water. His only

companions are four ducks. At the time of creation Old-Man-Coyote asks the birds to dive into the water in search of mud with which he will form the earth. In response to his request three ducks dive in, but each one is unsuccessful. Only the fourth duck brings up some mud attached to his webbed paws. Old-Man-Coyote is very pleased and says: "to every undertaking there are always four trials; you have achieved it" (R.Lowie, Anthropological Papers of the American Museum of Natural History, 14). Thus the earth was formed.

In another version of this same myth, Old-Man-Coyote and the ducks, see a man. Old-Man-Coyote points him out and says:

> look, yonder is a human being. There are more of them. That one is one of the Stars above. He is down here now and standing on the ground (15).

On their approach, however, the man transforms himself, and they find a Tobacco plant growing by itself. Then these words were spoken, commanding to the people that

> from now on all the people shall have this [the tobacco], take it in the spring and raise it. It is the Stars above that have assumed this form, and they will take care of you. This is the Tobacco plant. Take care of it and it will be the means of your living (15).

The tobacco plant was essential among many American Indian tribes, as it was revered and used in ceremonies, when the elders, and the chiefs sat in a circle passing around the

sacred pipe and smoking. For instance, in Papago mythology tobacco assumed such fame that songs and dances were done in its honor. Ruth Underhill writes that

> tobacco songs were not sung in public. Tobacco must be planted far from the village, for if any one other than the planter looked on it while it was sprouting, it would sink back into the ground. If a menstruating woman should pass near it at any time, it would wither. Therefore it was planted only by certain men who knew the ritual (Papago Indian Religion, 83).

As tobacco was part of the world of nature, it quickly took on the qualities given a religious symbol.

In yet another version of the creation myth, Old-Man-Coyote is assisted by four different creatures. These animals are a little swallow, a crow, a wolf, and a duck as *earth-divers*. These animals searched the waters to find mud. Once the mud was obtained, Old-Man-Coyote formed the land and its inhabitants.

> He took this mud and made human beings, one male, and one female. From this little mud he made us people. When a child was born, it was a boy. The next time a girl was born. Now they increased, that is how the people became numerous (Lowie, 16).

The Crows were not the only people who believed that water was the first element from which everything else originated.

The Muskogee, a tribe that lived in the central part of Alabama, also assumed that the earth originated from water. They believed that "...solid land had come from the expansion of a bit of earth brought from the edges of the world or from the bottom of the ocean" (E.Parsons, American Indian Life, 144).

Most American Indian myths of creation express a fundamental assumption in the power of the number four. This number attains a cosmic, mystic potential. That is why, in the many stories thus far related, there is a repetitive use of the number four. As an example there were four ducks, four trials, four animals. This number provided an avenue of expression for the earth-mother tradition of some American Indians tribal philosophies.

Water, however, was not the only medium for the evolution of earth and man. The Pueblo Indians of the Rio Grande Valley thought the world was formed through a crack in the underworld. Other Indians like the Tewa, from Taos, New Mexico, also expressed a similar credence in what is known as the "emergence myth". Edgar Hewett writes:

> according to the Tewa, there is an underworld where the sun shines at night, pale like the moon. They believe that the human race and the lower animals lived there until they found their way through *Sip'ophe* and entered the world... It is their belief that when the sun sets

> in the west it passes through a lake and enters the underworld, passing through the latter to reach the east again... Beneath this world are four lower worlds: the lowest is a white world; the second, red; next, a blue world; and the fourth, yellow (The Pueblo Indian World, 23).

While the Tewa thought they originally emerged from the underworld, the Keres, another Pueblo Indian tribe, relate how they entered the world from two caves, called *Keres holes*, located near La Cueva, in Taos County, New Mexico (24).

The Papago and Pima also believed that they came from an underworld. Their myth was very complicated and long. The elders recounted it through dances and songs. There were several such versions, each intricately related to the other. Ruth Underhill relates the course of events that took place in the beginning. Below is a partial list from her work:

> 1. In the beginning, all was darkness. Earthmaker and Yellow Buzzard were floating in the void. They met four times, and each urged the other to make a world.
>
> 2. Earthmaker took 'something from his heart,' or 'the dirt from his skin,' placed it in the palm of his hand, and a green branch grew from it. This was the greasewood. The lice on the plant produced a gum, as they do still, and from this Earthmaker formed a world. He pounded it, singing, and it flattened out (Papago

Indian Religion, 8-9).

The myths continues by mentioning a catastrophe in the form of a flood that brought about upheaval and destruction. The fourth event produced a being.

> 4. The earth spread until it reached the edge of the sky dome, then it spun around until the edges were joined. From this union sprang a being who leaped up and down four times, shouting: 'I am the child of earth and sky' (9).

Later the Santa Rosa growth ceremonies described a hole that "could not be stopped until four children, two of each sex, were dropped into it" (11).

Once again the essential number is four. In the above related myths the numeral assumes a powerful potential, that of life itself. It is well to note, however, that not all American Indian myths so clearly depict a particular cosmically powerful number. Often the myths are vague due to perhaps a hazy recollection of the original words which were orally passed from generation to generation, and because each storyteller tended to embellish the presentation, thus making changes that further obscured the original meaning.

One of the Navajo myths gives another example of creation through emergency. Hasteen Klah relates the story thus:

> ...Begochiddy, the Great God, and several powers, or Demigods, and a form of human being first created were

> living in an underworld of darkness. They climb up from world to world of increasing light, creating more forms of life until finally emerging on this world and creating Man of the substance of the whole universe. In this, Begochiddy, the Great God, is the moving and directing spirit, but is not arbitrary in his creative action, for on every occasion when something has to be decided or done, he calls a Council and acts only when there has been a discussion (Navajo Creation Myth, 15).

Like the Crow and others, the Navajo have several versions of this same myth. In another rendition the Navajo explain that Begochiddy created four worlds, giving each certain laws that governed that world.

> After Begochiddy had created these things he gave them *Tsa-tlai* (First Law). In the first world there was one law, in the second two laws, in the third three laws, and in the fourth four laws (40).

The preceding legends represent cases where the world was destroyed and rebuilt. After each cataclysm man was destroyed as well. The important aspect in these events is the consistent belief that "...man can be made over in body and mind by belief and ritual, and that though weak and full of faults, if he shows courage and enterprise, he can be made powerful by the powers above" (17).

Various oral tales describe the number four as a potent

force that expressed the Navajo philosophy of life. There is also a marked correlation to the Aztec formula of the creation and destruction of the world. The fourth human being that was created for both the Aztecs and Navajos was made of maize, the staple food of all the Indians. The Navajos say that these "...new people ate some white corn, for, although they were made of corn, it was good for them to eat it, and the Navajos live on corn today" (104).

All the myths of the contemporary American Indians, examined here, whether describing creation from water or through some form of emergence, express several important points.

First, creation usually occurred through the action of some animal or animals. These were chosen to represent the area from which creation was supposed to have taken place. If the tribe lived in the northern part of the United States, then eagles, ravens, or other animals typical of the location, would be employed to start the process for the birth of the world. If the tribe was located in the plains or the arid lands, then coyotes, gophers, and creatures particular to such terrain, were spoken of.

Second, in contrast with the two great civilizations which preceded them, the Maya and the Aztecs, contemporary American Indians did not graphically depict their creators. There is no evidence of codices or carefully inscribed

monuments to the gods. There is almost no written inscription or pictures of these deities. Instead, contemporary Indians imagined their gods, feeling them as manifestations of nature. These were special supernatural beings, to be revered as the elements of the earth itself. Hultkrantz points out that

> ...the Indians religious perspective centers around the supernatural world, populated by gods and spirits but also by human beings, animals, plants, and inanimate objects, for the supernatural breaks through into the everyday world. Its foremost means of expression is supernatural power, at times perceived as a specific, defined potency, at times merely experienced as a psychological reality underlying supernatural occurrences (14).

In this way the wind, the lightning, the rain and the snow are all manifestations of the forces of nature, that are an essential part of man's physical and psychological sphere. These forces are in some way expressions of supernatural wishes. They are to be revered in every aspect of their manifestations whether through dreams or some concrete reality. In this same way numerology is effectively used to define the potentially powerful world envisioned by some contemporary American Indian tribes.

CHAPTER XII

Numerology for some contemporary American Indians was clearly defined by the mystical and magical number four. This number apparently dominated many aspects of Indian life, such as in ceremonies that were performed at the time of birth and death. Four took on a sacred meaning, which was ingrained in the hearts and minds of these people, who tended to perform most actions through a ritualistic application of this number. First of all, the number four related to the four cardinal points. On these points, north, south, east, and west, everything was based. They were symbolically representative of life on earth. Just as the sun rose in the east, so life was considered to flow from this same direction. And as the sun set in the west life ebbed towards that part of the world.

The previous chapter has shown how the number four related to the various myths of creation as told by a number of American Indians. The Muskogee, for instance, recounted that "four 'light beings' from the corners of the world had brought the knowledge of the *poskita* [the Great Fast] to them and had lighted their first *poskita* fire" (Parsons, 144). According to the Navajo myth, Begochiddy brought about the emergence of four worlds (Klah, 39-51).

The Papagos spoke of an initiator, a being who "leaped up and down four times, shouting: 'I am the child of earth and sky'" (Underhill, Papago Indian Religion, 9). The I'itoi who was described as "a small man with a beard and white, or golden, hair" and who was later killed, remained "dead for four years, after which he came to life and revived himself by means of the four winds". Following this event the "underground people...came out in four stages" (11). There is evidence that the number four was the predominant numeral in this particular creation myth, demonstrating its powerful ceremonial importance.

> The Hopi myth of creation, describes a Spider Woman who: ...gathered earth, this time of four colors, yellow, red, white, and black; mixed with *túchvala*, the liquid of her mouth; molded them; and covered them with her white-substance cape which was the creative wisdom itself... And when she uncovered them these forms were human beings... Then she created four other beings after her own form. They were *wúti*, female partners, for the first four male beings (Frank Waters, Book of the Hopi, 5).

Apparently the Hopi also envisioned the formation of the world in four stages, where for them its cosmic value was self-evident.

In a collection of tales from a number of American Indian tribes, Elsie Clews Parsons, includes the account of how

Little-Wolf Joins the Medicine Lodge. In the initiation ritual that followed, Little-wolf of the Wave clan of the Menomini tribe, from Green Bay, Lake Michigan, brought gifts to the old man of the lodge. These gifts were in and of themselves symbolic of the essential importance of numbers, and in this case, once again the primacy of the number four was clearly demonstrated. When the old man unwrapped the bearskin he exclaimed:

> These are valuable gifts, and in the proper number. Four hatchets, four spears, and four knives of the sacred yellow rock (native copper), four belts of white wampum, and four garments of tanned deerskin, embroidered with quillwork, with much tobacco (65).

The initiation itself then took place on the evening of the fourth day at the time of the Medicine ceremony. The story teller related that:

> [t]he preceding three days and nights had been spent by the four masters, led by Terrible-eagle, in preparing Little-wolf within a room, formed by curtaining off one end of the lodge proper; in giving him his ceremonial sweat bath of purification; and in hanging the initiation fees, four sets of valuable goods--clothing, robes, weapons, copper utensils--on the ridgepole at the eastern end of the lodge; and in dedicating them...
>
> [Then] as the sun set, the four old men and the candidate

entered the lodge...(71).

In this case the number four clearly assumes the role of a ritualistic symbol.

Not only in life, but in death as well, the central ceremonial number was that of four. When a man died among the Muskogee, he was buried in a trench four feet deep, beneath the floor of his own house, followed by a numerologically significant period of mourning.

> ...for four days the women of his family bewailed his death with loud howling.... The hair of a widow was unbound for four years, she discarded all ornaments, and was compelled to absent herself from all merry-makings. At the fourth poskita she was formally released by her husband's sister and either provided with a new husband from the same clan,--or clan connection,--or set free to marry whomever she chose. For a widower the period of mourning was only four months (136).

Other tribes like the Algonkins and the Dakotas considered themselves originally related to four ancestors that were "very positively identified with the four winds" (Brinton, 94) The Creeks, on the other hand, formulated a somewhat different theory of their origin. They "told of four men who came from the four corners of the earth..." (94-95).

Another group of American Indians, the Blackfeet, arranged "the glacial boulders on the prairies, in the form of

a cross, in honor, they said of Natose 'the Old Man who sends the winds'" (115). This cross can be considered a metaphoric representation of the number four, or the four cardinal directions; while, at the same time, symbolizing the human body, arms outstretched, and the central point being the navel, from which life was assumed to have sprung.

George Webb describes the Pima Indian round-house as having been built "around four center posts, next to the wall there were sleeping mats made from yucca leaves" (A Pima Remembers, 16). Not only in the construction of their buildings, but in their relationships with other tribes, Pima customs were often expressed through the application of the number four. When a warrior

> killed an enemy, he had to fast for four days. During those four days the medicine-man was very busy shaking the rattle, drawing buzzard feathers back and forth over the hero's body and blowing tobacco smoke and singing to drive the evil spirits away (33).

The four days fasting, in the presence of the medicine-man, cleansed the body and the soul of the hero who in the act of killing was made conscious of the value of life. This ritual was somewhat reminiscent of the Aztec final confession to the goddess Tlazoltéotl. Although in Aztec society an individual underwent the ritual of purification only once in a lifetime, among the Pima the ritual was repeated whenever

necessary. A brave warrior felt the impact of his action, that of annihilating his enemy, and thus cleansed himself through four days of fasting.

In each instance of American Indian ceremonial life, as well as in their stories of the creation of man, an emphasis was often placed on the number four, consequently allowing it to assume a high rank.

Still not all American Indian tribes found a basis in this particular earth magic related numeral. One tribe, the Yaquis of Arizona, deviated from the norm. Both psychologically and culturally the deviation from the old numerological formula was due in part to extensive contact with an alien culture. Edward Spicer relates that the Yaquis have

> been experiencing an acculturation process, ever since the early 1600's, which has resulted in an intricate interpretation of aboriginal and Spanish cultural elements.... The Yaquis of Arizona, in making their adjustment to the cultural milieu of the United States, have preserved in striking fashion the Spanish-Indian forms of social and ceremonial organization which had been developed in Sonora by the 1880's (Pascua, xvii).

For the Yaquis, numerology was solely significant in its relevancy to the numbers valued by the Catholic or Christian church.

For example, ceremonial life, for the Yaquis, revolved around

> ...the calendar of the Catholic church. All the fixed dates, which constitute about two-thirds of all ceremonial occasions, are Catholic ones. The other third consists of personal crises, which, of course, occur at any time during a year. These latter also, with a few exceptions, have the sanction of the Catholic church.... Only the *fiesta de promesa* (which is given in honor of a god in return for assistance in curing) and certain kind of 'confirmation' seem to be distinctly Yaqui (205).

Thus, in this case, numerology took on a distinctively Christian slant, as opposed to the old numerological correspondences of such ancient cultures as that of the Maya and Aztec civilizations.

For the Yaquis, the ancient myths of the creation of the world, have been supplanted by a decidedly Catholicized version of this same event. There was still, however, a myth that was often told among the Yaquis, and which was said to relate to a story of creation. The account of the *talking stick*, is till today mentioned in Yaquis deer songs. The words of this song are:

> Sometime in the past the tree talked.
> All the elders do not know of it,
> But, yes, some wise ones spoke of it.

When the world was becoming new here,
There was one that could hear the sounds of the tree.
The one who could hear it,
That one told about it.
They were things from long ago,
But only one could hear it.
That talking stick was a long time ago.
When the earth was becoming new here,
When the Surem lived here,
When they lived here, that is when the stick talked.
When it talked, it was just like a song (L. Evers, Yaqui Deer Songs Maso Bwikam, 35-36).

Perhaps, one could hypothesize that for the Yaqui the *talking stick* refers to the branches of trees found in the Sonora desert. No matter what the origins a great value was placed on sound, or the song. These sounds

> that need to be understood may come from fishes, caves, or invading Spaniards. They may be a part of what we call myth, history, vision, or dream, but time and again in Yaqui stories the people must understand sound from beyond the limits of the everyday language of their communities in order to continue. In this sense there are no creators in Yaqui tradition, only translators. All beginnings are translations (36).

Consequently, sound may be best expressed by the oral

tradition, where the human voice recounted the beginning. Here the words were repeated like a mantra, giving the songs a sacred and mystical quality:

So one stick may be talking, talking,

So one stick may be talking, talking... (36).

In this case the singers, and listeners, find themselves in an hypnotic state, a trance, opening a door to the subconscious, where the translator will not be needed anymore. Yet these songs were limited to the sphere of the oral tradition. The old knowledge, thus, was being eroded and losing its power because of its narrow scope. Spicer writes that "knowledge of the deer songs is limited to a few specialists (the deer-dancer's musicians), and the myths are imperfectly known, mainly by a few of the older persons" (239).

Thus it was easy to supplant the old songs with stories from the Bible as they had been taught to the Yaquis by the Catholic priests. One version of the Yaqui myth of creation remains, but it too is tarnished by Christianization. This is the story of Jomu'muli, an old and wise Yaqui woman, that refers to a tree "without branches, like a telephone pole.... that kept vibrating all the time" (240). Jomu'muli was the only one that could interpret this sound, and through her translation she saw or foresaw the future in which the ones

who didn't believe the talking stick went into the ground

and remained Suris. The others were baptized and they are the Yaquis" (240).

This myth, as Spicer rightly assumes, is in reality a "synthetic version" (p.240), of the old *talking stick* myth.

Some years ago, under the guidance of Instructional Specialist in Mexican American Studies, Dr. Kieran McCarty of the University of Arizona, I was able to interview a local Yaqui woman and question her about life in the Yaquis community in Tucson. As Mary (later married to her second husband a gentleman named Vanalstine) recounted her life she implied that the most influential role model for her as a child was that of her grandmother. Although Mary was born and raised in Arizona, her grandmother had lived in Sonora Mexico, during the time of the Mexican government's persecution of the Yaquis people.

These were difficult times for the tribe. Those members of the tribe who were not killed or deported to Yucatan, escaped to Arizona, or the adjacent states of New Mexico and California. The majority of the Yaquis settled in Arizona, where they found work picking cotton or with the local

railroad. The pay was inadequate and the living conditions poor. Mary's Grandmother, sold tortillas, tacos, piñoles, and any other vegetables that managed to grow in the desert heat, in order to help her family survive.

Although the grandmother did not belong to any of the women's associations of her time, as was the custom among the Yaquis, she was recognized as a community leader. As such she counseled and helped her people in a variety of ways. For instance, she taught the women how to preserve food, how to serve as midwives, or cure illnesses through the application of medicinal herbs.

When asked what numbers had significance to her in her religious life, Mary spoke of three essential numerals. These were the numbers three, twelve, and fifteen. No importance was placed on the essential numbers of the ancient Indian civilizations such as zero, four, and twenty. Thus, through the process of assimilation, the Yaquis must have lost most of their ties with the ancient world. Here was an American Indian tribe that had almost completely severed its links with the past. In place of the old myths the Christian religion dominated supreme.

Numerology for the Yaquis is presently based on the number three, the symbol of the Trinity. The number four no longer has even a tenuous significance. In the Easter procession, the most important Yaquis ceremony, the essential

value of the number three is demonstrated in the image of three Yaquis women, representing the three Marys who were present at the time of Christ's crucifixion.

At the age of six or seven, Mary was formally initiated into Yaqui society. During the ceremony a red crown was placed on the child's head. The color red represented the blood from Christ's head on the cross. The ribbons, falling down from the crown, were dyed green, symbolizing the tree of life. Next, a white cloth was also placed on the child's head, as a symbol of the purity of the Virgin Mary.

According to Yaqui tradition, the *maestro* (a lay Catholic priest and the highest member of male Yaqui society) together with the senior *cantora* (a member of the female Yaqui society) became the godparents of the child, or padrino and madrina. These senior adults wrapped a scarf around the girl, exchanging places three times. At the conclusion of the ceremony, relatives and friends shook hands with each other three times.

During some of the main Yaqui ceremonies one finds a certain emphasis on numerology. For instance, the service at wakes is sung in three different languages: Latin, Spanish, and Yaqui. The number three, in this case, is of primary importance. This same numeral also appears in the ritual of the deer dance. The Yaquis' *maso bwikam*, or deer songs, [were] a traditional kind of Yaquis song usually sung by three

men to accompany the performance of the deer dancer" (Evers, 7). These songs are performed during a *pahko*, or religious observance, and are "...part of a ritual carried out before the hunting of deer and, for that reason,...the deer singers have a central place in most *pahkom*" (73).

Another highly placed number is twelve. Twelve is a multiple of three, and so easily corresponds to the number three since twelve is written by placing the numerals one and two side by side. Twelve also refers to the twelve apostles, and the twelve months of the year. As an example of the weight of this number, Mary said that at funerals the maestro addresses the mourners during a farewell speech, expressing the hope that they will be together again in twelve months, or in Yaqui "womani 'woy".

The number fifteen is essential to the ceremony performed on the Wednesday before Easter. At this time members of the church light fifteen candles. During the following period of observance, the burning candles are turned off two at a time, until only one remains. The maestro then blows out the last candle on the eve of Easter Day. These fifteen candles, turned off two at a time, may also be representative of the number seven, that is, the seven days of the week, plus one candle blown out at nighttime, and symbolic of the darkness before the resurrection and the light of Easter Sunday.

Mary also described the Yaqui rosary, the beads of which

are made of beans. Between every ten beans are two extra, or double beans, which can be interpreted as the duality of God/Christ, heaven/earth, night/day, life/death, good/bad.

The Yaquis value their rosary, which they use in many ceremonies. One important rite is the funeral ceremony of a society member. In this ritual,

> [t]he body must be outfitted with certain insignia which insure that he will be recognized in the next world as having the social personality he had in this. In the first place, it must be indicated that he was baptized in the church and, moreover, that he was a Yaqui. This is accomplished by tying a small cross to his right thumb and by placing at least six 'Yaqui-type' rosaries about his neck (Spicer, 250).

Spicer goes on to explain that,

> [t]he rosary, as among orthodox Catholics, is regarded as especially connected with the Virgin. Every tenth bead on it is called Holy Mary (Santa María) and is said by many to be a symbol of the Holy Cross (257).

The rosary then, assumes in itself a double numeral, that of twelve and nine, as the beads are counted in the prayers of the novena. Both are multiples of three. As a result it becomes more and more evident that the supreme number is three, which is the mystic and sacred number of the Catholic religion.

Very little is left of the original ancient thoughts and religious beliefs of the Yaquis people. Everything is now coated by the new religion that permeates every facet of the Yaquis life. Even the Easter celebration, although it has undertones of the old crede, is primarily Catholic. The deer dances, the deer songs, relate nostalgically to a past long dead and gone of which little is remembered. The *talking stick*, the legend of Jomu'muli, are now known only by the old people.

Like the Yaqui poet, Refugio Savala, today's Yaqui youths, are "...caught between Mexican and American nationalities, Yaqui and Anglo culture..." (Autobiography of a Yaqui Poet, 218). Thus, the uncertainty, the nether world, these Indians have been forced to live in, keeps the past locked away, perhaps forever lost in the mist of eternity.

For Mary, like for many other Yaquis, life is now influenced by membership in an Arizona based Catholic church. The past is often remembered, but the person that could inspire her to remember, her grandmother, is now gone forever. With her, with "mala'yowe", as she was called with love and respect, went also the knowledge of much of the original Yaquis culture.

Numerology, so important and valuable to the previous civilizations, was now superseded by the esoteric numerals of the Christian religion. In much the same way as the original

Yaquis' myths, numerology in American Indian life, has been subtly eroded by outside influences, completely changing the vision the tribe may once have had of the creation of the world and man.

CONCLUSION

CHAPTER XIII

When taking a further and more in depth look at the system of numerology, it is possible to draw several conclusions.

In a close examination of the Maya myth of creation it is immediately evident that the greatest symbolic and mystical power is ascribed exclusively to the zero. This number was, in essence, the primary representative of the beginning of the world's creation. From the zero everything appeared, developed and formed into different shapes. From the zero life sprung in all its force and splendor. From zero the Maya themselves emerged and developed a rich and complex culture, that till now awes archaeologists and scholars from all over the world. Not everything about this complex society is clearly understood, much is veiled in mystery. Scholars like Alfonso Caso, J. Eric Thompson, Miguel León-Portilla and others, spent years of research to unveil even a part of the mystery and give the world a chance to have a glimpse of a great civilization like that of the Maya.

Many questions about the Maya still remain unanswered. For instance, who were they, why did they construct such

majestic buildings only to abandon them to the tenacious forest undergrowth, how had they acquired such an intimate knowledge of such advanced sciences as astronomy, and were able to accurately predict natural disasters? These questions are part of a puzzle that, till now, scholars are trying to piece together in order to learn more about these extraordinary people.

Possibly further excavations, and a more thorough understanding of the glyphs will eventually answer some of these gnawing questions. For the time being the Maya are still very much an enigma. Whether in some future date someone will be able to provide the world with a clearer appreciation of this civilization is unknown. What is known as fact is that they existed and left to the world a complex culture and wisdom from which much can be learned.

Most probably the Maya were somehow related to some previous advanced culture that had in its time also disappeared. The suggestion of their relation to the lost continent of Atlantis, if it can be taken as a serious possibility, is an appealing one. In that theory one can understand the origins of Maya culture, and in some way explain their extraordinary advanced scientific background.

This tenuous theory could also explain such similar constructions, as the pyramids, found in Egypt, in Burma, in America, or even the strange, enormous heads of Easter Island,

and the ones carved by the Olmecs of Latin America. All these similarities can be explained if archaeologists could somehow discover one great society from which all these other civilizations stemmed from and later spread to the various continents of the Earth. Perhaps sometime in the future the truth will be revealed. Until then one is left with numerous theories and a variety of interesting possibilities.

The cosmos, dotted with its myriad of stars, planets and other celestial bodies, is not a static one. Science tells us that it too must have had a beginning, one that may very well collapse in on itself, ending as the black hole of a dying star. From the beginning of creation, whether it came about as one single explosion (as the big bang theory contends) or was the will of some omnipotent being or god, zero played the initial role. From the concept of zero or nothing the universe expanded to form worlds from which numbers naturally grew and developed.

The Maya depicted the cosmic beginning with a simple glyph, that of a shell. The whole of creation is, therefore, locked into this microcosmic representation of heaven, earth, the seen, the unseen, and the sound or vibratory beginning. The shell connotes all these things and more. And, it is perhaps, in this simple principle, the concept of one single origin, that explains the greatness of the Maya philosophy. The Christian religion might call this origin as God, the

Hindus and Buddhists might interpret it as the sound Aum, scientists might describe it as the first nuclear reaction or the Big Bang. But this burst of creative energy must have come from some unspecified nothing, from the shell, whose curved encasement winds and unwinds into eternity.

In contrast to the Maya, numerology, for the Aztecs, was interpreted by an array of multiple deities. While the Maya could be considered more spiritually inclined in their interpretation of the cosmos, the Aztecs were far more practical. They must have felt that the idea of only one beginning was too limiting, and preferred a variety of approaches to this question. Thus, ordinary people were supplied with a number of inventive choices, by picking the creator-god best representing their immediate needs, and ascribing to that force the power of origin.

Surely the high priests of the Aztecs realized the possibility of a beginning from nothing, from some highly condensed matter that exploded, that created. Yet they must have felt that their people could be more easily managed, if they could have some concrete representation, under the guise of very human-like gods and goddesses. After all, these deities were nothing more than different manifestations of the same god, the same principle. The masks of each god "represented some ambiguous presences with which people had to deal in everyday life; in fact they were supposed to be

ambivalent: propitious when propitiated, dangerous when offended" (Myths and Symbols. Studies in honor of Mircea Eliade, Edited by Kitagawa, 3). Although the former quote refers to the gods of the Buddhist people, it quite adequately describes the gods of the Aztecs. They were indeed propitious and played an essential role in the daily existence of the common people, thus they were the deities of the masses.

In formulating the myths of the creation of the world, the Aztecs favored the number two, a number very much predominant in their philosophy. To them two was the true principle of the origin of life. Heaven and earth, day and night, life and death, male and female, like the face of the Roman god Janus who displayed two opposing features, expressed all that was visible or, better yet, known in the world around them. From this duality the world had been created and expanded into a diversity of life forms.

While two was at the base of the Aztec thoughts on creation, the number four, stemming from two, took on an importance all its own. Four was the four cardinal points of the world, it was north, south, east, and west, it was a reality in a temporal world. So it was said that

> ...Tlaloc, god of rains and the waters, ruler of the terrestrial paradise and the season of summer, manifested himself under the three attributes of the flash, the thunderbolt, and the thunder (Brinton, 188).

These three attributes of Tlaloc, being all a part of him, formed, altogether, the essential number four.

The contemporary American Indians have also fully adopted the number four. For them this number was not so much represented by a god or gods, but was symbolic, once again, of the four cardinal points, which was to them nature itself.

Why was there such a stress placed on these points. The most plausible explanation, is that these points were intricately connected with the Earth mother. Contemporary American Indians' lifestyle centered primarily on a worship of nature. Since many of the tribes were nomadic, their environment was considered both teacher and guide. From learning to read the many signs around them the people ably found food and shelter. Even when building their houses a harmony with their natural habitat was maintained. The doors of their huts, or houses, faced the east, where the first sun appeared. George Webb, in his book A Pima Remembers describes the house of his childhood as

> [a] round-house, made of mesquite posts, willow and arrow weeds. This type of house is no longer used. It was enclosed all around, with a little dirt and straw on top to keep the rain out. The only opening was a small hole about two feet wide and four feet high which was used as a door. This door was always to the east (16).

Webb later goes on to explain that there were also, "four

center posts" built inside the round-house (16).

The entrance to the tipi of the Indians of the Plains had "a narrow opening in the cover, [that] generally faced east" (Lowie, Indians of the Plains, 32). These directional points proved of extreme importance to the Indians. Not having a compass, they relied on the stars, on the mountains, on rock formations, or other natural signs to find their way. Nature was the Supreme Being for these people. In honor of it, and as a matter of survival, they familiarized themselves with its every facet and mood.

The natural world for the American Indians was the mother that praised and punished her children. And because of their deep knowledge and reverence, the Indians honored, feared, and respected all of nature's manifestations. Every creature, every being, whether an animal, a tree, a rock, or a spring, was an expression of the natural world. An ant or a gust of wind *spoke* to them with words of magic, with words the Indian people understood and abided by.

Because of their intimate relationship with the natural world, the American Indians myth of the creation of the world and man was expressed with words that represented the world around them. The emergence myth, that of man's appearance through an underworld or the water, was one such expression. This myth may have very well stemmed from observations of live births. From the placenta, containing water, to the

uterus, from the various stages of fetal development to its final emergence into the open, in the sunlight, there is a basis for the concept of emergence. In this same myth there were also said to be four stages or levels to pass through before appearing in the world.

Perhaps, contemporary American Indians did not reach the sophisticated knowledge of both the Maya and the Aztecs. The ruins they left of their dwellings, like the ones of the Anasazi carved from the rock on Mesa Verde, did not distinguish them with such complex artistry as that of the pyramids, or other massive monuments left behind by previous civilizations. But they did show certain skills which they possessed and which enabled them to harmoniously coexist with, and make use of the natural world.

The Maya represented perhaps the intelligentsia of ancient Mesoamerican society. Their successors the Aztecs somewhat less sophisticated, and for their own purposes, allowed themselves to be dominated by a plethora of deities. The principle of duality, on which the Aztec based their system of numerological creation, was superseded by rites that obfuscated the original esoteric meaning. Contemporary American Indians found mysticism in the cardinal points, expressed by the number four.

From these numbers, three very diverse people attempted to logically and reasonably express numerological potentials

through their myths. The numbers even logically followed one another as one civilization died out and a new one was born, as expressed by the evolution from zero to two, and finally four. Whether there is one god or many gods or a talking stick, who remains to hear and interpret their signs?

In essence there is that sound, like that of the motion of the air, or wind, or the water or sea. The sound encompasses the zero, depicted by its amphibious shell. Its very shape claims a mystic force, naturally emanating from it. It was, and in many ways is, the depiction of the beginning, the sound, the aum. It is the numerological expression of the myth of creation of the world, the universe itself bursting with life, manifesting outward from zero, the shell, the eye of God, or the eyes of the many gods, manifesting into the ultimate reality.

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