

GENESIS - 2012 AD

The Beginning of a New Age

by

J. A. Chapin

DEDICATION

To my sons Gregory and Rodney and to my wife Eyvonne and to the memory of Michael their brother, our son, whose spirit lives on.

PREFACE

What would there be if there were no here, and

Where would we be and why?

There is a here, and we, and now,

Who but God knows why?

-Author

As an engineer by training and a self-taught philosopher by desire with a passion for understanding, I have attempted to build on the words of modern day authors as well as countless others from ages gone by who we only know by the inscriptions they have left and which have been passed down to us over the millennia. The words which follow stem from my thoughts as well as others before me, and perhaps from ALL.

CONTENTS			
CHAPTER	TITLE		PAGE
	Preface		
	Introduction		1
1	Questions		5
2	Mythologies		13
3	Genesis (Beginning)		29
4	Interpretation of Chapter 1 of the Book of Genesis		51
	• Introduction		51
	• Book of Genesis, Chapter 1		54
5	Stories of Creation		70
6	Stories of Cataclysm		97
7	Special Numbers		124
8	Physical Evidence		147
	• Dating Techniques		147
	• Archaeological Evidence		149
	a) Megalithic Structures		150
	b) Pyramids		156
	c) Artifacts		162
	• Geological Evidence		166
	a) Plate Tectonics		166
	b) Ice Cores		167
	c) Underwater Cores		171
	d) Volcanic Activity		172
	e) Formation of Mountains		175
	• Asteroids, Comets, and Meteor Evidence		175
	• Fossil Evidence		178
	• Solar Evidence		179
	a) Sunspot Cycle		179
	b) Solar Winds Between the Sun and Earth		180
	c) Interaction of the Sun's and Earth's Magnetic Fields		181
	d) Precession of the Earth's Axis		182
	e) Position of the Sun/Solar System Within the Galaxy		183
	f) Climate		184
	• Written Evidence		190
	• Summary		201
9	At-Oneness With Life		209
10	Age of Enlightenment		214
11	Role of Religion in the Development of Mankind		223
	• The Good		230
	• The Bad		230
	• The Ugly		235

CONTENTS (Continued)

CHAPTER	TITLE	PAGE
12	Predictions	254
	Glossary	259
Appendix A	Calendars	264
	• Quetzalcoatl's Hero Journey	267
Appendix B	Historical Timetables	277
Appendix C	Reference Data	327
	• String Theory	327
	• Properties Related to Einstein's Theory of Relativity and the Theory of Quantum Mechanics	328
	• Four Forces Which Interact Between Particles	329
	• Planck	329
	• Units of Measurement	332
	○ General	332
	○ Earth	332
	○ Sun	333
	○ Moon	333
	○ Mars	333
	○ Venus	333
	○ Solar System	334
	○ Sirius	331
	○ Sirius A	335
	○ Sirius B (White Dwarf)	335
	○ Sirius C	335
	References	340
	Index	343
 TABLES		
3-1	Brain Functions	48
3-2	Genesis, Chapter 1 - Cyclical Properties	49
3-3	Genesis Model and the Upanishads	50
4-1	Abbreviated Interpretation of Genesis, Chapter 1	69
5-1	Creation Story Comparisons	83
5-2	Anunnaki Chronologies	94

CONTENTS (Continued)

TABLES	TITLE	PAGE
6-1	Chronology of Josephus	103
6-2	Ages/Suns of Destruction	116
6-3	Long Count Periods	118
6-4	Errors Between Calculated and Codex Vaticanus End Dates	119
6-5	Corrected Age Durations	119
7-1	Special Number Comparisons	135
7-2	Special Numbers and Corresponding Degrees of Precession	137
7-3	Special Numbers and their Corresponding Precession Relationships	138
7-4	Tonal Interpretation of the Sexagesimal System	139
7-5	Locations of Ancient Sites Relative to Giza	140
7-6	Special Numbers and their Harmonics	141
7-7	Special Numbers and their Corresponding Tones as a Function of Frequency Ratios	142
7-8	Special Numbers and their Corresponding Length Multiples	143
7-9	Alternative Decimal Equivalents for Cuneiform Numbers	144
7-10	Comparison of Different Base Number Systems	145
7-11	Ancient Maps	146
8-1	Volcanic Activity	172
8-2	Cosmic Influx	176
8-3	Climate Changes	189
8-4	Cataclysmic Vs Historical Dates	204
8-5	Sumerian Kings Lists	207
8-6	Antediluvian Sumerian Cities and their Rulers	208
11-1	Gods Throughout the Ages	240
11-2	List of Catholic Popes	244
11-3	Rise of Islam	248
11-4	Semitic Tribes	253
A-1	Year and Day Sequences for the 260-day Tzolkin Calendar	270
A-2	Year and Day Sequences for the 260-day Tzolkin Calendar (The Birth of the Uinal)	271
A-3	Collations of Mayan and Gregorian Dates	273
A-4	Mayan Long Count Vs Gregorian Dates	275

CONTENTS (Continued)

TABLES	TITLE	PAGE
B-1	Historical Events	293
B-2	Post Flood Kings List	303
B-3	Correlation among Ancient Chronologies Highlighting The Amarna Period	306
B-4	Timeline Based on Herodotus	311
B-5	Phoenician Rulers According to Josephus	313
B-6	Rulers of Egypt	314
B-7	Man-King Rulers of Egypt and their Burials	315
B-8	Chronology of the Bible Based on Josephus	320
B-9	Chronology of the Bible Based on Kings 1 & 2	321
B-10	Comparison Between Josephus and Manetho of Egyptian Kings	322
B-11	Peruvian History	323
C-1	Makeup of the Atom	328
C-2	Solar System Orbital Ratios	336
C-3	Solar System Idealized Orbital Ratios	337
C-4	Solar System Density Ratios	338
C-5	Solar System Mass Ratios	339
FIGURES		
3-1	Genesis Model	47
6-1	Chronology of the Five Ages	123
8-1	Sacsahuaman	151
8-2	Sacsahuaman Interlocking Fit	152
8-3	Author at Sacsahuaman	153
8-4	Stonehenge Megalithic Observatory View 1	155
8-5	Stonehenge Megalithic Observatory View 2	156
8-6	Step Pyramid	157
8-7	Giza – Great Pyramid	158
8-8	Author at Giza Pyramid	159
8-9	Jaguar Temple, Tikal	161
8-10	Caracol Temple	162
8-11	Aircraft Design from a New Kingdom Temple at Abydos, Egypt	163
8-12	Vostok Antarctica Ice Core	170
10-1	Evolution of Consciousness	221

CONTENTS (Continued)

FIGURES	TITLE	PAGE
A-5	Day/Month Sequence for the 365-day Calendar where August 13, 3113 BC = 8 Cumh	276
B-1	Lower Egypt	281
B-2	Upper & Lower Egypt	282
B-3	Mesopotamia	283
C-1	Solar System, - Relative Size	330
C-2	Relative Sizes – Sun & Planets	331

INTRODUCTION

Here are men going afar to marvel at the heights of mountains,
the mighty waves of the sea, the long courses of great rivers,
the vastness of the ocean, the movements of the stars;
yet leaving themselves unnoticed...¹

-St. Augustine, c. 388 AD

Are today's events of global warming and climate change, the increase of fresh water into the oceans, and increased earthquake and volcanic activity harbingers of even more serious events in our future? Beliefs of the Mayans, passed on to us in the form of what we have termed myths, predict that the end of our current age (what they termed the fifth sun) will occur in the year 2012 AD. How did they arrive at this date and is there any evidence outside of their mythology to support their prediction? The Mayan mythology does not address the beginning of a new sixth sun; however, all preceding suns ended and were then followed by a new beginning. Are we about to begin a new age and can we learn anything from history which will aid us in the creation of this age? The answer to this question, not so surprisingly, lies in understanding a previous story of 'Genesis'.

Throughout history mankind has expressed more than a passing interest in his origin, his reason for existence, and his eventual end as a physical being. Evidence of these interests is expressed in ancient writings, from inscriptions and artwork on building ruins, from artifacts recovered from the sites in which man lived and from an understanding of man's need for- and use of- complex calendars. We today are intrigued by these ruins and unusual stories to the point we ask, what can we learn about our presence as human beings and possible future growth from this wealth of historical information? Our future, at least in part, is based upon our understanding of our past. A review of the myths of the past civilizations such as the Sumerians, Hindus, Egyptians, and Mayans gives us reason to question the accuracy and completeness of our history. Based on the evidence which follows, one can speculate that ancient man may have had a far greater understanding of his past and the workings of the world around him than we give him credit for today.

The history of modern man, as we understand it today, is based upon the recent changes we observe in the geological makeup of the planet; the interpretation of

artifacts, inscriptions, structures, and human remains made by anthropologists; and the compilation of these findings put together by our modern day storytellers-the historians. The data used by these scholars certainly facilitates the development of a plausible history of mankind over the past 12,000 years. Unfortunately, the history provided by these scholars ignores many of their findings. Since they cannot explain these findings, as they do not fit within existing explanations of history, they choose to ignore them. There is, however, at least one other possibility as to how our ancient history can be viewed. When ancient myths are evaluated in light of modern-day scientific findings an all together different history emerges. Can we predict our future from this past history? If this is so, then we have to assume that all events experienced in our world happened because of the events that preceded them. This is called determinism, a term attributed to the philosopher Gottfried Leibniz. As I have suggested above, history and therefore our future have other possibilities. I suggest that while our future is affected by prior events it is by no means a certainty. Every event alters the outcome of our future. There are infinite future possibilities and just because we can't currently explain everything we observe does not mean any given possibility does not exist.

Many of the ancient civilizations recognized the cyclical properties of the events they observed in their daily lives and many of these civilizations believed that four past cyclical ages have occurred and that we are living in the Fifth Age. If the Mayans were correct and we are nearing the end of the Fifth Age in 2012 AD, what can we expect will happen? Can we predict the future or can we influence its outcome?

Hundreds of thousands of clay tablets and inscriptions have been found from locations around the world with stories which until recently have been thought to be nothing more than myths expressed by people focused on cult worship and superstition. Many of these ancient writings express knowledge of past cataclysmic events and an understanding that similar future events could occur. With this in mind, if these stories of cataclysm were indeed factual then ancient man would have been faced with how to communicate this knowledge so future generations could prepare for, or possibly correct, the causes of their potential demise given that the technology of these ancient civilizations would quite likely not be understood by future generations. This was accomplished in the form of metaphor which we have termed myth. Myths have been passed down from generation to generation preserving their form but without passing on the understanding of the true meaning intended by those who wrote them. If the ancient civilizations prepared these writings and inscriptions with the intent to inform or enlighten future civilizations of knowledge and secrets they possessed

there should be a key or keys encrypted in the information which would allow future generations to recover their secrets. As inquisitive beings we view the unknown past as a mystery shrouded with intrigue. It is the intent of this writing to delve into this mystery by exploring the meaning of these ancient writings and inscriptions. If a key or keys exist within these writings then it should be possible to relate their meanings to known historical events. With the advent of modern-day discoveries and technologies, as discussed in Chapter 8, it has now become possible to make sense of these writings.

As mentioned, much of the historical information we have available to us today is in the form of myths. When these myths originated is uncertain. Many of the ancient civilizations claimed that the myths came to them in dreams which they interpreted as being from the gods. Are these mythological descriptions of real events and is there evidence in the writings which could lead one to determine if the myths from various locations around the world are describing the same events? Also, if these myths are describing real events is there any corresponding archaeological or geological evidence which would support these descriptions? It is important to question if our current understanding of our history is accurate in light of the descriptions offered in the mythologies. Also, it is important to ask if our future is uncertain and, if so, can we mold it as suggested by some of these writings? The interpretations of the various mythologies which follow suggest that this is possible!

A copy of what is perhaps the most important ancient myth which has endured the ravages of time is found in Chapter 1 of the Book of Genesis which, written in layman's terms, describes the creation of life and the physical universe. The actual meaning of Genesis, Chapter 1 is explained in Chapter 3 of this writing and is depicted as the Genesis Model, Figure 3-1. This interpretation shows that our ancient ancestors possessed an understanding of the workings of the mind as well as an understanding of their interrelationship with the universe in which they lived far beyond what we give them credit for today. During the time of the fall of the Roman Empire, Aurelius Augustinus (354-430 AD), a teacher of rhetoric who later became Bishop of Hippo Regius (Annaba, Algeria) was consumed by the meaning of the Book of Genesis. He was convinced that the Book of Genesis was not just any book. He believed it was an intricately coded message, sent by God to mankind through the words of Moses. He further goes on to write: "When he (Moses) was writing these words he wholly saw and realized whatever truth we have been able to find in them – and much beside that we have not been able to find, or have not yet been able to find, though it is there in them to be found." That is, the words may possess many meanings, all of which are correct; we just need to understand them.

Chapter 4 of this writing provides the detailed interpretation of Chapter 1 of the Book of Genesis based on the key words and phrases which are encrypted in the story. When this story is explained in light of modern-day physical and metaphysical sciences the results, described in Chapter 10, are indeed a 'Revelation'. The significance of understanding the meaning of Genesis, Chapter 1 is that the meaning provided through this understanding of creation provides the where with all by which we are able to understand the end of our current age.

The connection between the Mayan mythologies and ancient Mesopotamian and Hebrew mythologies are described in Chapters 5 & 6. While Chapters 3, 4, & 5 address the mythology of creation, Chapter 6 explains the stories of past cataclysms and how the coming cataclysm (end of the Fifth Age) was predicted by the Mayans.

CHAPTER 1 -QUESTIONS??

To live is to wonder.
We search for peace of mind, happiness and health.
The answers are within.

-Author

One cannot delve into the study of history without questioning why we exist in the first place and where we are likely to be going. For thousands of years mankind has pondered over the concept of existence and has tried to come up with an understandable rational which would provide a reason for being. A study of archaeology provides physical evidence of past events in the form of skeletal remains, structural remains, and the written word on clay tablets and other media. Geological evidence of the earth's strata containing fossil remains, the effects of earthquakes and volcanic activity on the planet, and findings from borings of ice sheets and underwater regions all provide additional information which raise questions as to man's beginnings.

History shows us that past civilizations were interested in understanding their beginnings and the reasons for existence. Ancient man's fascination and apparent understanding of astronomy, mathematics, and music leads modern-day man to wonder if a better understanding of our current existence can be gleaned from studying the past.

One can not help but to wonder! We find ourselves in the midst of existence and wonder why is there an 'I', what am I to do, what am I to be, and what will be my end? Humans have been around for more years than we today can define with any degree of certainty, so why do we not have consistent, understandable answers to the questions pertaining to existence? Why is it that what we want to understand about ourselves is so difficult to formulate? Today, man's imagination provides the source for questions addressing what might have been the beliefs and understanding of past civilizations, and what might yet be.

The modern-day archaeological timetable indicates that mankind originated approximately 4.4 million years ago and 'modern man' originated some 150,000 years ago. What ensued during the time between 'modern man's origin' and the end of the last ice age some 10 to 12,000 years ago? Over this 140,000 year period the world's climate varied and was quite severe at times. Could any

evidence of the presence of civilizations have survived this period? To date, little has been found.

Most historians today believe that civilization began in a number of places, which include the river valleys of Egypt, Mesopotamia, India and China. Archaeological evidence from the Yucatan region of Mesoamerica and the Norte Chico region of Peru shows that civilizations also began in the areas of Central and South America at approximately the same time. There is evidence, and some individuals postulate that the very ancient civilizations including Sumerians; Olmecs; Hindus; Incas; and Mayas may have evolved from civilizations much more advanced than those we today consider as ancient. As stated above, we have little information as to what may have occurred prior to the end of the last ice age, or for that matter, what occurred over the past 10,000 years in parts of the world that may no longer exist. Stories abound relating to the existence and destruction of the Lost Continent of Atlantis and the Lost Continent of Mu. Did these civilizations actually exist, were they high-technology societies, and where did the survivors go; assuming there were some?

Skeptics of the theory of lost continents have long used the argument that if they sank under the ocean there should be evidence of their existence through observations of the ocean floor. With the advent of the theory of plate tectonics, an explanation can be offered. I propose that not only could a land mass sink, it could also move laterally as the theory of plate tectonics suggests, and move under other continents such as North and South America. Geological evidence supports the idea that both the western regions of both continents were at one time at sea level. This is supported by the discovery of sea fossils in Peru at elevations as high as 13,000 feet. The uplifting of the Rocky and Andes Mountains could be a result of tectonic activity involving the submergence of continents now lost to history.

Many civilizations have appeared and disappeared since the origin of modern-man. Today, the evidence which we find pertaining to these civilizations consists primarily of ruined structures and written mythology. There are great numbers of ruins worldwide for which we today have little or no understanding as to why they were built, who built them, and for what purpose. How could ancient civilizations construct these edifices that we cannot construct today? Myths are found worldwide describing similar or the same events. What were the storytellers trying to impart to future generations, if anything?

It is informative to study the very ancient cultures as they seem to have focused on preserving life and avoiding what they believed to be certain unavoidable

catastrophes. Man today is expected to derive an understanding of his being by accepting the teachings of formal religions. Where did these understandings come from and how credible was their reporting? If we are to understand the origins of our current beliefs, we must ask the questions and try to understand; what did man believe and what was the basis for his beliefs before formal religion was invented? Since our belief system as we know it today is tied to our understanding of history, we must ask if we have a correct understanding of our ancient history. Based on the research which I have conducted over the past 35 years I propose that we do not.

What can be said regarding possible connections between where we are today as a civilization; where we came from; and where we might be headed? Is there an overall plan for our development, or is what develops just a random occurrence of events? Before we can discern where we might be headed from past events, we need to identify the past events which might provide unique understandings, or which might provide a perspective that may be different from what today is generally accepted as correct. These are a few of the questions which have bothered me over many years.

As a child looking out of my parent's living room window, my early thoughts of the church across the street were to wonder what went on in there and why. I remember watching on Sunday mornings, as people dressed up in their finery, walked from their cars to the two entrances; adults going in the front door, children going in the back.

I can still remember being led through that back door and my first exposure to Sunday-school. The teacher talked about God, and who can remember what else. Eventually it came around to closing, which turned out to be my first public presentation, or as it turned out; non-presentation. I remember this so vividly since it was one of the most humiliating experiences of my childhood. The teacher quite innocently asked me to close the session by leading the other children in reciting The Lords Prayer. I didn't know who the lord was let alone know that he had his own prayer. Everyone got a laugh at my expense and I came away with the question of who is this lord and how can he be any good if he could let this happen to me?

Since my childhood I have been critical of any form of organized church. I intuitively felt that there was something wrong with what I was being taught, yet I could reason that there must be something worthwhile associated with these institutions and what they represented. After all, what the church taught about being good did make sense. What didn't make sense was the reason why we

should be good (i.e., God would punish you.). How could God be a loving, omniscient god if his main recourse was to punish?

Like most children I wondered where I came from and why. When asking others about this, the answers which were offered made little sense. At some point in time I decided that the answers to my questions of where and why, were somehow tied to the church across the street yet when inquiring about my concerns the answers given still made little sense. The minister and teachers instructed me to take on faith those things which I could not understand and just accept "it", whatever "it" was. Now, since I didn't know what faith was, I didn't know if I had any or not. All I knew was that my presence in this world made little sense and since I couldn't understand what I was doing here there must be something lacking in my makeup. How could I understand or correct my makeup when I couldn't even get an acceptable answer as to who or what made me up in the first place? In school I learned that I was made up mostly of water and other matter found in the earth. What then made me alive and intelligent?

As an adult I continued to ponder my unanswered questions of childhood and came to the realization that all I had accomplished was to uncover even more questions that I could not satisfactorily answer, such as:

- Should Man seek a reason for being or just accept the fact he exists?
- How should one seek an explanation for being and does anything exist which could provide an explanation?
- If one can determine a reason for being, then how can this be beneficial throughout one's life?

I decided to take steps on my own to seek the answers to my childhood nemesis and finally concluded that no one (e.g., clergy, friends, TV ministry, Plain Truth, New Testament) could give me what I considered to be reasonable answers. I decided to seek my quest through the writings of the Ancients. I half-jokingly reasoned that since their existence was closer to the time of creation they might have had an insight we lack today. This led me to the writings of the Old Testament and other writings which in our modern churches' inimitable wisdom decided, do not warrant serious study (i.e., Apocrypha and Pseudepigrapha)^{2,3}. I also studied the Qur'an⁴, the Talmud^{5,6}, Hinduism^{7,8} Buddhist scriptures⁹, The Analects of Confucius¹⁰, the writings of Josephus¹¹, the writings discovered in the Nag Hammadi Library¹², the Gnostic Gospels¹³, the Dead Sea Scrolls^{14 - 17}, Aristotle¹⁸, the Mayan Popol Vuh¹⁹, Ayn Rand^{20,21} and guess what! I came up with still more questions, and no acceptable answers to my original questions.

Although my early quest through the annals of religious history did not provide any specific answers to my questions or provide enlightenment by revealing some hidden meaning which all of a sudden would clarify everything, it did provide some encouragement to continue my pursuit. The Nag Hammadi Tablets offer a somewhat different understanding of the development of early Christian beliefs. While some of the texts support biblical accounts others offer a completely different understanding of the origins and basic beliefs of the Gnostic Christians. Additionally, Nag Hammadi Tablets have been found which were unknown to modern day Christian scholars. It is evident that many early Christians did not have the same understanding of the message of Jesus and the development of the church that we are presented with today. The Dead Sea Scrolls offer tangible evidence which provided credibility as to the origins and validity of the literature found in the biblical account. The ancient copies of the biblical books show the same text as modern translations with only minor variations. This confirmed that the scribes who transcribed these ancient writings were extremely careful to preserve the exact wording of the text. I wondered, what were the reasons to retain this exactness? Since several of the books of the Bible were now recognized by other separate and distinct sources from a contemporary time period I felt there just might be some validity to these stories.

Readings of the Talmud and the Qur'an provide separate and distinct viewpoints from the Old and New Testaments of the Hebrew and Christian Bibles. The readings further substantiated the common origins of these writings. These readings set to rest some of my concerns which began during childhood. We (myself and friends) were taught that the Bible was the only true book about God; that our church was the "right" one and if you didn't belong to the "right" church you would go to hell even if you led a righteous life; that Israel was Gods' chosen people; that Christ came to save mankind from itself; and Christ's' teachings replaced those of the Old Testament. The reading of the Talmud, Qur'an, and Nag Hammadi texts convinced me that my earlier Christian teachings were biased, as I had suspected.

Eventually delving into the ancient writings of the Sumerians, Akkadians and Mayans provided additional information that supported my findings that the basis of modern religious teachings are filled with borrowed philosophies, manipulative rhetoric, arrogance, and incomplete histories of much of mankind.

Now, just as confused as ever and armed with a long list of seemingly unanswerable questions I came across a number of interesting writings.

In a book by Jack Ensign Addington²² titled "The Hidden Mystery of the Bible", Addington proposed that it is possible to evaluate the religious writings of the Bible on the basis that they were written using code -words, -numbers, -names and -phrases. He hypothesizes that these documents may have been intentionally written as secret writings such that only the 'informed' would understand, and the true meanings would not be destroyed by those with selfish or other personal agendas. Clement of Alexandria is to have said, "The Egyptians neither entrusted their mysteries to every one nor degraded their secrets of divine matters by disclosing them to the profane; reserving them for the heir apparent to the throne, and to such priests who excelled in virtue and wisdom."

The codes suggested by Addington should not be confused with the so called hidden messages generated by computer analysis of the Hebrew letters of the Torah. This is a very controversial topic. Some researchers believe that these computer-generated hidden messages were products of random chance and not integrated into the writing by a supreme being. Others believe that the Torah, which is purported to be unaltered since its conception, contains encrypted messages of our past and future.

In a book by Julian Jaynes²³ titled "The Origin of Consciousness in the Breakdown of the Bicameral Mind", Jaynes presents a theory of the evolution of Man's consciousness over the millennia and in particular man's development of what he terms a subjective consciousness which he proposes occurred around 1500 - 1000 BC. Jaynes proposed that early man prior to 1500 BC had no subjective memories and that he relied on audio-hallucinations (i.e., voices from God) to direct his life.

Two other writings which seem to fit into my overall quest for knowledge were those of Joseph Campbell²⁴ and Joseph Murphy²⁵. Campbell's writings on mythology cover myths from around the world and are written in several volumes. I found the volume on Oriental Mythology particularly interesting. Campbell traces the religions of the orient from the early teaching of the Old Kingdom of Egypt c. 2900 BC. The development of the particular style of eastern religious beliefs while indigenous to the east also derived much from the influences of western cultures. Campbell points out that the oriental point of view is metaphysical and poetical while the Biblical point is ethical and historical.

Murphy proposes that the master secret of the ages is the power found in your own subconscious mind, the last place that most western cultures would seek it. He develops a rationale which explains the powers of the subconscious mind and its workings with the conscious mind. What he proposes ties in dramatically with

ancient philosophies of the Sumerians, Oriental philosophies and the interpretation I have made of Chapter 1 of the Book of Genesis (refer to Chapter 4).

Another writing I came upon was that of Lewis Spence²⁶ pertaining to the ancient cultures and mythologies of Mexico and South America. Stories of repeated ages of destruction and creation seem to focus on the ancient people's understanding of the physical aspects of the world. These stories are discussed in Chapter 6.

Investigation of the written word leads one to conclude that mankind has come up with what at first glance appears to be several explanations for existence. In general, Man's writings deal with physical existence. Mankind, however, can not just ponder physical existence without eventually considering non-existence, or what exists before and after conscious living.

From the moment of birth, both man and woman begin their physical as well as spiritual growth. In each case, what develops as the individual's personality depends upon the teachings the individual encounters; first by parents/caretakers, then by peers and institutions. Ultimately the individual's development is formulated based upon the day-to-day environment, and depends upon the quality of physical as well as spiritual training.

It is commonly accepted that a child's personality is formed during the first six years of its development and it has been observed by researchers that the brain is most absorbent from birth to the age of 12. Personality development is in response to physical observation and interaction with the child's surroundings. The basis for understanding spiritual concepts only begins to take hold during these formative years. The understanding of spirituality is made difficult due to the lack of things that are tangible for the individual to visualize. The child needs to be able to formulate concepts, a trait which is developed later in life. Spirituality therefore becomes a concept involving ones consciousness. The concept of consciousness and conscious development is not well understood in our western society nor even accepted by the general western populace. It is therefore difficult for a child of the western society to comprehend these concepts, since the child has little in the way of role models to draw these experiences from and no way for the child to validate its understanding. Ultimately the development of individuality is tied to spiritual development as well as physical development.

Today, in our western society, the physical aspects of an individual's development seem to receive the most emphasis as they are commonly accepted by the general

public as being necessary for survival on a day-to-day basis. On the other hand, spiritual aspects of development seem to be minimized as a necessity for earthly survival. Spiritual aspects are relegated to a position of importance primarily as they apply to achieving some afterlife. In contrast to western society, the eastern societies system of thought tends towards going within oneself for answers and for spiritual growth.

The myth of eternal return/reincarnation, which is still basic to Oriental life, displays an order of fixed forms that appear and reappear through all time. The rhythm of organic birth, death, and new birth, represent a miracle of continuous arising that is fundamental to the nature of the universe. Psychologically the enactment of this rite is to shift the focus of the mind from the individual (who perishes) to the everlasting group. It is to reinforce the ever-lasting life in all lives.

These different belief systems coexist in our world, and with the exception of a few zealots, the differences do not seem to be of great importance to most people during the normal course of their life. However, as people become older, they tend to think more about their spiritual well being. Perhaps this is because they are closer to death, or haven't fulfilled their dreams of success, or perhaps they are just becoming wiser. In any case, whenever individuals become interested in spiritual development they are faced with where to start looking for information and which path to follow. Depending on how aggressively these individuals seek enlightenment and how open minded they are they will find an overwhelming amount of information available to study. Much of the available information promises that if individuals accept and follow whatever they are reading, or whomever they are listening to, they will be able to find 'The Answers' they seek.

It has been my experience that this is not so. The 'answers' which are found are often conflicting, often nebulous, or even unbelievable. I have found, however, that there are common threads of wisdom, truth, history, and teachings presented throughout the wealth of written information available to us today. Further, even though we cannot absolutely determine the spiritual beliefs of the very ancient civilizations, a great wealth of information is available through observations of what these civilizations have left behind in terms of construction projects and their attendant inscriptions. It is therefore my intent, with this writing, to distill the salient points which have common grounds. I hope this will help lead others through the voluminous stories, myths, philosophies, religious teachings and psychic experiences in order to provide an insight as to who we are and why we are here, and where we are going. Hopefully this will help provide answers to those questions which we wonder about yet can not seem to answer.

CHAPTER 2

MYTHOLOGIES

Either there is a God - whom in a primordial revelation
shares the secrets of the universe with the wise men everywhere,
or there is an underlying harmony between all spheres of being.

- Raimun-do Pannillear-
Journal of the American
Academy of Religion, June 1978

Much of our understanding of history comes from documents written or copied by individuals sequestered in various religious monasteries or government facilities throughout the ancient world. Other information comes from inscriptions on structures and other artifacts. The writings which modern historians have termed mythologies have generally been ignored as meaningful descriptions of history. I propose that recent scientific discoveries have changed this erroneous understanding.

Many of the ancient myths which we are familiar with today come from the Sumerians, Akkadians, Chaldaeans, Assyrians, Medes, Persians, Egyptians, Hindus, Hebrews, Mayans, Incas, and Greeks. The most ancient of these myths comes from a time 5,500 years in our past. These writings indicate that people were aware of earthly and heavenly events which were beyond their control, and which affected their day-to-day living. It can be further shown from studying these writings that these civilizations were aware of the cyclical properties of these earthly and heavenly events. Many of the ancient writings consist of interpretations of rituals and philosophy while others provide a record of commerce, history, and government. Some of the most surprising writings provide detailed insight into the ancients understanding of astronomy and mathematics. Studying these writings in light of modern-day science shows an awareness and understanding by these civilizations of complex subjects far beyond what we give them credit for today including precession of the Earth's axis; the relationship between the Earth, the solar system, and the universe; the relationships between locations on the Earth's surface, in terms of what we describe today as Latitude and Longitude; and the harmonic interrelationship between the Great Pyramid of Giza and the Earth. Evidence of the understanding of these complex subjects by ancient civilizations is presented in Chapter 7 titled 'Special Numbers'.

While the dates for the writing of the ancient myths may be somewhat uncertain, there is a focus within these writings on a beginning time, as seen in all the creation myths, and in several cases multiple beginnings, as seen in the myths of destruction and re-creation. Virtually all of the ancient civilizations had myths which described their understanding of creation of the world and the creation of mankind. These creation mythologies indicate that the ancients possessed an understanding of their origin and that they were concerned about a continuance beyond a current lifetime. How they came by this understanding is uncertain. However, it is generally accepted that the information is quite ancient. Over time, the knowledge of mans' origin appears to have become confused as evidenced by the differences stemming from the translations of several myths of creation from around the world. Upon analyzing these creation myths as shown in Chapter 5, a common theme evolves, so much so that it is possible to speculate on a common source for these stories.

The generally accepted history of modern day mankind begins at the end of the Pleistocene Ice Age some 10,000 to 12,000 years ago. History shows that many civilizations both great and small have both formed and disappeared over the last 12,000 years. There are numerous reasons for the disappearance of some while others have survived until the present time. The causes for these changes in civilizations, as described by Diamond ²⁷, include climate, damage to the environment, wars, and trade relationships with neighboring societies. While we accept the rise and fall of civilizations during this period we deny the possibility that similar occurrences involving both technologically advanced and more primitive societies could have happened in the more distant past.

The understanding derived from decoding ancient mythologies leads one to postulate that advanced civilizations more ancient than the Egyptians or Sumerians existed. If so, it is reasonable to consider that these creation myths contain some surprising information. If these creation myths were important to so many civilizations is it possible that they incorporate some of the most important information required for understanding our existence and possible demise? In Chapters 3 & 4 this possibility is explored and the results are indeed enlightening.

It is an accepted fact that the creation myth which we find in the Book of Genesis of the Old Testament actually comes at least from the time of the Sumerians, c. 3500 BC. Based on the similarities found in the myths from around the world, it appears that there was an attempt to preserve this story by many different cultures and to make sure it was available to future generations. Why? The answer to this question is offered in Chapter 10.

In addition to the stories of creation, many of the mythologies of ancient civilizations refer to acts of destruction of catastrophic proportions. In all cases the population approaches near-annihilation then ultimately recovers only to repeat the process. It has to be assumed that the writers of these myths had a purpose beyond the mere spinning of a tale. Was it their intent that these stories were to provide historical descriptions of events or to warn mankind of inevitable future catastrophes?

Several myths refer to a period prior to a great deluge. According to these myths civilization was utterly destroyed. Hundreds of these flood myths have been reported throughout the ages by many civilizations throughout the world. Each myth has its own hero who saves mankind from sure destruction and whose progeny go on to repopulate the Earth.

Mayan mythologies describe five periods of creation and destruction as Ages/Suns. According to the beliefs of the Maya, we today are nearing the end of the 5th Age/Sun which like previous ages the Maya expected would end in a cataclysmic event. Modern-day millennialists have interpreted this as the end of the world while the Maya may have only been calculating the end of the 5th Age/Sun and not predicting the end of the world. An attempt to explain these Mayan myths based on our current understanding of the universe is presented in Chapter 6.

Whoever created these myths describing cataclysms would have had to have recognized that any knowledge possessed by a civilization either -about to be, -or just recently, annihilated would certainly be lost by the surviving masses as a result of the chaos which would have followed the cataclysm. This eventually would have included a loss of their understanding of their reason for being. Life threatening stresses resulting from a cataclysm would have forced these masses into a form of existence which was focused on mere survival. Any knowledge they might have possessed prior to the cataclysm not related to survival, if not lost, would have been relegated to a position of minor importance. The masses would not likely have focused their attention on art, literature, science or philosophy as they would have just been trying to survive. Memories which would have verbally been passed down to the survivors and eventually passed on to future generations could not have been relied upon for very long. By encoding information in the form of myths these unknown writers would have hoped to ensure that important information was passed on to future generations.

As evidenced from the myths which describe periods following mass destruction, mankind struggled to reacquire an understanding of a reason for being. The mythologies relay stories of physical events that were to have occurred prior to the period in which we today attribute the beginning of written history. The myths describe the emergence of sages/leaders who were gifted intellectuals or individuals who had retained the knowledge of their past accomplishments, and understood what was required to overcome what had been lost as a result of the cataclysmic events.

These leaders which brought their civilizations to levels of greatness included:

- | | |
|----------------------------|--------------|
| 1. Osiris, Horus | Egypt |
| 2. Ea, El, Marduk, Enki | Mesopotamia |
| 3. Adapa | Akkadia |
| 4. Buddha | India |
| 5. Moses | Egypt |
| 6. Kukulcan (Quetzalcoatl) | Maya |
| 7. Quetzalcoatl | Toltec/Aztec |
| 8. Tloque Nahuaque | Toltec |
| 9. Manco Capac | Peru/Inca |
| 10. Viracocha | Peru/Quichua |

What is unknown is where these sages obtained the knowledge they imparted to these ancient civilizations and whether they only divulged enough information to get these people through the latest catastrophe saving the rest for future, more advanced civilizations. If the knowledge contained in the myths was intended for future generations it would necessarily have been based on fact. It follows that if the myths are indeed based upon fact then we should be able to correlate the information they contain with what we believe to be fact today.

Before delving into the true meanings of these myths it is important to understand the setting in which these writings could have occurred. The age in which many of these sages/leaders were to have founded the ancient civilizations, and in which we live today, is defined by archaeologists as the Holocene era. This was to have begun approximately 10,000 to 12,000 years ago at the end of the Pleistocene Ice Age.

Information obtained from ice cores recovered in Greenland and Antarctica indicate that over a period of several thousand years following the end of the last ice age the world's climate alternated between periods of warming and periods of cooling including the occurrence of two mini ice ages, the last of which ended c.

5800 BC. This should not be confused with the 'Little Ice Age' which occurred between 1630 and 1720 AD. These swings in climate placed severe stress on the existing populations. Those living in the northern climates experienced the extinction of the mega fauna that they had relied upon for their food supply. One theory suggests that the changes in weather and a changing food supply forced these hunter-gatherers to migrate, following the wild game, in order to survive. With the beginning of a warming trend c. 6000 BC, temperatures began to stabilize. Many scholars today propose that this warming trend, which has lasted until the present time, provided a climate that supported the development of civilizations throughout the world.

It is postulated that this warming trend led to the beginning of a farming culture. The transition from a hunter-gatherer existence to one of farming is defined as the time when Man began to cultivate cereal crops and moved to a village-based existence. The beginning of farming in Western Asia and North America is believed to have occurred around the Pleistocene/Holocene boundary (c. 10500-9200 BC) a time of climatic instability.

While farming of cereal crops initially appeared to have its beginning in Asia and Europe there is evidence of the cultivation of maize in New Mexico between 5 and 6 thousand years ago. Archaeologists have determined that man existed in the area we today call Arizona, New Mexico and northern Mexico 9000 years ago or more while artifacts from Chilean sites suggest this area of South America was inhabited more than thirty thousand years ago. Peru's first known inhabitants appear in the archaeological record over ten thousand years ago.

Until recently it has been postulated that in the southern hemisphere, notably in Mesoamerica and the South America Andes, farming as defined above did not occur until c. 3000 BC with the appearance of cereal-cultivation since this was the time that maize became a crucial crop. However, the shift to a village-based pattern in Mesoamerica was preceded by 3-7 thousand years of experience in growing major crop plants such as gourds, agave plants, peppers, beans, potatoes, and squash. Seeds from cultivated squash have been found in coastal Ecuador which are believed to predate any agricultural remains found in Mesoamerica. To say that farming did not develop in Mesoamerica until a time much later than it did in the Northern Hemisphere is misleading. The cultivation of crops in Mesoamerica was altogether different than the cultivation of grain which was the predominant crop of the more northern climates. Dating of squash seeds from a cave in Oaxaca, Mexico, has confirmed that plant domestication in the Americas began as early as 8000 BC which indicates that planting began in the New World

about the same time as in the Near East and China. This was reported by Smithsonian archaeologist Bruce Smith in the journal "Science".

Modern-day historians have concluded that the beginning of any civilization was predicated on the switch to a farming lifestyle. There is, however, evidence from Peru that complex civilizations could have been founded based upon a fishing lifestyle with farming taking a secondary role at a later date.

While it has long been thought that civilizations had their beginnings in the Tigris-Euphrates Valley of Mesopotamia, the Nile Delta of Egypt, the Indus Valley of Pakistan, and the Huang He Valley of central China more recent discoveries in Peru and Mesoamerica indicate the presence of civilizations contemporary with these. Excavations in an area termed Norte Chico, approximately 130 miles north of Lima, Peru have uncovered up to 25 cities dating back to 3500 BC.

A period of several thousand years passed, from the period mankind settled down to a farming lifestyle until the emergence of the ancient civilizations in Mesopotamia, Egypt, India, China, and Central and South America, c. 4000 BC. While there is evidence from this period of societies advancing in the areas of music, astrology, astronomy, metallurgy, literature, mathematics and construction, there is other evidence which indicates that these societies may rather have been in decline. The period between 3500 - 3000 BC is characterized by what appears to be a proliferation of well established civilizations. I believe this appears this way to us today due to the limited archaeological evidence in the form of written material being recovered from that period. The fact that written materials describing events prior to this period have not been found has lead scholars to conclude that the civilization which we have become today, began c. 4000-3000 BC. History thus indicates that these civilizations appeared with fully formed myths; a knowledge of art, architecture, and construction which challenges our understanding today; a sophisticated system of measurement; and a working knowledge of mathematics and astronomy. This does not seem reasonable. This is more representative of a legacy than an evolving civilization. Many of the achievements of the earliest Egyptian dynasties were never surpassed or even equaled later on. It should be noted that these civilizations also had fully formed languages. This seems a bit unusual, however, no language has ever been found in an early state of evolution. This apparent presence of well established civilizations flourishing at this point in time, leads one to speculate on the existence of sophisticated civilizations well before this time.

The mythologies which describe ages dating back thousands of years before our current Holocene era may be an indication that great civilizations may have existed prior to the end of the Pleistocene Ice Age or at locations on the earth which have disappeared due to some cataclysmic event. Tales of advanced civilizations living on the lost continents of Atlantis and Mu/Lemura can be found in the western world back as far as the writings of Homer c. 900 BC. According to some of these accounts Man was to have made his advent on Earth 200,000 years ago on the continent of Mu. This continent was to have sunk into the Pacific Ocean between 50000 and 10000 BC. DNA evidence supports the existence of modern-day Man during the period between 100,000 and 200,000 years ago. A more recent writing by Churchward²⁸, based on ancient pre-Vedic/Hindu writings, describes the colonization of Asia, South America, and Central America by the survivors of the continent of Mu which was to have existed in the middle of the Pacific Ocean. It is also speculated by some that the emergence of more recent civilizations of Mesopotamia, Egypt and India were from this earlier period or from regions no longer evident. These more recent civilizations may indeed be dying embers of past great civilizations. A great deal of information is coming to light; particularly from the Sumerian, Egyptian, and Mesoamerican histories which suggest that all of these civilizations derived their basic ideologies and technologies from a period much earlier than the times in which they thrived.

Many of the ancient myths describe the initial populating of the Earth with gods, beings from the sky, giants, primitive beings, and finally modern man. None of these ancient cultures referred to the entities who founded their civilizations as 'men'. It has only been over the past three-thousand years when mankind began to focus on formal religions that he assigned the basis for civilization to men. Had tales of highly evolved civilizations been described by a single individual they could easily be considered a figment of that individual's imagination. When they are reported from around the world by different civilizations, then one must pause to give them some consideration.

Several myths refer to giants. If they existed, could they have been powerful enough to erect the megaliths found throughout the world? Stories of giants exist across Asia Minor and the Middle East which are often cited to explain the presence of cyclopean ruins in the region. According to an Arabic manuscript found at Baalbek, Nimrod, the king of Lebanon had sent giants to rebuild Baalbek after a catastrophic flood had destroyed the city. According to the Old Testament Book of Numbers and Book of Joshua, the northern part of the Gilead Mountains was ruled by King Og. The King, according to the Bible, was a big and stout man. His bed measured 9 cubits (13 feet) long by 4 cubits (6 feet) wide. Like

Goliath, Og is hinted as being a descendant of the Repha'im (Nephilim), a giant like race of demigods. The Repha'im race is also mentioned in Canaanite myths and epic tales which relate tales from the Bronze Age.

Giants are mentioned elsewhere in the Old Testament.

"There were giants (Nephilim in Hebrew) in the earth in those days; and also after that when the sons of god came in unto the daughters of men, and they bare children to them, the same became mighty men which were of old, men of renown." - Genesis 6:4.

"Then a champion came out from the armies of the Philistines named Goliath from Gath, whose height was six cubits and a span" (i.e., 9 feet- 9 inches). - 1 Samuel 17:4.

Stories of the existence of giants are not new and have been described from around the world. The Eskimos say a race, known as the Tunit, lived among them, a mighty race with mighty ancestors, men so powerful one of them could haul a walrus across the ice as easily as an Eskimo could drag a seal. As recently as 1764 AD sightings of giants in Patagonia were reported by the British explorer Commodore Byron. The Tehuelehe of eastern Patagonia were the tallest of all the indigenous South American races and one of the tallest people in the world²⁹. There have been reports of the recovery of giant skeletons from Indiana, California, Alaska, China, Australia, and Argentina. Writings of the Hebrews, Greeks, Mayans, and Incas also describe contact with races of giants prior to our current civilization.

While one may think of giants as being like movie creations, such as Godzilla or the Jolly Green Giant, our ancestors who were generally less than six feet tall would most likely consider someone 10 - 12 feet tall as a giant. Today's basketball stars at 7 feet and over could possibly be considered, by some, as giants.

Today, the popular belief expressed by mainstream archaeologists support the theory that mankind emerged from the last ice age and pursued a cave-man form of existence, as described above. These cave-men-hunter-gatherers were to have eventually settled down to a more sedate farming form of existence. With this came the construction of villages and cities. Historians have built a case that civilization progressed from this cave-man form of existence to what we know today. However, archaeological evidence exists which does not support this premise. There is hard evidence that the ancient civilizations following the ice

age possessed sophisticated calendars; an in-depth knowledge of astronomy, mathematics, and music; and an aptitude for constructing edifices beyond what we possess today. Evidence such as the pyramids of Giza and Central America, megalithic structures of Sacsahuaman and Machu Picchu in Peru, megalithic structures of Baalbek in Lebanon, possible cities of megalithic structures off of Yonaguni Island in the East China Sea, Tiahuanaco and Puma Punku in Bolivia, and the Bay of Paracas Trident symbol and Nazca lines of Peru cannot be ruled out as coming from more advanced civilizations from a time before the end of the last ice age.

Beings/gods from the sky have been mentioned in several myths from around the world. The Mesoamerican cultures referred to entities of great intellect that possessed great knowledge of past generations. According to Andean legends, Viracocha was a God of Heaven who came down to Earth in antiquity. The Sumerians referred to "beings from the sky". Mesopotamian and Egyptian myths indicate that people were initially ruled by gods which in later times were replaced by man-kings. Images resembling a helicopter, jet aircraft and glider have been found on the ceiling of an Egyptian Old Kingdom Temple located at Abydos on the Giza Plateau (Figure 8-9).

The Chronicle of Akakor³⁰ is reported to describe Masters from the sky arriving in golden airships. They were to have populated the regions of Mesoamerica and South America c. 11000 BC and built the megalithic structures we now find there. They were to have left Earth 13 years before a great catastrophe which they claim occurred in 10468 BC and were to have returned c. 3100 BC after a second catastrophe which they claim occurred in 3166 BC.

Flight and the use of high performance aircraft and weapons of mass destruction can be surmised from Sumerian texts, Vedic texts, the Chronicle of Akakor, Old Testament Book of Ezekiel, Slavic version of the Book of Enoch, artifacts of model aircraft, and various inscriptions such as petroglyphs, engravings and artwork. A compelling case for the existence of flight/space travel comes from an analysis of the Book of Ezekiel prepared by Josef F. Blumrich in his book *The Spaceships of Ezekiel*³¹. Blumrich concludes that the descriptions provided by Ezekiel can only be accepted as extremely accurate descriptions of operational spacecraft. Blumrich was a spacecraft designer for NASA and as such brings unique engineering skills to the understanding of Ezekiel's observations c. 590-570 BC. According to Biblical chronology, Ezekiel was born in 622 BC, deported to Babylon by Nebuchadnezzar in 597 BC, and died about 560 BC.

A Chaldean text called the Sifrala reportedly contains over one hundred pages of technical information on how to construct a flying machine. The Hakatha, a Babylonian text is said to state: "The privilege of operating a flying machine is great. The knowledge of flight is among the most ancient of our inheritances. It is a gift from 'those from upon high'. We received it from them as a means of saving many lives."

Other evidence has been found which describes space flight. The Indian Emperor Ashoka formed a group of nine individuals to catalog the sciences described in ancient Indian sources. It has been reported that one of the books written by the nine individuals was titled "The Secrets of Gravitation". Also, the Vumaanika-Shastra is reported to have eight chapters with diagrams describing three types of aircraft called Vimanas and powered by anti-gravity propulsion systems. Approximately 15,000 years ago a large, sophisticated civilization called the "Rama Empire" existed in Northern India and Pakistan. According to ancient Indian texts, the people had flying machines called Vimanas. One text, the Samara Sutradhara, is said to deal with the construction, operation and safety concerns of the Vimanas.

A few years ago, the Chinese discovered Sanskrit documents in Lhasa, Tibet which were reportedly translated by Dr. Ruth Reyna at the University of Chandrigarh. These documents are said to give directions for building interstellar spaceships, called Astras, powered by an anti-gravity propulsion system.

The stories passed on by the indigenous North American inhabitants tell of Man coming from other worlds and worshipping the Great White Spirit, who had descended from the sky. Stories of the presence of white men, living in ancient times, with long black beards can be found in the myths of the indigenous North American inhabitants. Many of their petroglyphs depict what some believe to be figures of spacecraft and spacemen. The Hopi petroglyphs depict what could be representations of electronic waves which we recognize today as sine, triangle and square waves. The Chippewa told of the Gin-Gwins or Flying Boats, similar to the solar boats described by the Egyptians. The Navajos, Piutes and Hopi told of Golden Strangers from the skies in flying-canoes armed with electric rays.

There is no shortage of descriptions of flying machines in ancient times. Flying in ancient times seems to be the rule, not the exception.

While many modern-day historians do not accept the possibility of travel and trade across the great expanse of oceans by ancient cultures, there is an account in the Chronicle of Akakor of a port city named Ofir built by the ancient Masters and

located at the mouth of the Amazon which carried on trade with the East, possibly Egypt. Archaeological evidence has identified tobacco and coco being found in mummies of ancient Egypt. South America was the only place these plants were found in this age, indicating that trade must have occurred between Africa and South America during ancient times.

Other evidence of ocean travel in ancient times comes from what is believed to be a detailed map showing Antarctica void of ice and regions of South America supposedly not known by modern man until the 15th Century. This indicates ancient man would have possessed knowledge of ocean navigation as early as 4,000 - 9,000 years ago. This map was recorded on gazelle hide by the Turkish Admiral Piri Reis in 1513 AD. Only a fragment of this map exists today. This fragment shows the first depiction of what is believed to be the bays and islands of the Antarctic coast of Queen Maud Land, now concealed under the icecap. Geological evidence confirms that the latest date Antarctica could have been surveyed free of ice is 4000 BC. Another map prepared by the French geographer Phillippe Buache in 1737 AD, shows a version of Antarctica that apparently has no ice on it at all. It shows a clear waterway that runs straight through the middle of the continent dividing it into two landmasses. This version of Antarctica is virtually identical to what was discovered in 1958 AD when a comprehensive seismic survey of the sub-glacial topography of Antarctica was conducted. This survey showed the separation between the landmasses is in the same place, and the relative size of the two landmasses reflects those shown on the Buache map. What ancient civilization could have observed and recorded these conditions? The first modern depiction of Antarctica on a printed map was recorded by Giovanni Vespucci, published in Florence, Italy in 1524 AD. Admiral Piri Reis further portrayed a large island in the Atlantic Ocean to the east of the South America coast where no such island now exists. The island was located over the sub-oceanic Mid-Atlantic Ridge just north of the equator and 700 miles east of the coast of Brazil where the rocks of St Peter and St Paul are located today.

While the existence of advanced transportation systems during ancient times may be hard for academicians to accept, there is strong evidence of the presence of advanced medical knowledge c. 7000 BC which is not as easily refuted. The Oxford Radiocarbon Laboratory has produced evidence that trepanation, the surgical removal of bone from the skull, was performed near Kiev in the Ukraine c. 7300-6200 BC. Other evidence of this surgical procedure has been found at Ensisheim, France and is believed to have occurred c. 5000 BC. Evidence that individuals survived the trepanation procedure comes from skulls where the bone had healed. The patient would have had to have survived for the healing process to take place. More speculative and much more ancient evidence of medical

knowledge can be seen in ancient Sumerian texts where the creation of Man is discussed as the result of genetic engineering coupled together with a primitive being which underwent a much slower natural evolution. This certainly flies in the face of the teachings of our present religious communities. Today, we have just defined the human genome which during the time of modern mans religious upbringing was not even imagined. A pictorial depiction of a double helix from ancient Egypt may indicate that the Egyptians may also have been aware of the biological-genetic processes involving DNA.

There is a theory that the placement of the three pyramids at Giza was such that they reflect on earth the overhead positions of the three stars making up the belt of the constellation Orion. According to the laws of astronomy this alignment would have occurred c. 10500 BC. If this is correct then the antiquity of the Giza pyramids must be placed much further back in history than the time of Cheops (Khufu), c. 2550 BC. Further, it has been suggested that the southern shaft leading from the kings' chamber of the great pyramid of Giza is thought to have been directed at the belt of the constellation of Orion. Since this alignment would occur once every 24 hours for a short duration due to the Earths' rotation, its use as a communications device with the constellation of Orion, as suggested by some, would make no sense. However, if a satellite or space station were parked over this area in a synchronous orbit then a constant connection between the pyramid and satellite would be possible. There is speculation as to the use of high energy technology by the pre-dynastic Egyptians^{32, 33}. The internal construction of the great pyramid may point to its use as a high technology power plant based on the theory of Microwave Amplification through Stimulated Emission Radiation (MASER), which is a technology in use today. Evidence that the placement of the Great Pyramid of Giza was not by accident and that it was used as a harmonic generator is explored in Chapter 7. The party line promoted by Egyptologists, that the Giza pyramids were constructed as tombs, is simply not supported by the facts. It is more likely that the 4th Dynasty kings may have requisitioned the already existing structures to be used as their tombs.

Another astonishing technological feat of the ancients involves the construction of megalithic structures which rival the Giza pyramids in the difficulty overcome for their construction. These structures are discussed in Chapter 8. The movement of large stones and construction of megaliths, using stones weighing in the range of 100 - 1,000 tons, may have required higher technology material handling capabilities than are attributed to the ancient civilizations such as existed in Lebanon, Peru, and Central America. Today we still do not have answers to the technological challenges associated with construction of these structures. The locations of these structures may provide clues as to why they were built. As

shown in Chapter 7, these structures are located in places which have harmonic relationships to the Great Pyramid of Giza as well as the structure of the heavens. This fact coupled with modern-day theories on the vibration properties of matter and the relationship between matter and gravity may provide answers as to why the Giza pyramids were built in the first place.

An intriguing fact which is common to mythologies from around the world is their reference to numbers. The ancient writings are replete with many 'numbers' for which scientists have had no sure understanding as to their meaning or use. Archaeological evidence supports the fact that mathematics has been in use from the time of the earliest known civilizations. Mathematical tables of reciprocals, multiplication, squares and square roots, cubes and cube roots, exponential functions, and logarithms have been discovered on clay tablets used by the Babylonians, c. 3000 BC. The discovery of the Pythagorean Theorem once attributed to the Greek Pythagoras was actually known in Babylon more than 1000 years before the time of Pythagoras. The recurrence of identical and similar numbers in Babylon, Egypt, Greece, and Palestine confirms speculations on their historical continuity. These same numbers occur in the mythologies of the Mesoamerican cultures 2 - 3000 years after their use in Babylon. A study of these numbers shows they can be used to represent cyclic properties. The ancients recognized the cyclic properties of calendars, the motions of the earth and other planets, harmonics associated with music, and day to day cycles of events occurring in nature. It appears that the use of these same numbers over thousands of years, by civilizations throughout the world, is more than coincidental.

While Philosophy and Science are considered Greek inventions from the early sixth century BC, a common misconception held by many in our present-day society is that the laws of harmony and proportion should also be attributed to the Greeks. It has been shown that the Greeks actually acquired much of their learning from the East (i.e., Egypt and Mesopotamia). Ancient sources claim Egypt as the original home of geometry. The ancients possessed a profound knowledge of harmony, proportion, geometry and design. The ancients understood that in the real world; pattern, process and interaction conform to harmonic, rhythmic and proportional laws. Also, their precise calendar systems indicate they possessed an understanding of advanced astronomy.

A review of the history of mankind cannot be complete without looking at what was occurring in the sky as well as on the planet. The nature and motions of the heavenly bodies in the night sky have been a source of fascination to virtually every culture. The ancients studied the stars for practical concerns such as seasonal predictions for agricultural purposes, and also to try and explain the

unexplained or supernatural affects on their lives. Physical evidence of their interest in astronomy is presented in Chapter 8. There is further evidence that the ancients of Sumeria, Egypt and Mesoamerica had an understanding of the cosmos and the interactions of our solar system that modern man is only beginning to understand today. This can be observed in Chapter 5 for stories of creation and in Chapter 6 for stories of cataclysm. The antiquity of the twelve-part zodiac has been established as far back in history as the time of the Sumerians. How they arrived at this division of the sky is recorded in a series of texts which they attribute to the Anunnaki, gods from the sky. Many of the numbers used by the ancients can be used to describe the earth's precession cycle; the orbits of Venus, Mars, Earth, and the Earth's moon; and sunspot cycles and the magnetic fields of the Sun. Sumerian tablets describe properties of the planets of our solar system including: color, water content, orbit, tilt, and the presence of, as well as the properties of, their moons.

We are products of our history and evolution. From what has been discussed so far it can be seen that a great deal of information exists on mankind's development, most of which has come to light over the last 50 years. Much of this new information is not supported by irrefutable facts. History provides valuable information in ways that are fundamentally different from those of the archaeologist in that histories may not always be certified by measurable facts. A case can be developed by correlating what at first appear to be unrelated facts, then comparing these correlated findings with accepted facts and developing a theory which in time will either be accepted as correct or refuted as being wrong. As with any new idea, questions arise. The principle questions which I wish to explore are: 1) what have we become over the thousands of years of development, 2) where is our civilization going, and 3) are there clues in the ancient mythologies as to our ultimate end? Are we evolving from a forgotten past beginning as cavemen or are we the remnants of earlier civilizations in decline? If information as previously mentioned existed 5,000 years ago, why is it that we are only re-discovering much of it today? Are we learning anew or is there knowledge embedded within our psyche which we have forgotten how to access?

Archaeology provides insight into how mankind has developed in a physical sense. While this provides valuable insight into the development of mankind it is limited in scope. After reviewing the large collection of mythologies and comparing what they describe with the overwhelming amount of archaeological and geological evidence available it is hard to accept that our current concept of history is complete or entirely accurate. There is considerable evidence that highly evolved civilizations existed prior to the time our civilization was to have had its beginning c. 10000 BC. The arguments used by archaeologists and other

researchers for establishing the beginning of our civilization at the end of the last ice age are based upon a lack of physical evidence to the contrary. This is not a particularly strong argument. One needs only to consider the presence of megalithic structures throughout the world for which their existence has never adequately been explained. The technologies required for their construction simply did not exist within the civilizations to which archaeologists attribute their construction.

It is not at all surprising that there is a limited amount of evidence of earlier civilizations, other than these stone structures. First of all, even the materials which we use today cannot withstand the natural aging processes for longer than a few hundred years. If the very ancient civilizations had used materials that we have today, even those materials would not have survived. There is evidence that the ancients used metal keys for interlocking the blocks of the stone megaliths. The positions of these keyways are visible on the stone blocks today; however, there is no physical key since the oxidation of the metal over thousands of years would have utterly destroyed them. Secondly, if the catastrophic destructions described in the mythologies actually occurred then it is unlikely anything physical would have survived unless it was robust and made of a lasting material such as stone.

The scholars who have defined our current understanding of history are restricted to conservatively reporting their ideas based upon physical findings which they can point to as real data. Even with this tangible evidence, much of their reporting is based upon speculation and is controlled by the party line expressed by academicians.

I propose that the histories of civilizations have slammed headlong into an impasse created by the lack of physical information and the inability of academicians and scientists to explore outside the box which they have so carefully defined. It is quite possible that the only evidence to be found which would support the existence of highly advanced civilizations prior to 10000 BC is that contained in the mythologies of the more recent civilizations beginning c. 4000 BC. A point can be made that modern-day man has a history no longer remembered except through myth.

The Earth has been around for over 4 billion years and the Homo sapiens sapiens species has been around for approximately 100,000 years. It is arrogant to think that our civilization is the only one to have developed over this long history. It is possible that an advanced civilization or even several civilizations could have developed and subsequently been destroyed in a series of cataclysms. It is an

accepted fact that the Earth has been struck by large asteroids and that great floods have wrecked havoc on past civilizations. Like the dinosaurs, technologically advanced civilizations could have utterly been destroyed. The concept that the Earth has evolved gradually over its history is not only refuted by mythology but is also not supported by the physical evidence being discovered today. While there is a slow evolutionary process involved in the shaping of our world, there are also rapid, violent and cataclysmic events which have shaped the world and the civilizations which existed over the thousands of years since man first appeared.

Since evidence of very ancient civilizations may only be available in the form of myths, is there anything we can derive from them which will shed light on our true beginnings? If the people who developed the original form of the creation myths were indeed from an advanced culture perhaps they knew facts pertaining to their origin as well as the mechanics affecting their and our existence. If so, did they encode information in a few special myths? The stories of cataclysms describe a process of destruction which is cyclic in nature. Being cyclic implies that the process is therefore predictable. If it is predictable, then what do these myths tell us about the end of our current cycle?

In order to understand the present condition of mankind I believe it is necessary to study both the experiences which would have affected mans' psychological development as well as mankind's physical legacy. The world of consciousness combined with the world of physical experience, makeup the totality of human experience. To fathom modern man's thought processes it is necessary to understand why the ancients wrote what they did and what was meant by their writings.

In Chapter 3, I present what I have termed "The Genesis Model". This model was derived from the information I propose was encoded in the Genesis myth by ancient civilizations that possessed knowledge of their existence far beyond what we accept today as their understanding. This is further supported by our understanding today of how the brain functions and has evolved and by recent theories being offered by physicists which describe how the universe is integrated in a physical sense. The 'Genesis Model' defines the Universes' and Mans' integrated physical and psychological being.

CHAPTER 3

GENESIS (BEGINNING)

If the written word holds the key to unlock the mysteries of the ages, then what is the meaning concealed in the written word?

- The intent, hope, and dreams of the writer?
- A message to be understood by the reader?
- A paradox between intent and understanding?
- The secrets of mankind?

- Author

If the myths passed on to us from ancient civilizations are not just based on cult worship and superstition, but rather are descriptions of basic beliefs, then one might ask what can these tales tell us about human development from its earliest beginnings. In his book, *The Origin of Consciousness in the Breakdown of the Bicameral Mind*²³, Julian Jaynes suggests, two types of thinkers existed during the period c. 8000 BC- 1500 BC. Based on popular beliefs it appears that the majority were people who appeared to be superstitious, mindless followers, barbaric, and without the knowledge necessary to develop beyond what was required for mere survival. Jaynes suggests that early man (c. 1500 BC) was unable to formulate complex thought processes. Rather, man was limited to expressing himself in terms based on his physical activities and what he observed in nature. His mythologies were therefore necessarily based on these recognizable terms. If this is true then it would be impossible for more esoteric information to be encoded within the myths unless the information came from a much earlier period from a civilization that modern day scholars do not recognize. Our understanding of man's physical activities comes from observing his construction projects, artwork found on these projects, and from artifacts found at the sites in which he lived.

Between 4000 BC-2000 BC there appears to have been an explosion in cultures around the world. At this time strong leaders began to make their presence felt by the masses. The majority of the population still focused on the physical attributes of survival and serving their leaders. The leaders, unlike the masses, appear to have possessed a greater understanding of themselves and were beginning to prepare the masses with a knowledge base which they must have felt they needed to pass on to future generations. These leaders, I suggest, were in tune with their

subconscious thought processes and were connected with what I term later in the Genesis Model their Divine Consciousness which provided what the masses accepted as divine inspiration. According to Jaynes, these leaders emerged through the natural process of evolution. Another possibility is these individuals existed as a minority all along. They were ancestors of a very advanced, ancient civilization.

There are two ways to look at Man's beginnings. The first is the view held by many modern day scholars which is based upon the development of civilization from a cave man form of existence following the Pleistocene Ice Age, c. 12000 BC. The second is that man developed into highly advanced or technical societies at a much earlier time. These advanced societies were ultimately destroyed by a cataclysmic event or series of events eventually re-emerging following the Pleistocene Ice Age along the lines espoused by modern day scholars. As described earlier, much of our understanding of mankind's beginnings can be derived from the myths passed down to our present day civilization. Whether or not Man's beginnings originated before or after the end of the last ice age may never be known for sure. This does not alter the fact that myths were developed for the purpose of conveying meanings that were important to the individuals composing the myths.

In order to facilitate the passing on of these stories from generation to generation, yet still retain their accuracy and meaning, it was necessary for man to develop a reliable system to assist in the recall of the information he needed to relay. This, I believe, took a form which relied on numbers, rhythm, and the use of visually recognizable terms of every-day events and objects which provided the storyteller with a means by which he could recall complex subjects. With this learned trick of memory, the storyteller was able to recall easily remembered facts from his consciousness which would then allow him to associate more complex issues which he could communicate to his listeners.

There was probably a multiplicity of reasons for Man to record his thoughts and beliefs. His motivations could have been for purposes of philosophical self-preservation, or for the personal satisfaction of writing a story, or to provide a form of authority for the elite to control the masses, or for passing on his knowledge to future generations, or in response to what he believed was the direction of his God. These writers of mythologies were facing a changing reality either from evolutionary processes or from natural and perhaps catastrophic events. They were able to understand their relationship to their environment, and were beginning to control it; were probably faced with a diverse population of thinkers; and were perhaps in the minority as thinkers themselves.

If we consider that the myths were committed to the written word c.4000 - 3000 BC then based upon archaeological findings from this period it can be assumed that these ancient writers undoubtedly had a relatively limited written vocabulary with general and diverse meanings assigned to each word. Writing would have been difficult not only from the standpoint that it was time consuming because of the materials used to record with and on, but also because of the degree of difficulty in subjectively organizing the writers thoughts. The size of the audience for these writings must have been very limited. Reading would not have been widespread since production of reading materials was extremely limited and literate people were in the minority. Writers would not have just written for each other, nor is it likely that they would have just written for the sake of writing. Without the expectation that someone else would read their composition they simply would not have written, especially when we consider the difficulties involved. Writing would have had to have been undertaken as a result of a command either from other powerful persons or from what the writers believed was their God. It is therefore not likely that writing of esoteric verses was for the purpose of the self-satisfaction derived from the spinning of a tale or for purposes of creating an elaborate hoax. This would have to come from more modern writers who had access to easier methods of production and access to a much larger audience. If man believed he was losing his ability to hear directions from his gods either due to a failed communications system or because of an evolutionary change in his thought process, he may have felt the need to write down these directions or commandments, or run the risk of forgetting them for all time. This would have been mans beginning in the establishment of a philosophical image of himself, for without it he probably felt he could not survive.

Jaynes develops a theory in which he describes a scenario in which ancient man evolved through a learning process from a being with a hallucinatory mentality to that of a conscious thinker. Jaynes postulates that prior to 1500 BC man was an automatic reacting being who could communicate through talking and who functioned through mimicked or learned reactions. His thinking was an unconscious natural process that constantly sought guidance from external signals or authorities. His mind functioned as an unconscious two-step process and was, as is today, physically comprised of a right and left hemisphere. Jaynes postulated that the right hemisphere conducted thought and provided automatic reaction while the left hemisphere received instructions from the right. That is, audio hallucinations evolved in the right hemisphere and were transmitted and heard in the left hemisphere. Jaynes postulated that these audio hallucinations were what early man described as God. Man relied upon mysticism (God /

Guidance) and his own reactions (fight or flight) in order to survive. Man, prior to 1500 BC, had no concept of guilt, deception, evil, justice, philosophy, history, or future. He had no subjective sense of time, self or space; he had no subjective memories. Ancient man's unconscious mind was capable of concept formation, learning, thinking, and reasoning. As Man's subjective consciousness began to take over, and before man began writing, his limited (non-subjective) memory ruled his daily life and his ability to learn. The memory of individuals and of communities carried knowledge through time and space. Memory eventually became an awesome faculty which everyone had to cultivate.

During man's early history, he developed techniques which allowed him to remember and evoke understanding. The symbolic devices of the very early Egyptians were designed to evoke understanding by revelation, by instant vision, rather than by conveying information: they were a means of breaking out of the material bonds which limit human intelligence, enabling man to envisage higher and broader states of awareness. That is, these symbols facilitated the bicameral mind.

Sometime prior to 1000 BC man began learning how to think subjectively. In order to survive the changes in environment- social behavior; and population explosion; man developed a subjective consciousness which in turn changed the manner in which the bicameral (i.e., two chambered) mind functioned. The audio hallucinations diminished in authority, frequency and clarity over time and were replaced in modern man by what Jaynes terms subjective consciousness. By 300 BC Man had totally lost his ability to function as a bicameral thinker.

As Jaynes points out, ancient man was a right hemisphere thinker. As can be seen in Table 3-1 the right hemisphere is prone to rhythmic thought processes such as music and poetry. As a result, ancient man tended to present his thoughts in the form of poetry. The length of poems was limited by the patience of the listeners and the storyteller's capacity to remember verse. Poetry, not prose, was the primitive form for storing the community's memory. Man found that by shaping ideas and things into vivid recognizable (right hemisphere activity) images he could then store them in memory for later recall. As Ancient Man's subjective memory began to develop he found that it was possible to control memory by memorizing facts in a specific order through the use of memorable forms. Thus this early evolving man developed the use of allegory to facilitate his storytelling and make use of his developing memory. Everyone needed the art of Memory, which like other arts, could be cultivated. In later times memory was used by the ancients such as the Greek lyricists Simonides (556 - 468 BC), the father of mnemonic art, a technique for assisting memory through mental associations.

With the advent of writing, which initially was a right-brained function, the leaders began to record their knowledge. Unfortunately at this time the masses, because they lacked a subjective consciousness, could not understand the concepts of time and space. The writings were couched in terms that reflected real things that the masses could visualize. In this manner the leaders could get across their more complex issues. These writings took the form of myths.

According to Jaynes; "Narratization arose as a codification of reports of past events. Writing had originally been an inventory device, a way of recording the stores and exchanges. It also became a way of recording god-commanded events, whose recitation after the fact became narratization. Since reading may have been hallucinated from the cuneiform it may, then, have been a right temporal lobe function. And since these were the recordings of the past, it is the right hemisphere that became the temporary seat of the reminiscence of gods. In the transcendence to consciousness, man assimilated both this memory ability and the ability to narrate memories into patterns." Further evidence of early man's right hemisphere literacy is the fact that the first writers employed a leftward writing direction preference. As can be seen in Table 3-1 the left eye projects to the right hemisphere suggesting the individual's preference for a left-handed writing direction. As man became more left hemisphere literate his preference for writing shifted to the right handed direction. It has been recognized that the Greeks completely reversed alphabetic writing to a right-handed direction c. 500 BC. This timing is consistent with the description of man's change to a subjective conscious form of literacy, as described by Jaynes.

During the transition period (1500-1000 BC) in which man's subjective consciousness was developing, writers had access to people with a bicameral-active mind (prophets) who could hear voices and visualize images although visualization was probably beginning to fade by the time of Moses. Accounts of the Bible place Moses, (suggested author of the Pentateuch/Torah) in the time frame of 1600 BC. It is therefore likely that he was a bicameral thinker. That is, Moses heard/hallucinated voices and images which he attributed to God and for many years these events were narrated as stories for the telling down through the ages.

With the development of a written language, man developed a conscious mind which allowed man to make his own decisions. He was able to consciously influence his actions. This was an invented process independent of the bicameral mind. Consciousness gave man the ability to integrate reality with thoughts and actions. As man was presented with facts, through the use of his conscious mind

he was able to make decisions which he could then carry out as actions. Jaynes goes on to show that man could not invent consciousness until he developed a language sophisticated enough to produce metaphors and analog models³⁴. As Jaynes points out, consciousness is a conceptual, metaphor-generated analog world that parallels the actual world. Thinking in metaphors and analog models creates the mind, space, and mental flexibility needed to by-pass the automatic, bicameral process. The voices heard by bicameral man tended to be poetic and rhythmical; or in another term cyclical. These properties of audio hallucination may have been a function of the mind process. These cyclical properties I propose were carried over to the spoken word in order to organize thoughts for the purpose of easing recall in order to relate the true meanings during the process of story telling.

Jaynes' work raises a few questions not the least of which is man's ability, by himself, to create his own consciousness. To quote Jaynes, "I am saying -- and finding it work to believe myself -- that all this highly patterned legend, which so clearly can be taken as a metaphor of the huge transilience toward consciousness, was not composed, planned, and put together by poets conscious of what they were doing. It is as if the god-side of the bicameral man was approaching consciousness before the man-side, the right hemisphere before the left. And if belief does stick here, and we are inclined to ask scoffingly and rhetorically, how could an epic that may itself be a kind of drive toward consciousness be composed by non-conscious men? We can also ask with the same rhetorical fervor, how could it have been composed by conscious men? We do not know the answer to either question." What has not been considered by Jaynes is the possibility that what we call 'Man' may have had outside help-possibly from the ancestors of an earlier civilization!

Jaynes has suggested that prior to 1500 BC man was incapable of abstract thinking. The use of calendars during this period therefore raises another issue in that the term 'year' represents an abstract concept. As discussed in Appendix A the first calendars were based on lunar or seasonal occurrences which could be observed and recorded in some non-abstract manner.

The term 'year zero' shown in Appendix A represents the start year of the various solar calendars. These years begin 1,500 to 2,000 years before the time frame assigned by Jaynes for mans' change to a conscious thinker. The dates that these calendars were conceived is not known. It is highly unlikely that the year-zero dates are the dates of conception of the calendars but rather represent dates far enough in the past of each civilization as to provide a history which was likely

based upon some significant occurrence around the year-zero timeframe which had been passed down orally to the then current civilizations.

There are indications that a form of solar calendar was used c. 2000 BC. This reflected a 360 day year and did not represent a historical date other than perhaps referring to the reign of a particular ruler. A worldwide revision of the 360-day calendar took place during the eighth century BC which falls within the time frame in which man became a conscious thinker cited by Jaynes. Other historical references which support a change in mans' thinking process, post 1000 BC, are listed below:

REFERENCE	DATE (BC)	MEANING
Babylon	1700-1600	Use of regnal years (rulers)
Persians	1380	Solar & Lunar calendars agree
Nabi	835	Welling up with speech and vision
Amos	783	Bicameral thinker
Isaiah	740	Prophet- Bicameral thinker
Jeremiah	677	Prophet- Bicameral thinker
Ashurbanipal	699	Laws- Conscious thinker
Ezekiel	580	Prophet- Bicameral thinker
Greeks	500	Changed writing to right-Handed direction
Nabi	300	End of prophecy

While man may have begun the change to a conscious thinker c. 1500 BC, it can be seen that the process of change lasted well into the 4th century BC.

Since the mid 1960's a variety of psychological studies have shown that the left and right sides of our brains specialize in different types of activity. The left side of the brain appears to be more concerned than the right with rational, sequential thought and with linguistic faculties such as reading, writing and speech. The right side of the brain seems to be more concerned with visual-spatial functions, aesthetic and emotional appreciation, and perhaps intuitive thought.

Table 3-1 summarizes the functions predominately performed by the brains two hemispheres of a left cerebral hemisphere dominated (right handed) person. Subjective consciousness is a learned process/behavior and does not have a physical location. It is a particular organization of the mind and a specific way of using the brain. Having developed this capability, man basically replaced the tie to his access to the divine consciousness as experienced by the bicameral mind.

That is, what man had relied upon through hallucination he now had to rely on his self. If subjective consciousness is a learned process, is the automatic audio-hallucination portion of the right hemisphere an unlearned process? If so, is it lying there dormant just waiting to be rediscovered?

In most modern societies, people tend to use the functions associated with the left side of the brain more than those of the right. This is reflected in our general approach to the world, the activities in which we engage, and the type of mental activities we value and encourage. This preference for the left side of the brain is partly a reflection of our educational systems. It is also partly cultural. Our emphasis in western society on doing and achieving, rather than on being, has reinforced left-brained ways of thinking. The traditional Western system of thinking is more left-brained; that is, linear, logical and rational. Alternatively, the Eastern system of thought tends toward going within oneself for answers. That is; right-brained, intuitive, open, and capable of holding contradictory concepts without confusion.

Studies of the electrical brain activity of people while in deep meditation have revealed a progressive synchronization of the electrical activity coming from both sides of the brain; the deeper the meditation, the greater the integration. This synchrony suggests an increased balance between the two modes of thinking. It would seem likely, as Russell³⁵ has suggested, that in an enlightened state, thinking would be both: analytic and holistic, intellectual and intuitive, active and receptive.

If it is accepted that ancient mankind hallucinated from an all-knowing source then one explanation of mankind's parallel development throughout the world could be that they were basically tapping the same source of knowledge and consequently would develop in much the same manner, planet-wide. Another option is that civilizations such as the Sumerians, Egyptians, and Mesoamericans all had access to a common earlier and advanced civilization.

In Chapter 7 I explored the possibility that the ancient civilizations may have been aware of the harmonic relationships necessary for a sophisticated system of global communications. If, as Dunn³² suggests, it is assumed that the Giza pyramid complex was a communications system which included a global harmonic grid network then what the myths relate as oracles or communications with gods may have been what we today call radio.

As Dunn has described, the Giza pyramid complex ceased to be useful as a result of a structural failure within the resonant cavity which we today refer to as the

King's chamber. If this communications system suddenly failed the people's connection with what they believed to be their gods would have ended. If it is further assumed that the construction of this pyramid complex was performed by the mythological entities that these ancient civilizations referred to as gods then it would be safe to assume that these ancient civilizations could not repair the failed system and likely did not understand how it worked in the first place. In order to capture the knowledge they did possess they resorted to writing the myths we have today.

If one were to speculate on the cause of failure of the pyramid complex in light of the myths which refer to catastrophic events, a story can be developed which explains the pyramids demise as well as account for the phenomenon that Jaynes has ascribed as a change in brain function. As described in Chapter 8, there is evidence that the cores of galaxies periodically undergo major explosions releasing high energy cosmic ray particles. During the past 6,000 years there is evidence that the Milky Way galactic center has expelled several clouds of ionized gas forming zones of high radiation around the Earth. These radiation zones could possibly have caused a genetic change in the brain functions which Jaynes describes. This could account for the emergence of a cave-man form of existence following the ice age even though these civilizations might have originally come from more advanced societies.

As Dunn has described, the operation of the Giza Pyramid complex was based upon a coupling of the Earth's natural resonance frequency which should remain constant unless something caused a major increase in its amplitude. It is believed that debris could be transported to the Earth's surface as a result of a galactic explosion. It is further believed that this would cause a climatic change possibly resulting in the onset of an ice age. The increase in the volume of ice on the Earth's surface could have affected the harmonic relationship between the Earth and the pyramid. This however would be a relatively gradual change which would unlikely cause an abrupt transient which would have been necessary to create a catastrophic failure of the granite structure of the resonant chamber. A more likely scenario which could cause a spike in the amplitude of the Earth's resonance frequency would be the impact of a large asteroid such as is thought to have occurred during the past 6,000 years in the region of Mesopotamia.

Whatever caused the changes which prompted ancient man to record his thoughts may never be understood; however, we find ourselves today with a wealth of interesting writings to try and understand. To understand these ancient esoteric writings it is helpful to mentally place oneself at the time of these writings, with the mentality of the writer/storyteller, and with his knowledge of the language and

events shaping his world. Unlike bicameral man, we today have a subjective consciousness so this is possible.

The use of rhyme, fixed sequences of words, and repetition were an integral part of an individual's ability for recall, and helped to assure accurate oral communications over hundreds and thousands of years without changing the meaning of the story. These are traits that we now know are associated with a predominately right-brained individual. This is also in accordance with Jaynes' theory relating to early man's use of his right brain functions prior to becoming a conscious thinker.

Several of the most familiar esoteric writings which we have access to today are found in the Old Testament. As shown in Chapter 5 of this writing, many of the verses which appear in the Old Testament Book of Genesis stem from earlier Sumerian and/or Babylonian mythology and perhaps from much older sources. If the wording of the ancient mythologies has been preserved and reliably translated, the Biblical account which has been passed down through the millennia should be considered as an authentic reproduction of what would have been originally composed by early man. The more recent books written by authors with a subjective consciousness may have incorporated in their meanings interpretations of their own for personal/secular gain or positioning.

If the early writings of the Old Testament were conceived through the processing of a bicameral mind, and if these writings have survived through time with the same meanings intended when they were first spoken, then I believe it possible to interpret these verses as expressions which reflect today's knowledge. These interpretations support our understanding of man, based upon the knowledge we have today. I postulate that since we today believe ancient man did not have our knowledge, yet possessed the explicit information referred to in his myths, this information had to have come from a second party or from a higher consciousness.

The books of the Old Testament offer a written history of the development and exploits of man over a period of approximately 3,000 years. It has been suggested that much of the Old Testament consists of forgeries from the seventh through the fifth centuries BC for the purpose of writing a history for the Hebrew sect. This is not an unusual practice and it was not the first time a nation borrowed from previous cultures. It has been established that the story of creation comes to the Hebrews at least from the time of the Sumerians. I would speculate that the Sumerians also borrowed the story from a much earlier civilization which had achieved high states of consciousness and technology. The type of rewrite an

early Hebrew might have used would include the insertion or change of names, events and places. Even though the writer may have incorporated slight changes in the text/meaning to suit his purpose there still should remain a hidden or intrinsic meaning encoded within the remnants of his verse. Since the purpose of the writer would have also been to retain what he believed were the words of God, the earliest texts should be considered reasonably accurate. Alternatively, the Hebrew writers may have substituted names of their own ancestors whose meanings were the same as the words they replaced, thereby retaining the true meaning of the text with certain key phrases/words replaced with proper names of the same meaning. As another alternative, the original words may have been mistranslated by later writers. This, however, is not likely since this would reflect a randomness which would tend to mix up the translated meanings rather than provide order, as is the case as shown in Chapter 4. If these stories had indeed been formed by bicameral thinkers and passed down from bicameral times, dates and durations would not have been part of the story since the bicameral mind was incapable of comprehending the concept of time.

At this point a few words pertaining to the origin and development of the Old Testament are in order. The Old Testament is professed by many to be the 'word of God'. In order to understand the significance of the Bible it is beneficial to review its origin from the time of the Jewish/Hebrew beginnings.

For thousands of years from the very early beginnings of the Jewish nation through the period of their exile in Babylon at the hands of Nebuchadnezzar II, c. 597 BC, down through their return to rebuild Jerusalem, c. 536 BC the Jewish philosophy; wisdom; and laws were passed on orally (Talmud) and as written law (Torah) which became the first five books of the Hebrew Bible.

During the period of Persian rule c. 538-330 BC the Jews returned to rebuild Jerusalem at which time they were governed by a group of Levites and sages beginning with Ezra. This is the period in Jewish history known as the 'Great Assembly'. The members of the Great Assembly collected holy writings and decided which books would be canonized as their holy scripture. It was during this period that the Old Testament took its earliest form consisting of the five books of the Pentateuch and perhaps some of the earlier books attributed to the prophets. It was during this same period that prophesy was to have ended. During this same period 15 other books in use by the Jewish community were not included in the Hebrew canon of Holy Scripture. These have become known as the Apocrypha. Besides these works, many other Jewish-Christian works have survived from the period between about 200 BC to about 200 AD. These are called 'pseudepigrapha'.

The Bible was further changed in 325 AD when the Council of Nicea, formed by the Roman emperor Constantine, removed or modified at least 45 documents from the collection of texts which would become the Holy Bible of the Christian world. Our awareness of these missing texts is a result of the discovery of Essene documents, known as the Dead Sea Scrolls; scrolls found in Upper Egypt, known as the Library of Nag Hammadi; and from the archives of the Catholic Church containing texts which were secreted from the common person being reserved for scholars.

The Book of Ezekiel was the center of controversy over many centuries since it diverged with the Mosaic code. Fortunately, it was salvaged by Rabbi Chaniah in the first century AD as it is the only scripture which appears to describe an encounter with space beings and spaceships.

The Apocrypha first appear, with the exception of 2 Esdras, in the Greek version of the Bible known as the Septuagint and later appear in their entirety in the Latin Vulgate version. During the sixteenth century the Apocrypha appeared in the English translations of the Bible including the King James Version (1611 AD). In 1546 the Council of Trent decreed that the Canon of the Old Testament include the Apocrypha. However, the editions of the Bible prepared by the Protestants have followed the Hebrew canon and do not include the Apocrypha. In 1648 the Puritans declared that the books of the Apocrypha were not of divine inspiration and therefore should have no part of the Canon of Scripture.

The point to be made here is the Old Testament portion of the Bible has a long history of development. It was developed by men with various agenda. It could be argued that these men were inspired by a divine presence and therefore the words do come from God. If this is an accepted premise then should the words relayed by individuals such as Muhammad, the Mormon prophet Joseph Smith, the sleeping prophet Edgar Cayce, Nostradamus, the Greek oracles, and others be considered as gospel? The Genesis Model described in this chapter suggests that there is a process by which divine inspiration is indeed possible.

By some accounts the books of the Old Testament were written beginning with the Book of Amos, dating from the eighth century BC and ending with Ecclesiastes dating from the second century BC. This span of time began during the bicameral era and continued into the subjective consciousness era. In order to conceptualize what might have been occurring during ancient times, in terms understood today, I would like to introduce the term "Genesis-Man". By this I mean the concept of generic man as he existed during the period in which man

was undergoing his transition from a bicameral oriented thinker to a conscious thinker. During this period, bicameral hallucinations were diminishing and subjective writing would have been in its infancy with 'God' still speaking to some. This covers a time period of perhaps 1,000 years (1600-600 BC).

At some point prior to the time of Amos, Genesis-Man was motivated to write down the esoteric stories which had been passed down by means of narration over the ages. When these writers wrote of creation and the early personages, did they consider who would read their writings or who would understand them? What was the purpose in these particular writings? Jaynes suggests it was because of the nostalgia for what had been lost with the disappearance of the bicameral thought process.

During the times of bicameral thinkers such as Moses, stories were widely spread through oral communications such that they could not have been kept from the masses but rather were perpetuated by them. The prophets were accepted as speaking the words of God. It could easily have been accepted by the writers that God was directing them to write down His commandments and teachings so they would not be forgotten.

As conscious thinkers began to appear, they may have either recognized the need to establish controls over the masses or perhaps recognized they were an elite group who could benefit themselves by controlling others. Anything which is meant to control must have an unquestionable basis in order to be acceptable by man. Being divine would fill this need. Since ancient man prior to 1500 BC had a limited concept of good and evil, justice and philosophy; there was a need to set down the laws, history and philosophy, as is the case with the Laws of Hammurabi and the 10 Commandments given to Moses.

If the purpose of the conscious thinkers was to write stories to provide the conscious elite with a written record of the gods, for the purpose of control of the masses, then the writings would have been closely controlled by these few elite, and fed to the masses as it suited their purpose. This seems to be the case as evidenced by the fact that the ancient writings are found in libraries of the ruling class or religious sects and not found in the houses of the general populace, as is the case for idols.

The period beginning around 1500 BC (migrations) and continuing through 500 BC (Greek Golden Age) down to 300 BC (Alexander the Great) could be classified as a period of chaos. This is supported by Biblical accounts of wars throughout the history of the Hebrews as well as accounts by other writers such as

Herodotus the chronicler of Greek, Assyrian, Babylonian and Persian conquests; and Homer, the suggested author of the Iliad and Odyssey. The masses seemed to be under the control of the elite (perhaps conscious) individuals. Wars were fought by what seem to be non-reasoning masses willing to follow the direction of their conscious, literate leaders without any particular thought of their own other than survival. This period of chaos coincides with the period in which the breakdown of the bicameral mind was to have occurred and the learning of subjective consciousness was to have begun. I think it not coincidental that the Old Testament happenings which supposedly occurred prior to 1500 BC and related by bicameral man, were rewritten between 600-420 BC by subjectively conscious writers. Some of the Old Testament teachings were perhaps the writings of conscious thinking authors who intended to preserve the original verbal stories hallucinated by bicameral thinkers (e.g., Moses) and simply wrote down what they were told. Alternatively, since these writers were able to think and compose in terms of allegories, they were able to write their own conscious thoughts and may have preserved the true meaning within a codified writing. This I believe was accomplished through the use of the cyclic properties of rhyme, harmony, numbers, and key words & phrases.

This cyclical process can be observed in the writing of the first chapter of the Book of Genesis. I propose that Chapter 1 of the Book of Genesis, once interpreted, provides a meaning beyond the literal description. This interpretation reflects a metaphysical as well as a historical and ethical presentation of Creation. This falls in line with teachings such as those of the Sumerians, early Egyptians, Hindus, South and Central American cultures, and North American Indians. Each culture has borrowed from the other and integrated what was thought to be appropriate at the time, and discarded the rest. Beginning with the beliefs of the earliest cultures down through the modern day religions, all had an explanation of who was responsible for creation and where and how it was to have occurred. Today we can describe the physical makeup and workings of the universe, the workings of the smallest components of matter, yet we are unable to determine how or why we ourselves work.

I propose that the 'workings' of man is codified in the Book of Genesis. The following discussion is based on the repetition of phrases found in the 31 verses of Genesis 1. The first two verses are an introduction to the rest of the story. They set the stage for what is to come. The remainder of the text is written in a cyclical fashion alternating with what I will term a "Thought Verse" with a "Reality Verse", until the end of the chapter. This is depicted in Table 3-2. At the completion of each Thought/Reality sequence is a completed activity (i.e., a day). Verses 22 and 29 are somewhat unique in that they are neither a "Thought" nor

"Reality" verse, but are termed here as "Conclusion Verses". They represent a completion of the two creation cycles (i.e., animals & man) with instruction that any further physical creation will be through self re-creation/multiplication.

Each "Thought" or "Reality" verse has common phrases which either begin or end the verse. I believe this is for the purpose of facilitating recall on the part of the storyteller. These phrases begin with a command and end with the effect, plus a conclusion that 'all was good'. I believe these phrases have specific meanings which are:

Then God said --- Voices heard by the left hemisphere of the Bicameral
Mind. (Thought verse)

And it was so --- Manifested in consciousness

God saw that it was good --- God reflects on God- Reality is as was
imagined. (Reality verse)

I propose that the writings in Genesis 1 provide an explanation of the workings of mans conscious mind with his unconscious mind (God) and provides a description of the development of Man's consciousness.

The interpretation of verses 2-15 of Genesis 1 yield a description of how the world and man function as an integrated consciousness. This is represented by the Genesis Model as shown in Figure 3-1. Since our current thought process is constrained by the concept of time, the following discussion is presented as though creation was a sequential process. In actuality I believe that the process was instantaneous. Further, I believe that this is an ongoing process participated in by all. This leads one to speculate that what we term the past, the present and the future are all occurring at once. Our senses are such that we cannot observe this.

Now consider "All That Is", in Figure 3-1, as a representation of what we today would perhaps define as God. Now, this god is truly all that is, including what is known by man, as well as everything that is unknown to man. God established from the depths of All That Is, what is termed here, a Universal Consciousness which is responsible for everything pertaining to physical and spiritual realities. The Universal Consciousness is the controlling force of all intelligence.

Throughout creation, the Universal Consciousness created in thought what it then created in reality. The Universal Consciousness created a Divine Consciousness

which represents that which knows. This is a consciousness which exists but has no specific place or location, since it really is independent of physical reality. From what the Divine Consciousness envisions the subconscious mind generates in thought or perhaps generates that which is manifested as a psychic experience. The word "psychic" is from the Greek word "psychikos", meaning "of the soul". The soul is, in these terms, the Divine Consciousness.

The Universal Consciousness also created, what is defined as, a Physical Consciousness. This again is a consciousness with no place or location since it is a consciousness. This is what we today experience as the conscious mind or that portion of the mind which understands physical reality through information derived from the senses and learns through the conscious use of repetition.

Creation through divine consciousness is in the form of energy while creation through physical consciousness is in the form of matter. Einstein's theory of relativity concluded that an objects mass is not constant and that mass and energy are in fact the same thing (or from the same thing). This I term Universal Consciousness. The Universal Consciousness through the Divine Consciousness establishes our subconscious mind; the conscious mind being developed by the Physical Consciousness.

In the bicameral brain, God (Universal Consciousness) gave direction through both audio and visual hallucinations as Jaynes points out. This hallucinatory function was replaced by man, through a learning process, as his Subjective Consciousness.

The "darkness" emanating from the Universal Consciousness directly to the subconscious mind represents the audio and video hallucinations that bicameral man experienced and eventually lost as he developed a subjective consciousness. I would take this one step further and propose that the "darkness" actually was a bidirectional process. While the hallucinatory function described by Jaynes was considered as being instructions from God, the link in the direction from the subconscious mind to the Universal Consciousness was also lost. I propose that this was mans use of prayer and his understanding of how his emotions played a role in interacting with the process of creation.

It would appear that in bicameral times man made use of this Divine Consciousness (subconscious mind) and then shifted to his Subjective Consciousness (conscious mind) around 1500 - 1000 BC. Where the subconscious mind perceives by intuition, the conscious mind perceives through the five senses. Could this be the fall of man as discussed in Chapter 3 of The

Book of Genesis, and is what we are seeing today the beginning of an integration of the workings of the Divine Consciousness the Subjective Consciousness and the Physical Consciousness into what will develop into "Enlightened-Man?" That is, is man trying to control or change physical reality through the integration of his intuitive and learned powers?

What the Genesis Model offers is a process by which selected individuals were able to tap into a hidden knowledge base through the Divine Consciousness. This is not unlike the process Edgar Cayce claimed to have used when, through meditation, he had access to what he called the Akashic records. This process does not require the existence of previous highly evolved races or men from space, but it does not exclude them.

Several years after completing the Genesis Model based on the Book of Genesis I had the opportunity to read several of the Upanishads⁷ and they struck me as relaying the same information as I interpreted from the Book of Genesis. This should not be surprising as it is believed that the Sumerian account of creation followed by the Hebrew account stems from the very ancient Vedic writings which form the basis of the Brahman and Hindu religions. Table 3-3 is a comparison of the Vedic terms and the terms derived from the Book of Genesis.

During the period when the Western Roman Empire fell to the Barbarians, c. 395 AD, another scholar Augustine, Bishop of Hippo also shared a great interest in the Book of Genesis. Convinced that the book was a coded message, sent to mankind by God he struggled with his understanding of the first chapter of the book. In particular, "In the Beginning" presented him with great difficulty. Since his frame of reference was a spatial three dimensional universe plus time he felt it necessary to place God before time began and in space. He satisfied his curiosity by accepting that "Beginning" meant "Wisdom" or intellectual nature. Considering the knowledge base during his time he was quite accurate. In the Genesis Model I propose that "All That Is/God" established a "consciousness" in "The Beginning".

Augustine further had no understanding of the theory of subatomic physics which allows for up to 11 extra curled-up space dimensions. Since it is difficult to conceptualize this phenomenon in a 3-dimensional framework Augustine could not visualize God being anywhere but somewhere in space, yet still having to be unbounded. He had to settle for God just being. With modern day understanding of reality the concept of God does not have to fit within Augustine's limited understanding of the world.

Augustine further accepted that there was formless matter, although he did not understand the concept. Today, according to string theory all matter and all forces are made from one basic ingredient: the oscillating string. That is, everything at the microscopic level consists of vibrating strands. The Genesis Model proposes that In the Beginning the “Deep” consisted of these vibrating strands which coalesced into both consciousness (spiritual) and matter (physical).

Another mystery concerning “In the Beginning” can be observed in Table 3-2. The phrase “Then God Said...”, occurs nine times. This has been interpreted as creation occurred thru the “Word of God”. Now, since in the beginning there was no one to talk to or no one to listen to the words “God said” must be considered as a metaphor. This metaphor, I suggest, represents an action for which ancient man had no understanding. However, speech was understood and actually does represent the action to initiate creation. “Word” or “words” are formed thru speech and a term the ancients could understand. Today we know words/sound is formed by the vibration of our vocal cords which then pass through the air as a form of vibration. As mentioned above string theory states that all matter is formed as the result of the vibration of subatomic entities called strings. This certainly was unknown to the ancient writers. However the terms “said” or “word” represent vibration which was the basis of creation of both physical reality and what we have termed spiritual reality or what I have termed levels of consciousness.

In conclusion, what I am proposing is: One of the interpretations of the story of creation in the Old Testament is that it is a description of consciousness and how the spiritual and physical aspects of mankind were created and integrated. There were no words at the time of the Old Testament writings to explain the concepts as we have defined them today, consequently, the writers would have recorded the words as they heard them using allegory to describe the concepts. Since bicameral man could not have conceived this knowledge by his free thought, it could be concluded that it must have been received from another source or hallucinated through the right hemisphere of the brain. The Sumerians stated, "Everything that we know was taught to us by the gods".

Chapter 4 is an interpretation of each verse of Chapter 1 of the Book of Genesis which shows how the terms for the Genesis Model were derived. In Chapter 10 I compare the Genesis Model to the concept of Superstring/M theory which describes our current understanding of the physical universe as theorized by modern day physicists.

ALL THAT IS

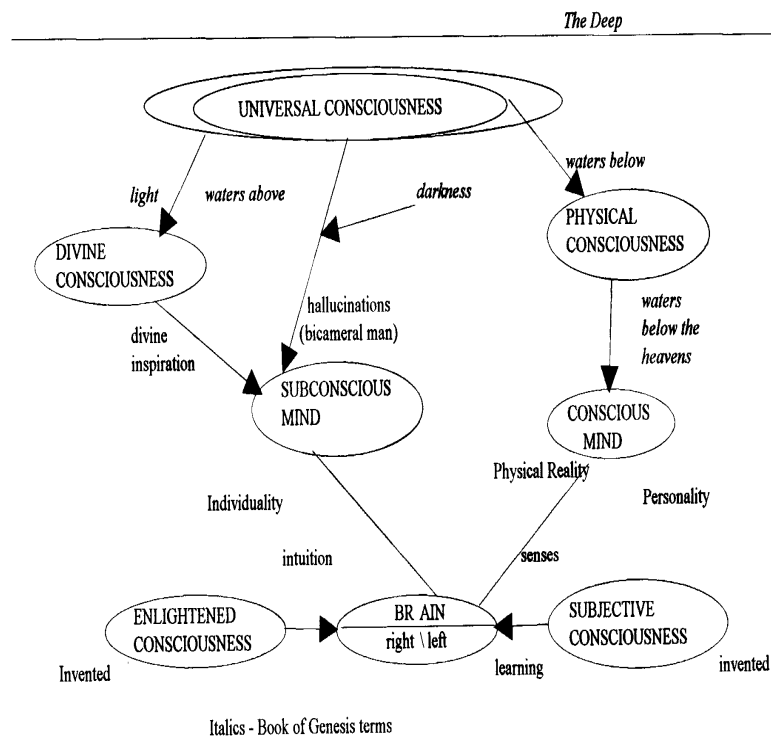


TABLE 3-1 BRAIN FUNCTIONS

LEFT HEMISPHERE	RIGHT HEMISPHERE	SUBJECTIVE CONSCIOUSNESS
Controls right side of body	Controls left side of body	Time existing in space
Speech	Songs and music, poetry, artistic Auditory hallucination	Introspection, Visual mind
	Trigger emotional reactions of displeasure, Favors emotion	Good and evil.
Listen	Listen	
Understand	Understand, Intuition	Analog "I" ³³
Sight from right eye Rightward writing preference	Sight from left eye Leftward writing preference	
Left nostril	Right nostril	
Analytic & verbal (looks at parts), Mathematics, Logic	Synthetic & spatial-constructive tasks (looks at wholes)	
	Recognition of faces and facial expressions	Recall (memory) Exerption
Reading	Reading (early in life)	Language
	Narratization (early in life)	Narratization
	Susceptibility to hypnosis	
Desire, inspiration	Inward authority (God)	Fatigue

TABLE 3 -2 GENESIS, CHAPTER 1, CYCLICAL PROPERTIES

VERSE	THOUGHT -T REALITY - R CONCLUSION-C	PHRASES		
		COMMAND	EFFECT	CONCLUSION
1	Outline of story			
2	Outline continued			
3	T	Then god said	...and it was so (implied)	
4	R			...saw it was good*
5	DAY 1			
6	T	Then God said		
7	R		...and it was so	** *
8	DAY 2			
9	T	Then God said	...and it was so	
10	R			...saw it was good
11	T	Then God said	...and it was so	
12	R			...saw it was good*
13	DAY 3			
14	T	Then God said		
15	continued		...and it was so	
16	R			** *
17	T			*
18	R			...saw it was good
19	DAY 4			
20	T	Then God said	**	
21	R			...saw it was good*
22	c			
23	DAY 5			
24	T	Then God said	...and it was so	
25	R			...saw it was good*
26	T	Then god said	**	
27	R			** *
28	c			
29	T	Then God said		
30	continued		... and it was so	
31	R			... saw it was very good*
31 plus	DAY 6			

* Each verse also begins with an action word (i.e., And God created. separated, made, placed)

** Verses which do not follow: (7, 16, 17, 20, 26, 27)

TABLE 3-3 GENESIS MODEL AND THE UPANISHADS**MAN – TWO ASPECTS:**

- Physical
- Spiritual

<u>GENESIS MODEL TERM</u>	<u>UPANISHADS TERM</u>	<u>UPANISHAD BOOK</u>	<u>ATTRIBUTE</u>
All – That - Is	Brahman	Katha	Supreme Being
<i>The Deep</i>	OM	Katha	Symbol of Brahman
Universal Consciousness	Primal Cause	Katha	Universe
	Unmanifested Seed	Katha	
	Cause of the Universe	Mundaka	
	Universal Person	Mandukya	
<i>Light / waters above</i>	Taijasa	Mandukya	Divine Illumination
<i>Darkness</i>	Prajna	Mandukya	Unaware direction from the Primal Being
	Dreamless sleep	Mandukya	
Divine Consciousness	Soul of the Universe	Prasna	Spiritual
	Primal Energy	Prasna	
	Prana	Prasna	
Physical Consciousness	Giver of Form, Rayi	Prasna	Physical Form
<i>Waters below the heavens</i>	Intellect & Ego	Katha	Conscious awareness, Ego
Subconscious Mind	Mind, Atman	Manduka	Spiritual Reality
Conscious Mind	Mind, Indha	Katha, Brihadarany	Consciousness,

		aka	God within
<i>Individuality/Intuition</i>	Meditation	Manduka	Subconscious Mind
<i>Senses</i>	Senses	Katha	Conscious Mind

CHAPTER 4

INTERPRETATION OF CHAPTER 1 OF THE BOOK OF GENESIS

Enki conceived Inanna,
Ea created Marduk,
Nammu created heaven and earth,
Enlil created the moon,
God created Man,
What's left to figure out?

-Author

With a system of underlying principles,
a collection of historical data, and
a dash of subjective consciousness;
a concept is formed.

- Author

INTRODUCTION

This chapter is an interpretation of the meaning of the first chapter of the Book of Genesis as outlined in the Genesis Model, Figure 3-1. I propose that this is a story which focuses on the description of creation as related to man functioning with a bicameral mind. The understanding of his inner voices and images he attributed as God. I believe this story has a much deeper meaning than what is commonly or literally taken. The story provides a greater understanding of creation, God, and man; beyond that which we can attribute to a bicameral thinker. The story had to have come from a more conscious source or perhaps from a more advanced civilization for which we have no records today of their existence. I further believe the terms used regarding physical reality refer to a concept within consciousness, and the discussion in terms of physical creation (e.g., earth, stars, etc.) is secondary to the story of the creation of consciousness. The terms used, which are described in the Glossary to interpret the meaning of this chapter, offer a consistent story which supports the idea of coded meanings hidden within the text. When a code is being used, any symbol must be decoded with a consistent meaning each time it appears. This is the case, as can be seen with what follows.

I believe the mystics of the ages had a deep sense of the meaning of spiritual writings, much of which has been lost on modern man. Addington²² postulates that the Bible and other esoteric writings (e.g., the Bhagavad-Gita, the Vedas and the Upanishads) can be read and understood by modern man through the use of the codes that Addington has uncovered. (Refer to the Glossary for a list of codified words that are referred to and used in this chapter).

Addington states, "That which I have to offer began with the discovery that modern day readers were completely overlooking the meanings behind certain proper names of people and places, continually featured in Biblical writing, meanings that the ancient writers had taken for granted and assumed would always be understood. I found that certain numbers and common words had a repetitious use and that when their symbolic or esoteric meaning was understood, they opened up entirely new avenues of wisdom and understanding."

As Addington points out "God in man is the principal character in all Bible stories." Since the Book of Genesis follows the principle of what was first conceived in thought was made manifest in reality, I propose that the usage of physical terms such as earth, flora, and fauna, implies both a spiritual as well as a physical meaning.

In summary, the interpretations which follow unfold as such:

Verses 1 - 5, which comprise day 1, describe the development, from All That Is, of the spiritual aspects of consciousness (i.e., that which is God, enlightenment, spirituality and sub consciousness).

Verses 6 - 8 describe the creation, from All That Is, of the consciousness of physical reality; the physical aspects of God in consciousness. A dual consciousness is formed consisting of the enlightened consciousness and the physical consciousness.

Verses 9 - 13 refer to the physical materialization of earth, flora, etc., first in consciousness and then in reality. (Physical reality as understood by the Universal Consciousness.

Verses 14 - 19 are the integration of physical and spiritual consciousness.

Verses 20 - 23 describe how the conscious mind functions/learns by reasoning and by outside authority.

Verses 24 - 25 describe how the conscious mind learns from outside influences.

Verses 26 - 27 describe the concept by which man's mind is to function as an enlightened consciousness working in an integrated fashion with its physical consciousness. Man is created in physical form.

Verses 28 - 30 describe how man is to grow intellectually and spiritually.

Verse 31 is a summation or conclusion.

BOOK OF GENESIS, CHAPTER 1:

1. In the beginning God created the heavens and the earth.

INTERPRETATION:

Creation of the divine consciousness within and the consciousness of reality comes from All That Is (i.e., the absolute truth, wisdom and understanding).

This is probably a lead-in statement written by a subjectively conscious man introducing the story he is about to relate which was passed down from, or, related to him by, a bicameral man. Since bicameral man had no concept of time, he could not have conceived of a "beginning". The writer introduced the phrase "In the beginning". "Beginning" implies a before and after or the concept of time. Since bicameral man did not perceive time, this concept I conclude would have been introduced by a subjectively conscious writer and, therefore, I surmise this is an introductory verse. God created the concepts of a consciousness within (spiritual, left hemisphere) and a consciousness of the without (physical, right hemisphere). Bicameral mans left brain received instructions from his "inner voices". He could observe physical phenomena such as the sky and the ground and observe himself interacting with both. He was limited as to his means of expression of the concepts of god; heaven; earth; and man; consequently, his terms are simple and straight forward.

Bicameral man had to listen to his voices and view his images and as he began to develop language and concepts he assigned these voices and images as God. As Man began to reason consciously he surmised that in the beginning God is all there is, the only cause, the only creator, the only substance. Therefore everything created by God must be created out of God. Conscious man began to assign a more subjective meaning to the words which were passed down through the millennia by bicameral man. The story that unfolds (Genesis) is a discussion of the various "levels" of consciousness.

What the writer of Genesis is trying to convey is: "What I am about to relate concerns the subject of the creation of mans consciousness." The writer will go on in verse 2, which is a continuation of the introduction, to describe where mans consciousness came from. He will then, beginning with verse 3, to relate the how.

In verse 1 the writer is using the meaning of God in its broadest sense (i.e., All That Is). That is, everything that was, whatever it was, had to be lumped into something which represented the unknown, something greater than man.

"Created" Is a synthetic and spatially-constructive concept associated with the right hemisphere of the mind, or that which was in tune with the inward authority of God and therefore was understood by the bicameral mind. Therefore, creation may have been relayed to the bicameral man by his inner voices. Conscious man, at a later time, put it in the perspective of having it occur "in the beginning."

According to Addington "heaven" refers to the divine consciousness within while "earth" refers to the outer manifestation or in a broader sense a consciousness of reality.

At the time these words were written, conscious man may not have had the knowledge or understanding of the functions of the brain and how it affects the physical body (i.e., involuntary actions such as heart beat and breathing). What was being referred to by bicameral man as a consciousness of reality, (a concept that may not have been understood at that time), was written as "earth". Whether or not ancient man understood this concept of consciousness or not, may never be known. Modern man has, however, interpreted "earth" literally as earth, or what is manifested in physical form. Since creation in the physical sense parallels creation in the conscious sense, accepting the interpretation, as modern man does today, is not wrong; it is just incomplete and misses the primary meaning.

2. And the earth was formless and void, and darkness was over the surface of the deep; and the Spirit of God moved upon the face of the waters.

INTERPRETATION:

Before the earth and man existed (reality) the only consciousness that existed was that which comprises All That Is. From this "deep" a Universal Consciousness (Spirit of God) came into being.

Bicameral man relied on thoughts coming from his inner voices as inspiration in order to understand creativity. This verse is an introduction showing that there is something greater than man, all knowing, -all powerful, -all everything. The "earth" represented physical reality which did not yet exist and the "deep" represented the concept of All That Is. Movement over the surface represents a Universal Consciousness coming into existence from the deep.

Whereas the first verse introduces the concept that in the beginning there existed a consciousness which represented All That Is, this verse directs the focus of creation from a more general "All That Is" to a more specific Universal Consciousness which comes from, and is a part of All That Is, but is directed specifically to the development of man.

The "deep" represents the consciousness of All That Is, which is unknown; that which man does not understand. The "darkness" represents the knowledge and wisdom of All That Is, surfacing from the deep. "Waters" according to Addington refer to a fluid mind, movement in consciousness, where "Spirit of God" refers to the breath of life. God moving over the face of the waters refers to the development of a Universal Consciousness; as the darkness was over the surface of the deep, so was the Spirit of God over the face (surface) of the waters.

3. Then God said, "Let there be light"; and there was light.

INTERPRETATION:

Spiritual illumination (knowledge and understanding) come from the Universal Consciousness and are made manifest as the Enlightened Consciousness. The Enlightened Consciousness was conceived.

Verses (3-5) describe the development of the spiritual aspects of consciousness. Bicameral man believed that his inner voices were saying, through this verse, that an enlightened consciousness was brought into being. This enlightened consciousness is a representation of divine illumination (i.e., that which represents the wisdom and understanding parts of consciousness). "Light" is a synonym for God, denoting divine or spiritual illumination, also wisdom and understanding.

4. And God saw that light was good; and God separated the light from the darkness.

INTERPRETATION:

The Divine Consciousness is a true representation of the Universal Consciousness (i.e., God reflects on God). The Enlightened Consciousness, which supplies divine inspiration, was separated from the unknown portion of the Universal Consciousness.

The Divine Consciousness represents what god knows and what man can access through his subconscious mind. The darkness represents the unknown or infinite wisdom and knowledge of All That Is, which must be supplied by the Universal

Consciousness to man through hallucinations and visions (i.e., bicameral mans inner voices).

The bicameral man believed God supplied that which he could not understand from that which covers the deep (darkness). That is, what he lacked from his own thought process, he received by direction from God.

5. And God called the light day and the darkness he called night. And there was evening and there was morning, one day.

INTERPRETATION:

Wisdom and understanding are within the Divine Consciousness, and from the darkness (All That Is) will come understanding of the things that remain unknown (not yet understood). And there was feeling (emotion) and there was inspiration, a unique consciousness.

"Light" represents wisdom and understanding; a function of the Divine Consciousness which is represented by "day". From verse 2 we see that darkness represents the knowledge of the unknown from All That Is (i.e., that which is emerging from the deep). What the Divine Consciousness needs in order to comprehend must be supplied from a deeper consciousness and this occurs in the bicameral mind through hallucinations or communications directly from God (All That Is). This verse is concluded by stating that at this point in creation there is established a unique consciousness (one day) which understands/controls emotions (evening) and inspiration/intuition (morning). This is the source of mans subconscious mind.

The bicameral man could relate the terms "day" (what he could see) and "night" (what he could not see). Day and night represent the separation of feelings, inspiration, knowledge, and wisdom from the unknown or hallucinated state.

6. Then God said, "Let there be an expanse in the mist of the waters, and let it separate the waters from the waters.

INTERPRETATION:

Let there be a consciousness of firmness within the Universal Consciousness and let this consciousness be separated from the Universal Consciousness.

Waters refer to movements in consciousness. At this point in creation the Universal Consciousness and, from it, the Divine Consciousness had been

created. This verse affirms the need for a consciousness of firmness, or in other words the Physical Consciousness

7. And God made the expanse, and separated the waters which were below the expanse from the waters which were above the expanse; and it was so.

INTERPRETATION:

Thoughts of divine inspiration created the Physical Consciousness which was separated from the Universal Consciousness, and this was physical consciousness manifested as the spiritual mind.

With this verse comes the creation of the Physical Consciousness, out of, and separated from, the Universal Consciousness. Dividing the waters from the waters means selecting the specific idea (Physical Consciousness) from the midst of the multiplicity of ideas (consciousness within the Universal Consciousness). This is the creation, in spiritual form, of a consciousness which will later be conceived as reality.

8. And God called the expanse heaven. And there was evening and there was morning, a second day.

INTERPRETATION:

This is the divine consciousness, manifest within the spiritual mind. And through desire and inspiration was created a dual consciousness, which is the spiritual mind.

The spiritual mind consists of a divine consciousness, a consciousness of the "unknown", and a physical consciousness which will later be manifested in man as 1) his subconscious mind, which is responsible for intuitive processes, and 2) his conscious mind which responds to the physical world.

9. Then God said, "Let the waters below the heavens be gathered into one place, and let the dry land appear"; and it was so.

INTERPRETATION:

The Universal Consciousness through the Physical Consciousness within the spiritual mind focused its thoughts, such that there was an awareness of that which was unfolding, which was devoid of self awareness, thoughts, and ideas (i.e., physical reality).

The Universal Consciousness through the Physical Consciousness establishes the concept of a physical reality. The "waters below the heavens" refers to the physical reality. "Gathered" means to consolidate uniquely or to focus. The "land" is an awareness of consciousness unfolding at different levels whereas "dry" refers to, "devoid of, or not requiring, thought or ideas. "This I interpret as inanimate things without the need of self awareness, or in other words, physical reality.

10. And God called the dry land earth, and the gathering of the waters He called seas; and God saw that it was good.

INTERPRETATION:

This 'consciousness' which was conceived as the outer manifestation, and the thoughts focused by this consciousness, were conceived by the Universal Consciousness; Reality was as the Universal Consciousness imagined.

The "dry land", as in the previous verse, is consciousness which is unfolding devoid of, or not requiring, thoughts or ideas and "earth" is the outer manifestation of this consciousness. "Gathering of the waters", as in the previous verse, refers to the thoughts which are focused by this consciousness which are brought forth (called) by the "sea" which is the Universal Consciousness of the mind. "And it was good" refers to the Universal Consciousness reflecting upon itself. That is, reality is as was imagined or conceived by the Universal Consciousness. Physical consciousness unfolds as an inanimate (not requiring thought) physical reality (earth), under the oversight of Universal Consciousness.

11. Then God said, "Let the earth sprout vegetation, plants yielding seed, and the fruit trees bearing fruit after their kind, with seed in them, on the earth"; and it was so.

INTERPRETATION:

Growth of the outwardly manifested consciousness (Learning to grow) comes from ideas and thoughts springing from original thoughts and through imitation or copying and developing new thoughts from this, and this was manifested in consciousness.

What later manifests as the earth's flora was first conceived in thought by the Universal Consciousness. Sprouting from the earth means that which comes forth from the outwardly manifested consciousness (i.e., learning). "Vegetation" means growth. Sprouting forth from the earth's vegetation means, "Learning to grow

consciously". The phrase "plants yielding seed" represents ideas (seeds) sprouting from the original thought (plant), and fruit after their kind means to copy or to learn by mimicking.

12 And the earth brought forth vegetation, plants yielding seed after their kind, and trees bearing fruit, with seed in them, after their kind; and God saw that it was good.

INTERPRETATION:

Physical reality and development on earth parallels Physical Consciousness; Universal Consciousness sees in reality its image/reflection.

What has been conceived by Physical Consciousness as flora, in verse 11, has materialized in physical reality on the earth. Mans' conscious learning will come from copying and mimicking what he observes in physical reality.

13. And there was evening and there was morning, a third day.

INTERPRETATION:

Through desire and inspiration a wholeness consisting of the Universal Consciousness of God, the Divine Consciousness of man, and Physical Consciousness; has been created.

This describes the creation of the Spirit of God, Divine Consciousness (subconscious mind) within the spiritual mind, and consciousness of physical reality (conscious mind). God, within, without [spirit, mental (mind), physical (body)] - trinity.

The root of the word health is the Greek holos, meaning "whole," and this is also the original meaning of the Anglo-Saxon word "well". Moreover, the word holy comes from the same root. The healthy or well person should, therefore, be a whole person, one fully developed and integrated in mind, body and spirit. And the truly whole person would also be a holy person, spiritually mature, that is, enlightened.

14. Then God said, "Let there be lights in the expanse of the heavens to separate the day from the night, and let them be for the signs, and for seasons, and for days and years;

INTERPRETATION:

Let there be wisdom and understanding in the consciousness within the mind which shall differentiate between the Divine Consciousness and that which is unknown or not understood and let this wisdom be for an understanding of those things which point to facts (signs), cycles, and for learning.

"days and years" - Since the concept of time was not known to the bicameral thinker, I suspect "years" is an added feature by conscious writers. "Days", however, when considered as representing a divine consciousness, does fit in the verse. Days (plural) may indicate repeated divine consciousness, enlightenment, or learned.

This verse means that the consciousness within the spiritual mind is capable of understanding and differentiating between 1) observed facts, 2) cyclical occurrences such as cycles found in nature, and things which remain unknown or mysterious which are hallucinated through rhythmical inner voices, and 3) those things which are learned by the enlightened consciousness. This is represented in man as his subconscious mind.

15. ...and let them be for lights in the expanse of the heavens to give light on the earth; and it was so.

INTERPRETATION:

...and let wisdom and understanding in the conscious mind within be for understanding on the matters of physical consciousness; and this was manifested in consciousness.

Verse 14 establishes the wisdom in the spiritual mind to understand the conscious activities within (i.e., subconscious mind), and verse 15 adds understanding to that which goes on outside of the spiritual minds consciousness in the physical world (i.e., conscious mind).

16. And God made the two great lights, the greater light to govern the day, and the lesser light to govern the night; He made the stars also.

INTERPRETATION:

God conceived the two states of conscious awareness with a dominant consciousness being the divine consciousness and a non-dominant consciousness being the unknown; spiritual illumination was also made.

"Two" represents the consciousness as great lights; one greater or more dominant than the other. The dominate controls the learned functions while the non-dominate side controls the thoughts of the unknown or the knowledge which comes directly from the Universal Consciousness in the form of hallucinations and visions. The stars represent a spiritual enlightenment or the recognition of God (Universal Consciousness) as God. "He made the stars also.", could be translated as shown, however, the way in which it is placed here makes one wonder if it wasn't an after-thought, by the later writers, who felt a need to add the other physical bodies seen in the sky since they would assume that God could not have overlooked them. This literary license would have been understandable if the verse was meant to be taken literally.

17. And God placed them in the expanse of the heavens to give light on the earth,

INTERPRETATION:

God placed the two states of awareness in the conscious mind within, to provide understanding of physical reality.

The dominant and non-dominant states of awareness conceived in the previous verse form the spiritual mind. These two states perform the functions of the mind as it pertains to knowledge and understanding of physical reality.

18. ...and to govern the day and the night and to separate the light from the darkness; and God saw that it was good.

INTERPRETATION:

This means: to control (govern) the Divine Consciousness (day) as well as the unknown (night), and to separate wisdom and knowledge (light) from that which is unknown (darkness).

This is the separation and placement of the intuitive functions and the functions which are not known (i.e., hallucinated voices and images) within the conscious mind. This is the creation of the bicameral mind.

The levels of spiritual consciousness were conceived by the Universal Consciousness. These were later embodied in the physical two hemisphere mind which can think, reason, and learn from its emotional and analytical aspects, as augmented by hallucinatory assistance from the Universal Consciousness (God).

19. And there was evening and there was morning, a fourth day.

INTERPRETATION:

Through Gods feeling and inspiration a perfect balance has been accomplished. There is an exact parallel between physical reality on earth and the divine consciousness within.

The overall consciousness stems from a consciousness that is All That Is and encompasses the various thought processes which occur, namely 1) reasoning; 2) thoughts related to the physical side of life such as those related to involuntary actions; and 3) thoughts which seem to come out of nowhere which we term inspirational. These stem from the emotions and desires of man. This has been the most confusing to understand until the discovery of Jaynes. - The "darkness" referred to in the Old Testament was the existence of audio and visual hallucinations in the mind of bicameral man. Over the millennia this function diminished and was eventually replaced by what Jaynes has termed mans' subjective consciousness.

20. Then God said, "Let the waters teem with swarms of living creatures, and let birds fly above the earth in the open expanse of the heavens."

INTERPRETATION:

Then God said, Let the fluid mind produce and be filled with thoughts and ideas of life and existence, and let the liberated thoughts and ideas be relegated to higher levels of the outer manifestation in the vastness of the realm of divine ideas. (i.e., Universal Consciousness)

This is a description of the conception of the thought process. That is, the fluid mind is filled (swarms) with thoughts of life and existence (living creatures) and the liberated/other thoughts (birds) (i.e., those thoughts not under the auspices of the Divine Consciousness or not requiring reasoning were relegated to the other levels of consciousness. "that which is above the earth in the open expanse," could represent the Universal Consciousness or perhaps all other consciousness, except physical.

This may imply that man could have been constrained to his thoughts of existence and all other thoughts were relegated to or directed by God through hallucinations within the bicameral mind. Man would be too bent on survival to have to worry about anything else. Further, when man takes physical form, the functions of the mind which control the involuntary actions of the body would also fall under this description.

21. And God created the great sea monsters, and every living creature that moves, with which the waters swarmed after their kind, and every winged bird after its kind; and God saw that it was good.

INTERPRETATION:

God created a dominant force within the deep Universal Consciousness, and learning of the thoughts of existence by filling the mind through copying, and through involuntary thoughts in Gods own way.

The concept of motion is interpreted in this verse (i.e., that moves, winged, swarmed after) as that which repeats or goes forward or learns or teaches. The term "monster" is deduced to represent the hallucinated voices/images heard by bicameral mind. Since there is no such thing as monsters, it is necessary to try to determine what ancient man could mean by this term. I propose that it meant something unknown or uncontrollable, and may have even been frightening at times. His inner voices/images which he had no control over nor could he explain, seem to fall under this loose definition. This verse then would take on the meaning that even though learning comes from repetition and copying, the dominant force is mans inner voice which teaches/instructs him on how to exist.

22. And God blessed them, saying, "Be fruitful and multiply, and fill the waters in the seas, and let birds multiply on the earth."

INTERPRETATION:

God provided for the development of consciousness by increasing in many ways the thoughts of the fluid mind by supplying what was needed from what was in the deep universal conscious mind and ideas in the conscious mind with the things needed from the outer manifestation.

23. And there was evening and there was morning, a fifth day.

INTERPRETATION:

Through feeling and inspiration came the integration between the conscious mind and the unique spiritual consciousness which speaks to man.

Verses 20 - 22 describe how the thought process is developed by the conscious mind and how learning takes place within the mind (Physical Consciousness and Divine Consciousness) as augmented by the spiritual consciousness. The "fifth day" is a combination of the fourth day (perfect balance of the conscious mind) and one day (unique spiritual consciousness).

24. Then God said, "Let the earth bring forth living creatures after their kind: cattle and creeping things and beasts of the earth after their kind"; and it was so.

INTERPRETATION:

Thoughts of life and existence, thoughts based on sensations and strength, and subtle thoughts, and sensuous or material thoughts which are learned through imitation and copying come from physical reality.

25. And God made the beasts of the earth after their kind, and the cattle after their kind, and every thing that creeps on the ground after its kind; and God saw that it was good.

INTERPRETATION:

Thoughts are turned to reality. Reality reflects the thought.

After first conceiving of a spirit, which was brought about in consciousness, and describing the interaction of the mental and physical aspects of consciousness as well as the learning process, this verse and the following describe the beginning of living animal reality from that which was conceived in consciousness. The thought-form dwelt upon by the mind may eventually be perceived in the physical world as an actual physical form, as an attitude or conscious idea, or as an action, influence, or effect.

26. Then God said, "Let Us make man in Our image, according to Our likeness; and let them rule over the fish of the sea and over the birds of the sky and over the cattle and over all the earth, and over every creeping thing that creeps on the earth."

INTERPRETATION:

Then the Universal Consciousness created man in the image of the Enlightened Consciousness and the Physical Consciousness, partaking of the very nature of God (having inherent within himself all of the attributes of Gods different consciousness); let the Physical and Enlightened consciousness (them) have dominion over ideas drawn from the deep conscious mind and over ideas in the conscious mind, over sensual thoughts, over all the outer manifestations (physical reality), and over all hidden mysteries of reality and nature.

The terms: "Us", "Our image", and "them" have been confusing. Since we have been taught there is but one God, how could this verse refer to "Us" and "Our" which is clearly the plural? With this translated understanding of the Chapter I text, this becomes clear. The plurality stems from the different levels of consciousness that come from All That Is. The Divine Consciousness, which represents the knowledge and understanding of the spiritual consciousness and the Physical Consciousness, which represents the reality aspects of the spiritual consciousness, make up the "Us" and "Our image". The image is of the two states of spiritual consciousness which "rule" over all the thoughts available from the various sources.

27. And God created man in His own image, in the image of God He created him; male and female He created them.

INTERPRETATION:

God conceived man in spiritual consciousness, in physical form he created him; with a conscious mind to reason and analyze; and which is creative and has feeling.

28. And God blessed them; and God said to them, "Be fruitful and multiply, and fill the earth, and subdue it; and rule over the fish of the sea and over the birds of the sky, and over every living thing that moves on the earth."

INTERPRETATION:

God provided for the development of the conscious mind by increasing in many ways the thoughts of physical reality by supplying, for the taking by man, what was needed from ideas from the deep Universal Consciousness, thoughts not requiring reasoning and from learning of life and existence from his physical surroundings.

29. Then God said, "Behold, I have given you every plant yielding seed that is on the surface of the earth, and every tree which has fruit yielding seed; it shall be food for you;

INTERPRETATION:

Observe, you have everything which is pertinent to reasoning based upon the physical world, and everything which is pertinent to thoughts of the awareness of God;

30. ...and to every beast of the earth and to every bird of the sky and to everything that moves on the earth which has life, I have given every green plant for food"; and it was so.

INTERPRETATION:

...and everything of material thoughts of the physical world and free thoughts of the spirit, and to go forward and learn of life and of spiritual growth.

Verses 29 & 30 are a summation of what God has provided for man. That is, what God has made available for Mans physical and spiritual development. Verse 30 ends by saying, take what I have given you and go forth and grow. The meaning of Life is to grow intellectually and spiritually.

31. And God saw all that He made, and behold, it was very good. And there was evening and there was morning, the sixth day.

INTERPRETATION:

"Reality of man was as conceived through spiritual thought. And through desire and inspiration was made complete. "The process beginning with

spiritual conception, the development of both physical and mental consciousness, creation of physical reality - both living and non-living, the process of thought and learning, is made complete with the creation of man.

Table 4-1 gives an abbreviated interpretation of each of the verses of Genesis, Chapter 1.

The meanings of the day numbers 1, 3, 4, 6 as suggested by Addington²², and definitions for verse 2 and verse 5 which I have taken the liberty to define, are also shown with their corresponding verses.

TABLE 4-1 ABBREVIATED INTERPRETATION OF GENESIS, CHAPTER 1

Verse	Day	Meaning of Verse	Meaning of Day Numbers
1		All That Is	
2		Universal Consciousness	
3		Divine Consciousness conceived	
4		Consciousness of the Unknown created	
5	1		Intuition, inspiration, Unique Consciousness
6		Physical Consciousness conceived	
7		Physical Consciousness created	
8	2		Spiritual Mind/ duality
9		Physical Reality conceived	
10		Physical Reality unfolds (Earth)	
11		Flora conceived	
12		Flora created	
13	3		Spirit, Mental, Physical
14		Subconscious reasoning	
15		Conscious understanding	
16		Hierarchy of consciousness	
17		Two hemisphere mind	
18		Bicameral mind	
19	4		Perfect balance, understanding
20		Thought process	
21		Learning sources	
22		Learning from wisdom	
23	5		Subconscious and Conscious thought
24		Fauna conceived	
25		Fauna created	
26		Man conceived	
27		Man created	
28		Learning from Physical Reality	
29		Summation of Creation	
30		Meaning of life, Intellectual & Spiritual growth	
31	6		Reality
Chap 2-			
1,2,3	7		Finished, complete, perfection, release

CHAPTER 5

STORIES OF CREATION

Creation is essentially the union of intelligence with substance.
Through the presence of consciousness,
dumb matter speaks and appears to be alive.

- Ruth Montgomery³⁶

Stories of creation describe a process by which the universe and eventually the Earth and its inhabitants were formed. These stories are found in the mythology of virtually all civilizations from all parts of the globe dating at least as far back as 4000 - 3000 BC from the time of the Sumerians and if Churchward² is correct, back to 15000 - 50000 years ago. These stories have been passed down through the ages initially by word of mouth, through inscriptions on tablets and structures, and ultimately through the written language. These stories have been studied; dissected and put back together; and interpreted and redefined by modern day religious writers, leaders and teachers, psychics, story tellers, and researchers.

A comparison of four myths of creation is given in Table 5-1. These myths include: 1) the Naacal Tablets from India⁴, c. 15000 BC, 2) the version found on Babylonian tablets called the Enuma Elish, c. 1900 BC, 3) the Hebrew story found in the Book of Genesis of the Old Testament, c. 900 BC, and 4) the Maya/Aztec version as transcribed in the Popol Vuh²⁵, c. 300 BC. It is speculated that the Maya/Aztec account is from a much older civilization, such as the Olmec or even their predecessors, at a time unknown. The Enuma Elish account was recited at least up through the Babylonian era, c. 1600-500 BC. The first six tablets describe the creation of the heavens and the Earth and all upon the Earth including Man. The seventh tablet exalts the Babylonian deity Marduk. Included in Table 5-1 is a column which describes events which are supported by modern day scientific observations and theories. The modern-day findings are remarkably similar to the information found in the four creation stories.

It can be seen from the comparison in Table 5-1 that all stories have sufficient similarities (i.e., phrases, terms, numbers, and descriptions) to speculate that they may have come from a

common source. The wording is too much alike to consider that these stories came about by mere coincidence. Also, the sequence of the creation events is consistent throughout all four stories. While the sequence could be ascribed as a logical thought process common to any civilization, it would be surprising that this same logic would independently surface from different places throughout the Earth at times over thousands of years apart.

The stories all begin with a primordial state of nothingness where nothing stirs; a void consisting of darkness, no form, no sound, and no life. This is consistent with the Big-Bang theory which postulates that creation occurred some 14 billion years ago. The stories describe the solar system as being formed in different manners including: by mythological characters, by celestial bodies in collision, and through the condensation of gases into solids forming the planets, as theorized by modern science. The source of creation is described in 1) the Sumerian/Akkadian/Babylonian/Assyrian Epic of Creation (Enuma Elish) as the planet Nibiru from beyond our solar system (the deep); 2) is described in the Old Testament as being from 'The Deep'; 3) is described in the Popol Vuh as being from the "Black Cleft of the Milky Way" (road of Xibalba); 4) is described in Vedic mythology as being from celestial space; and 5) is described in Egyptian creation stories with the basic assumption that before the beginning of things there was a primeval abyss of water, everywhere, endless, and without boundaries or direction.

The descriptions of the formation of the solar system offered by these mythologies all involve a separation and gathering of waters, gasses, and solid material. They all refer to a separation of sky/heaven and earth. The Sumerian and Mesoamerican accounts, which are from civilizations a half a world apart, both use the terms Hurricane, Wind, and Lightening/Thunderbolt in describing creation. According to modern-day science, the solar system was formed some 4.4 billion years ago and the Earth formed 4 billion years ago. It is believed that following the formation of the planets, the surface effects were chaotic consisting of volcanism, earthquakes, high winds, and the presence of large amounts of water. The descriptions offered by the Sumerian and Mesoamerican civilizations describe similar events through the use of different, yet similar terms.

There are many common terms used in each of these stories. The number seven is found in all creation stories as either the number of days it took for creation as described in the Old Testament; or by the mythological characters Seven Death and Seven Hanahpu, which means creation in the original language of the Maya; or by the Seven Headed Serpent/Seven Superlative Intellects/ Seven Commands, as described by the Naacals; or by the physical collision of seven celestial bodies/moons, as described by the Sumerians. While most of the stories refer to creation as being performed by gods or mythological characters, the Sumerian text refers to creation as a result of natural processes.

Some of the earliest writings come from the Sumerian civilization which resided in the area of Mesopotamia, c. 3500 BC and which were passed on to the Akkadians c. 2400 BC and later on to the Babylonians c. 1600 BC. An interpretation of these writings has been made by Sitchin³⁷. His interpretation of the tablets results in a story which describes the creation of Man as the result of the efforts made by a race from another planet which orbits our Sun at a great distance. His story is consistent throughout and can be tied to many historical, archaeological, and astronomical facts. While there are a great many skeptics who do not accept Sitchin's theory, a February 2000 article written in "Astronomy", V28,i2, p 24 by David Graham titled "Solar System May Possess 10th Planet" states "British and American astronomers independently have found evidence of a possible 10th planet; a body perhaps three times the mass of Jupiter." The article goes on to state "an unseen object orbits the sun at a distance of perhaps 3-trillion miles and is inclined from the plane of the innermost eight planets by approximately 30 degrees". The article also leaves open the possibility that the planet could have been captured from interstellar space. This was discovered in an area referred to as the Oort Cloud. During the summer of 2005 a group of astronomers consisting of Michael E. Brown of the California Institute of Technology, David Rabinowitz of Yale University, and Chadwick Trujillo of the Gemini Observatory in Hawaii announced they have discovered the solar system's 10th planet. Could this be the planet Nibiru? If this planet is Nibiru then the ramifications on our current religious philosophies will require a monumental change in our approach to life.

The discovery of Charon, a satellite orbiting Pluto, has lead astronomers to recalculate the size of Pluto consequently finding

it much smaller than previously supposed. Two more moons have been discovered using the Hubble Telescope. These moons are currently un-named. This taken together with observed perturbations of Uranus and Neptune supports the findings of a new massive object in the solar system, since the perturbations of these two planets can no longer be attributed to Pluto alone. Further, in a paper³⁸, researchers Nadis, Stern, Canup, and Durda suggest a collision gave rise to Charon, Pluto's largest moon as well as the fragments known as a "family" in the Kuiper Belt orbiting the Sun beyond Neptune.

Table 5-2 is a chronology of the Anunnaki following the story line prepared by Sitchin. This Sumerian account places the first coming of the Anunnaki at 120 Sars before the deluge (i.e., 443200 BC). Based on the orbital period of Nibiru of 3600 years presented by Sitchin, this places the Anunnaki on Earth at the time of the deluge which according to their account was 11000 BC. The date 10468 BC is referenced in Naacal mythology as being the date of a great catastrophe. This time frame is coincident with the timing of the end of the last ice age. The table also provides a comparison between the Anunnaki rendition and the events recorded in the Old Testament of the Bible.

Archaeological evidence indicates that early forms of hominids existed as early as 2.5 million years ago which evolved into a species of archaic Homo sapiens some 500 thousand years ago. The Akkadian tablets, known as the Atrahasis, refer to the existence of a primitive being at the time of the arrival of the Anunnaki some 300-400 thousand years ago. Archaeologists believe that the ancestors of modern man evolved 100-120 thousand years ago^{39, 40}. This is also found in the Sumerian myths as the time the Anunnaki created a species of workers to carry out the tasks of manual labor. According to the Enuma Elish myth, a large planet from outer space was to have been captured into orbit by the Sun. This planet was named Nibiru by the Sumerians and later renamed Marduk by the Babylonians in honor of their national god. The tablets refer to Seven satellites of Nibiru as seven winds, two of which were to have collided with the no longer existing planet Tiamet resulting in their destruction and the creation of Earth. The Sumerians described Tiamet as a watery planet which lost much of its water during its collision with the moons of Nibiru.

The presence of water on Earth and within comets was to have originated from this watery planet. The collision split Tiamet in half creating the Earth, the Moon and the asteroid belt as Nibiru passed Tiamet and passed around the Sun. Coming from behind the Sun, on a second pass of Tiamet, the myth relates, "her skull was struck by the Nibiru satellite North Wind; the blow carried it to places that have been unknown-to a brand new orbit where there had not been a planet before" (i.e., formation of Earth). The Sumerian creation story also describes the formation of comets as well as the affects on the orbits, rotations, and orientations of the outer planets of the solar system.

Descriptions of the other planets within the solar system have been recorded in the mythologies of the Sumerians, the Egyptians, the Chinese, and the Mayas. These civilizations not only observed the planetary motions, they also record parameters that modern astronomy is just now beginning to fathom. While the synodic cycles of the planets could have been observed from Earth, properties such as color, water content and the presence of moons were also known. These properties could not have been observed from Earth by these civilizations. A Sumerian tablet is believed to depict the presence of all the planets in the solar system which implies that even the presence of Pluto was known to the Sumerians 4500 years ago, yet its presence was only discovered by modern astronomers in 1930 AD.

On the other side of the globe from the Sumerians, the ancient civilizations of Mesoamerica also had their ideas of creation. These are recorded in the Popol Vuh, a Mayan text translated into Spanish in 1701 AD. These civilizations developed in the areas of central and southern Mexico including the Gulf Coast and Yucatan Peninsula, Guatemala, El Salvador and part of Honduras, Nicaragua, and northern Costa Rica. Ancient civilizations of Central America included the people arbitrarily named the Olmecs, Mayas, Toltecs, and Aztecs. The Maya and Aztec civilizations are believed to stem from the older legendary civilization of the Olmec, of which very little is known. It is believed that the Olmecs once inhabited the Tabasco region of Mexico and then about 300 BC their civilization vanished. This region of Tabasco features the oldest pyramids so far found in the Americas. The origins of this civilization are lost in time but are believed to go back to at least 3000 BC peaking around 1200 BC. Origins extending to ages much further back in time are certainly possible.

Other civilizations existed in the South American Andes contemporaneously with the Central American civilizations. The area of the Andes includes the coastal and lowland areas as well as highlands of western South America. These civilizations included the Chav'n, Nazca, Moche, Tiwanaku, Wari, Chimor, and the Inca⁴⁰. The Moche and Nazca peoples were contemporaries of the Maya while the Inca were contemporaries of the Aztec. Each had their stories of creation and stories of divinely inspired leaders who taught their people their history regarding ancestral beliefs and who led them to greatness.

The civilizations of Mesoamerica existed contemporaneously with the European civilizations of the Dark Ages. Unlike the Europeans, at that time, the civilizations of South and Central America were expert astronomers. However, unlike the Europeans, the people of Mesoamerica went beyond the initial creation of the world and described what they believed had been a series of creation-destruction cycles before the present, the fifth creation.

When compared with stories of other civilizations, as can be seen in Table 5-1, the Mesoamerican stories contain much the same meaning. The Mesoamerican account refers to Seven Death, Seven Hanahpu (creation) as mythological characters who encounter rulers of the unseen world. This I suggest is equivalent to the capture of Nibiru from space (the deep) and its approach to Tiamet, a watery planet orbiting the Sun. During the resulting encounter between Seven Death, Seven Hanahpu and the rulers of the unseen world, the severed head of Hunahpu (remaining portion of Tiamet) was placed in a tree fork, at the place of the encounter (the place where Tiamet and a moon of Nibiru collided). This I suggest is equivalent to the splitting in half of Tiamet on the first pass of Nibiru. The Maya account goes on to state "Hanahpu (Tiamet) and Xbalanque (moon of Nibiru) return and Hanahpu loses his arm". This I suggest refers to a collision of the remnants of Tiamet and a second moon of Nibiru, possibly resulting in the creation of the asteroid belts. The account goes on to state: "They return again with grandfather/grandmother (Nibiru) and destroy Seven Macaw (major remnant of Tiamet) and reestablish Hanahpu who rises as Venus." This I suggest is equivalent to the second pass of Nibiru which results in another collision with the major remnants of Tiamet. The Sumerian account attributes the creation of Earth at its new/present orbit, and the Mayan account attributes the birth of Venus as a result of this encounter. The Naacal account refers to seven superlative intellectuals/seven

headed serpent as being responsible for creation. This I suggest is equivalent to the seven moons of Nibiru.

All four accounts imply that the Sun existed at the time the Earth was formed. The Mayan account refers to Seven Macaw as being the pretender of the Sun and Moon. This I speculate means that our present moon existed prior to creation of the Earth, perhaps as a proto-planet or as a moon of Tiamet.

One of the most significant similarities is that the stories all describe the use of clay in the formation of Man. The Sumerian story inscribed on clay tablets reports that the god Enki was to have said to his mother Nammu "Reach up and take a handful of clay from the bottom of the earth, just above the surface of our watery abyss, and shape it to the form of a heart. I shall produce good and princely craftsmen who will bring that clay to the right consistency. And then do thou shape the limbs. Above thee the Earth-mother, my goddess-spouse, will be in labor, and eight goddesses of birth will be at hand to assist. Thou shalt name the newborn's fate. The Earth-mother will have fixed the image of the gods upon it. And what it will be is Man." Modern science also has an explanation of how clay could have played an important role in creation. Science has demonstrated that simple amino acids deposited on nickel and nucleotides deposited on zinc begin to form chains necessary for more complex life, when deposited on **clay**. Clay also has the property that it is able to store and transfer energy, a necessary requirement for the formation of life.

Several requirements for life to begin are discussed in these stories. The Earth must rotate in order to establish the cycles of day, night, seasons, and years; all of which effect biological cycles. The need for light and lightening interacting with water are also described. Modern science has also shown the need for light and charge/lightening as being necessary ingredients for the creation of life. Modern day scientific theories describe the early evolution of life as beginning in the seas and eventually moving to dry land. The seas provide the necessary amino acids and nucleotides and when stimulated by light or lightning produce bacteria and green algae.

The stories also recognize that plants and green herbage are required before man can show his presence. Until the atmosphere surrounding the land was cleared of toxic gases and replaced with oxygen, life as we know it today could not exist. Modern science has determined that

the presence of bacteria and green algae are required to create oxygen in order to make the atmosphere habitable for Man to breathe. The initial atmosphere on Earth was largely carbon dioxide which would have been poisonous to man.

An Akkadian text, referred to as The Atrahasis Epic, describes several attempts at the creation of Man eventually leading to the creation of Homo sapiens-sapiens. The first attempt was to clone a primitive worker and was to have occurred approximately 300,000 years ago. The second attempt was to have occurred 250,000 - 270,000 years ago resulting in the creation of man and woman. Another attempt was made approximately 110,000 years ago most likely resulting in Neanderthal Man. The final attempt resulting in the creation of Homo sapiens-sapiens is reported to have occurred approximately 98,000 years ago. In one hundred lines of the Atrahasis text, and in several other "Creation of Man" texts that have been discovered, the tale of genetic engineering and embryo-implant has been told in amazing detail. This required the sperm from the Anunnaki male and the egg of an evolved woman (perhaps Homo erectus) which was implanted in the Anunnaki female. This account compares quite well with the dates assigned to the fossils of ancient man by archaeologists. As can be seen in Table 5-2, these dates for the creation of Man coincide with the 3,600 year cycle of Nibiru. It seems that the key to stories of creation are tied to the presence or absence of the planet Nibiru and its inhabitants, the Anunnaki. Who then were the Anunnaki and what is the story of their creation - All That Is?

The science of genetic engineering using the DNA of the Anunnaki and an existing primitive earth being is very interesting in light of the recent discoveries pertaining to DNA, the decoding of the human genome, and the successful genetic engineering being performed on plant and animal species today. If the Sumerian epic is true, then, was man created by the Anunnaki and not by God as we define god today? While the stories, as relayed by Sitchin ⁴² make interesting reading, the question of who created the Anunnaki has not been addressed. This leaves open the possibility that there is a god, although not necessarily the god as described by today's religious philosophies.

Recent studies of the genetic code which describes ancient man prior to his exodus from Africa point to a non-African race exodus from Africa resulting in a population of the non-African world. The term used to describe this event is COL1A2 polymorphism which arose as a result of a deletion, and is a single event in the evolution of the human species. Insertions and deletions are one of the major sources of DNA sequence variations. This event is speculated, by genetic researchers, to have occurred 100,000 years ago or coincident with the Sumerian

report of the final creation of Homo-sapiens-sapiens approximately 98,000 years ago.

Studies of a section of the Y-chromosome passed down from father to son in 38 men from around the world point to the possibility that they all descended from a common male ancestor about 270,000 years ago. The timing fits closely with that reported by the Sumerians. Researchers looking into the mitochondrial DNA (mtDNA), passed down mother-to-daughter, found that 147 women of different races from Africa, Asia, Europe, Australia and New Guinea all descended from a common 200,000 year old African population. Studies have been performed of the mtDNA of the Indian populations from Arizona, the Yucatan, and the Amazon Basin. These show genetic links which point to a shared common ancestor approximately 15,000 - 30,000 years ago. Researchers have compared the Neanderthal DNA sequence extracted from Neanderthal skeletons to the DNA sequences for 994 modern human lineages, which, included Africans, Asians, Australians, Europeans, Native Americans and Pacific Islanders. As a result of this comparison, the geneticists concluded that Neanderthals and modern humans did not interbreed or evolve from one another. The genes appear to have diverged from the modern human lineage about 600,000 years ago, way too early for the Neanderthal and Homo sapien-sapien to have interbred. If this is so then there had to have been different means for the creation of these two separate human species.

According to German physical anthropologist Gunter Brauer, there were at least three forms of Homo sapiens in sub-Saharan Africa. An archaic Homo sapiens form, which evolved from Homo erectus populations, was distributed from southern to northeast Africa some 200,000 years ago. These populations flourished between 150,000 and 100,000 years ago. Brauer further inferred that the biological developments that led to the appearance of modern humans had run their course as early as between 100,000 and 70,000 years ago. Brauer's beliefs are quite similar to the information revealed by the Sumerian Tablets, c. 3500 BC. The time period of 70,000 to 80,000 years ago referred to by Brauer has recently surfaced in a study of mtDNA which points to a reduction in the genetic variation of man indicating a dramatic reduction in population size to a level of a few thousand people worldwide. It is postulated that a near extinction of the human race occurred at this time. The cause of this near extinction is attributed to the eruption of Mt. Toba, a super-volcano located in the Sumatra caldera, causing a worldwide drop in temperature of approximately 5 degrees Celsius. A similar caldera has recently been identified in Yellowstone as a result of observations of the change in elevation of the Yellowstone Lake shorelines.

The recent decoding of the human genome shows genetic manipulation can successfully be accomplished. Why could we not believe that manipulation of the genes has happened before - possibly by an advanced civilization no longer remembered? To create a human as we know today is not within the realm of possibility based upon what we know today. It may not have been known by the 'gods' initially, either - resulting in Neanderthal, Cro-Magnon, and Homo Sapien before the successful creation of the Homo sapien-sapien species. Man today is quite possibly a result of genetic experimentation/engineering by the "gods" plus many thousands of years of prior evolution.

In more recent times, Dr. Carl Sagan⁴³ had suggested that the ancient Sumerians may have had contact with space people. He cites evidence from Sumerian mythology. "Taken at face value, the legend suggests that contact occurred between human beings and a non-human civilization of immense powers on the shores of the Persian Gulf, perhaps the site of the ancient city of Eridu, and in the fourth millennium BC or earlier."

As can be observed from Table 5-1 the Old Testament account of creation is not unlike the other three accounts. The over zealousness of early biblical scholars to treat the Bible literally and solely on a historical basis set Christianity on a path which brings us to the confused state we are in today concerning our existence. Two of the early church scholars who set the tone for creation over the last 500 years were Archbishop James Ussher (1582-1656 AD) and George-Louis Le Clerc, Comte de Buffon (1707-1789 AD).

Biblical scholarship in the seventeenth century focused on the six days of Creation. It seemed to the religious scholars at that time both absurd and heretical to suggest that nature had a history. What interested Biblical scholars was the chronology of the Bible in relation to human events.

The Irish prelate James Ussher, an expert in Semitic languages, managed to provide for the first time a generally acceptable Biblical chronology, still found in editions of the English Bible. As a scholar of Trinity College, he collected books for the college library. He became professor of divinity and archbishop of Armagh. In his search for authentic Biblical texts he hired his own agent to gather manuscripts in the Middle East and collected a famous library. In 1654 he delivered the fruits of his lifetime of scholarship when he declared that the Creation had occurred on October 26, 4004 BC.

The precision of this discovery and Archbishop Ussher's prestigious documentation added weight to the widespread belief that the earth and all living

creatures had been created within a single week only a few thousand years before the Christian era. This view of the Creation confined history to what, by modern geological standards, is a relatively brief time span.

The Comte de Buffon, not satisfied by Archbishop Ussher's calculations, began his own study of the Earth's development. Buffon set out to explain how the Earth had come into being. Newton, his inspiration in many other ways, had asserted that the planets, revolving in the same plane in concentric orbits in the same direction, must have been created by God himself. It would have been interesting to see what might have been hypothesized had they known that the planet Venus rotates in a clockwise direction unlike the rest of the planets. Buffon demanded natural causes, and he came up with his own explanation. "In order to judge what has happened, or even what will happen," he observed, "one need only examine what is happening."

Buffon's clue for the origin of the earth was Newton's observation that "comets occasionally fall upon the sun." When one such comet collided with the sun, Buffon speculated, fragments of the sun must have been knocked off into space. Once these liquids and gases came together they formed spheres which revolved in the same direction and in the same plane. Each of them became a planet turning on its own axis, flattened at the poles. Based upon some speculations of Newton, and some experimentation of his own, Buffon was able to calculate the age of the earth at 74,832 years. He was thus, he thought, able to offer an experimentally verified figure whose precision rivaled the pious calculations of Archbishop Ussher. Modern geologists have, of course, extended this figure into the billions of years. It is reported by Buffon himself that he thought of three million years or more, even up to infinity could be possible. He prudently scaled this down, he himself explained, because he did not want to shock readers so much that they might suspect him of pure fantasy. His figure needed to be only enough longer than Archbishop Ussher's to make plausible his modern vista as a world of slow and constant change.

When Buffon went on from his *Theory of the Earth* in the first volume of his *Natural History* (1749) to his *Epochs of Nature* (1779), he thought he had found that his vastly extended calendar was divided into precisely seven epochs. This he believed gave a hitherto unsuspected metaphorical meaning to the Book of Genesis. Seven 'days' became seven 'epochs'. In the first epoch the earth and the planets took shape. In the second epoch, as the earth solidified, the great mountain ranges were formed, with their deposits of minerals. As the earth cooled in the third epoch, gases and water vapors condensed, covering the whole earth with a flood. Fishes and other marine creatures flourished in the deep

waters. Chemical processes pulverized the "primitive vitreous material" from the submerged mountains and made sedimentary deposits, which included organic debris like coal. As these waters rushed into the vast subterranean openings, left when the earth had cooled, the flood level dropped. In the fourth epoch, when volcanoes erupted, earthquakes shook the earth, and tumbling waters reshaped the lands. In the fifth epoch, still before the separation of the continents, land animals appeared. In the sixth epoch, when the continents separated, the lands received their present shape. Finally, in the seventh, the present epoch, man appeared, heralding a new age.

Josephus, a Jewish priest, general, and later a Roman citizen (37-67 AD) provided a history of the Jewish people in which he provided durations from the destruction of Jerusalem in 70 AD by the Romans all the way back to creation. This chronology is provided in Table 6-4. This establishes creation c. 4670 BC, a date not unlike that arrived at by Ussher. This is not surprising since the data used for both dates comes from the common source, the Old Testament. The differences could easily be attributed to the different recollections of the authors of the Bible and Josephus.

Many modern day astronomers and physicists expound a theory that the whole universe erupted from a microscopic particle whose size makes a grain of sand look gigantic. This event is termed the Big Bang. While this has been a popular theory for the creation of the universe, the laws of physics do not support the early stages of the theory. A new theory termed superstring-theory is believed to more accurately describe this process.

As Dr. Brian Greene states⁴⁴: "superstring theory describes a universe in which space and time are malleable, a universe with more dimensions than we see, a universe in which the fabric of space can rip, a universe in which everything might be composed of the vibrations of ultramicroscopic loops of energy called strings." A brief outline of the properties of physical matter, including string theory, is presented in Appendix C.

A timetable for creation beginning with the Big Bang through the movement of amphibians to inhabit the land, through the creation of early man, is as follows:

Big-Bang	14 billion years ago
Universe cools sufficiently for atoms to form.	70,000 years after the Big-Bang
Heavier elements formed in	After millions of

a super-nova	years, formed in approx. 15 minutes
Formation of Earth	4 billion years ago
Life (simple bacteria)	3.5 billion years ago
Cells with nucleus, sexual reproduction	10-20 times longer to form than for simple bacteria
Multicellular organism	800 million to 1 billion years ago
Plant Life on Land	450 million years ago
Amphibians move to land	400 million years ago
Man (Hominid)	5 million years ago

Fossil records show that about 100,000 years ago, several species of hominids populated the Earth. *Homo sapiens* could be found in Africa and the Middle East; *Homo erectus*, as typified by Java Man and Peking Man, occupied Southeast Asia and China; and Neanderthals roamed across Europe.

As I studied the various renditions of the stories of creation, I began to wonder if it was possible that all of these stories could be describing the same source. If these stories could be ascribed to a common origin, then the meaning hidden within the Genesis Model would have its roots at least extended as far back in time as the origin of these myths. The ancient stories which we believe were committed to the written word c. 4000 BC were undoubtedly written using terms that the writer would have understood which describe the physical aspects of creation. An understanding of the scientific principles was not likely a part of their knowledge base. If this is so then some intellect somewhere would have had to understand these principles in order to provide an initial story. The whole meaning, including the spiritual aspects of creation, would have to have been understood by whoever codified the myths in the first place.

The creation stories seem to have a common source and relate consistent content. While the Genesis Model is consistent with the descriptions of physical reality, the story of the development of consciousness is not obvious in what has been written as the creation myths with one possible exception. The Egyptian creation myths reflect the belief that the universe did not initially consist of physical components but was composed of individual deities. The outcome of creation

was thought to be based on the wishes and actions of the gods. The Memphite Theology explains creation began as a divine concept and was given reality by expression through the spoken word. The creator god first perceives the world as a concept and then brings it into being through his spoken word. The Egyptians believed that creation involved the creative functions of thought (consciousness, my term), the spoken word, and physical creation. I propose that a meaning in addition to a description of physical creation is embedded within the verse. While the majority of the people today believe the stories have different meanings, a generic story unfolds which, in fact, appears to stem from a common source and provides a common meaning which I propose came from a much earlier period than the times assigned to their writing in the forms we see today.

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
Source of Creation	Abyss of darkness	The Deep	Nibiru, The Deep	From Black Cleft of Milky Way-Road of Xibalba	Big-Bang
Primordial	Void, dark, soundless, without life	Earth formless and void and darkness was over the surface of the deep		Primordial sea and sky, nothing stirs, Face of the earth is not clear, Blackness	15 - 18 billion years ago.
Sun	The light was contained in the atmosphere. And shafts of the Sun.	Genesis 1: 3-5 Let there be Light, ... separated the light from the darkness - Day 1	Exists from Beginning	Seven Macaw (Tiamet) - pretender of sun & moon	
Creation of Comets			Band of Tiamet thrown into new elliptical orbit in opposite direction. (retrograde orbit)		Comets and the Asteroid Belt were formed from the same origin.

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD ESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
Creation of Asteroid Belt		Heaven Genesis 1: 6-8	Hammered to become a bracelet		Evidence of asteroids being a result of a collision years ago
Formation of Solar System	Gathering of gasses from the void	Genesis 1:6-8 Separate the waters from the waters... called the expanse heaven- Day 2	Celestial Battle -Nibiru, -Tiamet -Evil Wind -Hurricane -North Wind	Heart of Sky & sovereign Plumed Serpent talked, thought & worried -Heart of Sky, - Heart of Earth, New Born Thunderbolt, Thunderbolt Hurricane, Sudden Thunderbolt	
Seven Winds	Seven superlative intellectuals, Seven-headed Serpent gave seven commands.		Satellites of Nibiru (Seven) -N,S,E,W Winds; -Evil Wind; -Whirlwind; -Hurricane	Seven Death, Seven Hanahpu With One Death (Tiamet?) dead, the next to be taken was Seven Death. They did not come back.	

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC	MODERN
			c. 3000 BC	(POPOL VUH)	SCIENCE
	c. 13000 BC	c. 900 BC		c. 300 BC	c. 2000 AD
Lightning	And the shafts of the Sun met the shafts of the light in the atmosphere and gave birth to light		Lightning between Tiamet & Nibiru		
Creation of Earth	Let the gasses solidify to form Earth. Darkness prevailed; neither atmosphere nor the waters were formed.	Genesis 1: 9-10 Job 26: 7-13. Let the waters below the heavens be gathered into one place, and let dry land appear...and God called dry land earth.	Tiamet split in half to create Earth, Moon, and Asteroid Belt- First pass of Nibiru. On second pass the upper part, her "skull" was struck by the Nibiru satellite North Wind; the blow carried it "to places that have been unknown" -to a brand new orbit where there had not been a planet before-formation of Earth.	The severed head of One Hunahpu was placed in a tree fork at the place of Ball Game Sacrifice. Hanahpu and Xbalanque return. Hanahpu looses his arm. They return with grandfather/ Grandmother & destroy Seven Macaw (Tiamet) and reestablish Hanahpu who rises as Venus.	4 billion years ago

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
Days, nights, years		Cycles of light & dark (night, day) Genesis 1:5. And God called the light day and the darkness he called night - Day 1; Genesis 1:14, Let there be lights in the expanse of the heavens to separate the day from the night, and let them be for signs, and for seasons, and for days and years.	Celestial relationships & Biological Cycles	Counting of days & time, Early Dawn - cycles	Rotation of earth on its axis, Orbiting of moon

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
Waters	Let the outside gases be separated and let them form the atmosphere and the waters...and the waters settled upon the Earth and covered its face so that no land appeared ...	Heaven - separated waters below the expanse from waters above-Day 2	Inner planets separated from outer planets		
Separation of Water & Land	Let the gases that are within the earth raise the land above the face of the waters.	Genesis 1: 9-10 Waters gathered into one place, let dry land appear	Collision of two watery planets (Nibiru & Tiamet) = Earth	The waters should be removed, emptied out for the formation of the Earth's own plate and platform	Plate tectonics
Seven	Seven Commands, Seven Headed Intellect, Seven Headed Serpent. The earth was created in seven periods of time.	Days of Creation 6 - divine work 1 - rest, reflect	Tablets of Creation 6 - creation process 1 - exaltation of Lord	One & Seven Hunahpu together mean Creation	

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
Gods	Narayana, Seven Headed Intellect	Nephilim (Genesis 6:4)	Those who came down from the heavens to the Earth - Anunnaki	Heart of Sky	
Formation of Life	Let life come forth in the waters and the shafts of the Sun met the shafts of the Earth in the mud of the waters and there formed cosmic eggs.	Let the waters below the heavens be gathered into one place ... Genesis 1: 9	Assemble water/clouds	Sky formed	
		let dry land appear Genesis 1 : 10	Foundation of Land	Mountains were separated from the water	Plate tectonics, volcanism
			Gather Oceans	Oceans Formed	
		Green Herbage - Day 3 Genesis 1 : 11-13	Green Herbage	Maker, Modeler alone are in the water, a light. Enclosed in blue-green quetzal feathers.	Bacteria, Green Algae, Oxygen formed

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
Life (sea and air)	c. 13000 BC	c. 900 BC Maritime Life (Birds, sea monsters) -Day 5 Genesis 1 : 20-23	c. 3000 BC Swarms in the Waters	c. 300 BC First attempt at Man fails thus becoming animals of the mountains; Birds appear	c. 2000 AD Fish, Sea Plants, Amphibians Reptiles, Birds, Dinosaurs
Life (land)		Animals appear - Day 6, Genesis 1 :24,35			Mammals & Land Plants (seed) appear
Clay	Let life come forth upon the land. And the shafts of the Sun met the shafts of the Earth in the dust of the land and out of it formed cosmic eggs, and from these life came forth	Genesis 2 : 7; And the Lord God formed man of the dust of the ground (clay)	Reach up and take a handful of clay... and shape it into the form of a heart.	Clay-Man disappears	Simple amino acids (on nickel) and nucleotides (on zinc), begin to form in chains when deposited on clay, Clay has ability to store and transfer energy

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
MAN	<p>c. 13000 BC</p> <p>Let us make Man after our own fashion, and let us endow him with powers to rule this Earth.</p> <p>...the creator of all things throughout the universe, created man, and placed within his body a living imperishable spirit, and man became like</p>	<p>c. 900 BC The Man (Adam) - Day 6</p> <p>And God created Man in his own image. Genesis 1 : 27</p> <p>And the Lord God fashioned into a woman the rib which He had taken from the man... Genesis 3 : 22</p>	<p>c. 3000 BC Life-seed from space, Proto-man evolved</p> <p>Genetic manipulation, Homo Sapien</p>	<p>c. 300 BC Must make a provider & nurturer. Second attempt at Man using Mud. Grandmothers of Day (Xpiyacoc) & Light (Xmucane) Third attempt at Man (wooden beings)</p> <p>Fourth and last attempt at making Man. The making, the modeling of our first mother-father by Xmucane with yellow corn, white corn alone for flesh</p>	<p>c. 2000 AD Panspermia Theory,</p> <p>Cloning</p>

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
MAN	Narayana in intellectual power. Then was Creation complete.			for our first fathers, the first human works: -Jaguar Quitze -Jaguar Night -Not Right Now -Dark Jaguar The first people to come from beside the sea, from the east.	
Mercury					Gray-Brown color
Venus			Described movements, 584 day synodic cycle		Sulfur colored 584 day synodic cycle

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
Mars			Retrograde motion described by the return of One Monkey & One Artisan, 780 day synodic cycle		Retrograde motion, Reddish color 780 day synodic cycle
Jupiter - Granymede (Largest Moon)			Foremost of the Firm-lands		Red-brown-yellow, 61 known moons
Saturn -Titan (Moon)			Foremost of the Heavens		Red-brown-yellow, 31 known moons Titan-largest, Own atmosphere
Pluto -Charon (Moon) - 2 Others			Nibiru provided Gaga/Pluto with its final destiny "In the Deep", Outermost planet		Orbit inclined to ecliptic, Pluto discovered in 1930 AD. Charon possibly created by a collision.

TABLE 5 - 1 CREATION STORY COMPARISONS

ATTRIBUTE	NAACALS	OLD TESTAMENT	SUMERIAN (ENUMA ELISH)	MAYA / AZTEC (POPOL VUH)	MODERN SCIENCE
	c. 13000 BC	c. 900 BC	c. 3000 BC	c. 300 BC	c. 2000 AD
Uranus			Blue green color, water, tilt on side, Planet which is double to Neptune.		Discovered in 1781, Blue green color, water (8000° F- superheated), Lies on side, retrograde winds, possibly created by collision, molten rock core, strong magnetic fields. 20 known moons orbiting equator.
-Miranda (Moon)					
Neptune			Planet which is double to Uranus Blue-green color, water, Triton in retrograde orbit		Discovered in 1846, Blue green color, water (like Uranus), strong magnetic fields, 8 known moons, Triton in retrograde motion.
-Triton (Moon)					

TABLE 5 - 2 ANUNNAKI CHRONOLOGIES

DATE BC)	ZODIAC	Number of Cycles Before Deluge		EVENT (Place) [Persons] (SITCHIN) ^{37,42-49} (SUMERIAN)	BIBLICAL EVENT
		Nibiru (3600)	Zodiac (2160)		
443000*	Taurus to Aries	120	200	Earth Station 1 (Eridu) [Anu, Enki] [Enlil, Anu]	
407000*	Sagittarius to Scorpio	110	183.33	Spaceport (Sippar & Baalbek) Mission Control (Nippur)	
396200*	Cancer to Gemini	107	178.33		
349400*	Virgo to Leo	94	156.66		
306200 *	Sagittarius to Scorpio	82	136.66		
299000*		80	133.33	Cloned primitive worker [Enki, Enlil, Ninharsag]	The Adam
270100		72	120	Cloned male	
256000					
250000				Cloned female	
241400*	Cancer to Gemini	64	106.66		
205400*	Pisces to Aquarius	54	90		
140600*	Virgo to Leo	36	60		
112360				Created (Neanderthal)	Adam ³⁵
104600*	Aries to Pisces	26	43.33	Climatic warming [Enlil] [Enki] confused tongues Created Cro-Magnon	Seth ³⁵ Nefilim ³⁵ Enosh ³⁵ Cainan ³⁵
98260					
86660					
75800*	Pisces to Aquarius	18	30	New ice age	
47000*		10			Lamech ³⁵
30000				End of Neanderthal	
23820	Aquarius				
21660	Capricorn				
19500	Sagittarius				
17340	Scorpio				
15180	Libra				

TABLE 5 - 2 ANUNNAKI CHRONOLOGIES (Continued)

DATE (BC)	ZODIAC	Number of Cycles Before Deluge		EVENT (Place) [Persons] (SITCHIN) ^{37,42-48}	BIBLICAL EVENT
	(Beginning of Age)	Nibiru	Zodiac	(SUMERIAN)	
13020	Virgo				
10860	Leo			Sumerian account - Deluge occurred during Leo	
10468				Deluge [Ziusudra] (Shuruppak)	Deluge [Noah - Age 600]
10400				Mesopotamia [Ninurta]	
				Nile valley [Enki]	
				Sinai Peninsula (spaceport mission control)-Present day Jerusalem	
8670				Heliopolis built (Beacon City)	
				Nile valley [Enki]	
				Sinai Peninsula (spaceport mission control)-Present day Jerusalem	
8700	Cancer			Heliopolis built (Beacon City)	
				Proclus-horoscope of the world; Dog star rises with Cancer	
8500				Jericho built	
7400*		+ 1		New Stone Age (pottery)	
6540	Gemini				
5600				Bosporus Flood ⁵⁰	Noah's Flood???
4380	Taurus				
3800*		+ 2		Urbanization (rebuilt Sumer, Eridu, Nippur, Uruk/Erech)	Sumerian culture
				[Anu returns to Earth]	
3760				Nippurian Calendar (Kish) - Day zero	Hebraic calendar - Day zero
3450				Tower of Babel	Yahweh Confuses Languages
3200				Art of writing (Uruk) **, (Nippur)	
3100				Egyptian civilization begins (Kings)	
2800				Indus River civilization begins	
2220	Aries			Sumerian monarchies develop	
2200				Period of Major Drought	
2123				Abraham born	Abraham

TABLE 5 - 2 ANUNNAKI CHRONOLOGIES (Continued)

DATE (BC)	ZODIAC	Number of Cycles Before Deluge		EVENT (Place) [Persons] (SITCHIN) ^{37,42-49} (SUMERIAN)	BIBLICAL EVENT
	(Beginning of Age)	Nibiru	Zodiac		
2048				Yahweh instructs Abraham to Canaan	Abraham to Canaan
2041				War of Kings	
2024				Nuclear War	Sodom & Gomorrah
2000				Collapse of Akkadian empire, Period of major drought.	Amorites & Elamites Replace Sumero-Akkadian Culture.
1963					Jacob born
1948					Abraham dies
1816					Jacob dies
1833					Israelites in Egypt
1700					Hammurabi, Babylon
1513					Moses born
1433					Exodus from Egypt
1160-1000				Period of major drought	
610				Yahweh leaves Earth	Yahweh becomes silent
593					Ezekiel (spaceship)
200*		+3			
148			+5		
60 BC	Pisces				
2012 AD		+3.6	+6	End Mayan Fifth Age	
2100 AD	Aquarius				

* Indicates 3,600 year cycle (1 Sar) of return of Anunnaki using the deluge as a basis of when the Anunnaki were reported present on Earth.

** Campbell³⁰

CHAPTER 6

STORIES OF CATAclysms

Chaos is not randomness-

It simply represents a limit
of our understanding
of what we are observing.

-Author

Cataclysmic events of global proportion, such as described by the Mayans, have occurred in the Earth's past. To believe this could not occur again in our future would be irresponsible. We consider ourselves as having evolved from a primitive culture which today we believe has become the world's most advanced civilization. Since there is no physical evidence to the contrary we have accepted our role as being the world's only advanced civilization. However, the idea of advanced civilizations existing in the distant past, and of a fall from grace into barbarism due to catastrophes of apocalyptic proportion, is enshrined in the memories and writings of many cultures. Stories of catastrophic destruction as well as predictions of a future destruction can be found in the mythology of virtually all ancient civilizations, including: Hindu, Sumerian, Egyptian, Chinese, Hebrew, Greek, Maya, Inca, Aztec, Indians of North American, Aborigines of Australia, and Eskimos of Greenland. Some of these myths may be of local or regional events whereas some could be of worldwide events.

In general, the myths which describe cataclysms take on three forms. Myths such as those found in the Codex Vaticanus from Mesoamerica describe a history of great duration featuring multiple catastrophes which periodically end an age in which the life forms which were in existence at the time were destroyed. What makes these myths seem plausible is they can be shown to follow a pattern which can be tied to astronomical observations regarding the motions of the Earth and Sun in relation to their position in the Galaxy. Myths such as those from Mesopotamia, as translated by Sitchin, describe a history of great duration as shown in Table 5-2 but unlike the myths of Mesoamerica they describe a single catastrophe which occurred as a result of a flood. What the Mesopotamian myths also describe is a series of life-form creations up to modern man. The more recent myths of the Hebrews, as found in the Old Testament Book of Genesis, describe a relatively short historical duration compared to the other two forms. Like one of the Ages in the Mesoamerican version, the Hebrew version ends as a result of a great flood. It has been established that the Hebrew version of the creation and deluge myths have been borrowed from their Mesopotamian neighbors and

possibly from the Ugaritic culture, most likely to create a history for the Hebrew nation. In order to fit within their overall philosophy, I suggest they selected one of the ages described in the myths which they had access to which ended as the result of a flood. By ignoring the other ages they did not have to explain the historical discrepancies. Also, it is quite possible that their collective consciousness recalled a flood in their past in the areas of Mesopotamia, the Black Sea, or possibly the Mediterranean Sea which caused great destruction.

Mythologies provide interesting insights into what the ancients understood about their histories as well as what they may have observed in their daily lives. Information provided today from scientific fields such as archaeology, geology and astronomy can help us to understand these myths. Physical evidence of the past occurrence of cataclysmic events can be observed across the surface of the earth. Physical disturbances thought to be caused by tectonic changes resulting in the motion of the surface of the earth are observed in the building of mountains, changes in sea and ocean levels, rifts in the ocean floors and faults of the Earth's crust. It is not understood if these physical events are caused by activities generated within the Earth or if they are triggered by something outside the Earth's control, or both. In any case the ancients have left numerous accounts which follow for us to puzzle over.

Perhaps the earliest date given for a cataclysmic destruction comes from the research of a journalist named Karl Brugger who published an account of a story which he reported was told to him by a South American Indian. This story was supposed to have come from the mythology of a tribe located in the Amazon in an area between Brazil and Peru. Brugger published this account as the Chronicle of Akakor³⁰. This account was said to describe two specific dates for global destruction, 10468 BC for the first and 3166 BC for the second. The account also states that the gods predicted the first cataclysm and left Earth 13 years before it occurred and returned shortly after the second cataclysm. The date of their leaving (c. 10481 BC) was reportedly taken as their day zero for their calendar. An interesting point which may tie this account to the Mayan use of their 52 year period is the fact that the duration between the cataclysm of 3166 BC and the beginning of the Mayan Fifth Age c. 3114 BC is exactly 52 years, which is equivalent to the Mayan calendar round. The Akakor account goes on to relate that during the first cataclysm the courses of the rivers were altered, the height of the mountains changed, continents were flooded, the eastern regions became humid and hot and in the west mountains became bitter cold due to the change in altitude. This account is possibly reflected in the ruins found in the cities of Teotihuacan and Puma Punku in the Andes which show evidence of violent destruction. Further, salt deposits found high in the Andes Mountains and the

presence of several species of sea fossils and sea life in Lake Titicaca at 13,500 feet above sea level suggest that this region was once at sea level and was uplifted very rapidly.

A story which supports the rising of the Andes comes from the nation of Canaris of Peru which says that at the time of the deluge, called unu-pachacuti, two brothers were on a mountain. As the waters increased the mountain kept rising such that the mountain was never covered and they were saved.

Another account of cataclysmic destruction is based on translations of tablets stored in monasteries in India which are to have described events between 15,000 and 50,000 years ago. Colonel James Churchward² was to have translated several of these tablets which he reported were written by people called the Naacal. Churchward claims these tablets describe a deluge which submerged the continent of Mu, c. 11500 BC. Could this be the same destruction event of 10468 BC described by Brugger?

Another account⁵⁰ of a cataclysmic event has been described by DS Allan and JB Delair. This event they propose occurred as a result of the Vela supernova which because of its brightness could have been observed on Earth c. 11000 BC. The diameter of the supernova, as observed from Earth, has been calculated to have been 16 times the diameter of the full Moon. The authors suggest that a planet sized fragment was released during the explosion which subsequently traversed our solar system 1,500 years later reeking havoc throughout. This they believe was to have occurred c. 9500 BC and is speculated by the authors to be the Akkadian reference to Marduk. This is a slightly different perspective from that of Sitchin who interpreted the intruder as being a planet inhabited by the Anunnaki rather than a planet sized fragment from a supernova.

According to the authors this nearby Earth passing was to have had catastrophic impacts on the Earth and other planets within the solar system. The effects on the Earth were to have included:

- Fracturing of the Earth's crust and redistribution of landmasses,
- Elevation of mountain ranges,
- Realignment of the Earth's axis,
- Worldwide flooding,
- Bombardment of the Earth by debris from a destroyed planet, and
- Near annihilation of plant and animal life.

Geological, palaeontological, and biological evidence all point to the Earth undergoing sudden and very major physical changes. Scientists have observed that many of the clays, gravels, and sands in various parts of the world appeared to have been laid under chaotic conditions on rock surfaces which had been smashed or polished. There is evidence from Siberia, an area which did not experience glaciation during the Pleistocene Ice Age, that rocks have been eroded exhibiting features of glacial action. Animal remains have been found consisting of chaotic piles of disjointed bones of a variety of species that could never have co-existed in the same environment. Mammoths and mastodons thought to be cold climate animals have been found with temperate grasses in their stomachs. These anomalies point to the occurrence of a violent and rapid change over much of the Earth's surface. While the authors pick a date of 11000 BC for the occurrence of the supernova, astronomers say this could be off by a factor of two. Measurements of the spin down rate of the Vela supernova indicate the event could have occurred up to 35,000 years ago. While the dates for the supernova event cover a wide range, the similarities of these events with the Akakor and Naacal accounts c. 11500 BC are remarkable.

The most familiar accounts of a worldwide cataclysm deal with stories involving a great deluge. Three different Babylonian myths describing this flood have survived: 1) the Sumerian Flood Story, 2) the ninth tablet of the Gilgamesh Epic, and 3) the Atrahasis Epic believed by some to be the oldest Akkadian story of the deluge. This story is believed to have originated with the Sumerians, however, because of the antiquity of the story it should not necessarily be assumed that it is a derivative from the Sumerian account. A Babylonian account also exists of this flood which is believed to have been written no later than 1700 BC. The Sumerian Flood Story has survived in a very fragmentary state. The most complete account of the Gilgamesh Epic is the version which was found in the library of the Assyrian king Ashurbanipal. These accounts all describe the deluge as an event which nearly caused the destruction of mankind. The Sumerian/Akkadian account points to a time c. 11000 BC³⁷ which is reasonably consistent with the Akakor and Naacal accounts. Sumerian writings recall that the Deluge occurred during the zodiacal constellation of Leo. This would place the Earth's rotational axis in Leo between 10888 - 8700 BC.

In the book Noah's Flood⁵⁰, the scientists William Ryan and Walter Pitman develop a flood scenario which begins when the Bosphorus was still separating the Sea of Marmara from the fresh water Euxine Lake (Black Sea). This was the period following the last mini Ice Age (c. 6000 - 5800 BC). Prior to this period (c. 9400 BC) the ice sheets that blanketed much of the northern hemisphere were melting. Much of the melt-water from the Eurasian ice sheet flowed into lakes,

such as, what we today call the Black Sea. At that time the Black Sea was a freshwater lake whose low elevation provided a friendly climate, rich farmland, and freshwater which could have attracted the hunter-gatherers to eventually settle down in this area to follow a farming lifestyle. As a result of glacial melt-down the sea levels in the Oceans and Mediterranean Sea began to rise. Scientists theorize that erosion of the Bosphorus began, ultimately resulting in this narrow strip of land collapsing thereby allowing the sea water to pour into the then lower elevation of the Black Sea. This theory is supported by core samples from drilling the Bosphorus Strait and the Black Sea bed. Further, data which also supports this theory was collected by sonar mapping of the seabed and canyon bottom through the Bosphorus Strait. The date of this collapse, c. 5600 BC, was derived from samples retrieved from the deep sea bed cores using the Accelerator Mass Spectrometry dating technique. This could be the source of the deluge myths recorded by the Hebrews. Other researchers have placed the collapse of the Bosphorus as early as 10000 BC. Since these earlier dates were derived by carbon-14 dating their validity should be suspect.

Another more speculative location similar to the Bosphorus Strait includes the Strait of Gibraltar and the Mediterranean Sea. The Mediterranean Sea today is what is believed to be the remains of the ancient Tethyan Seaway, an ocean whose western extremity began at the Atlantic Ocean and ran to the Himalayan Mountains of India/Tibet in the east. Today the eastern region of the Mediterranean is blocked by the doming of the land along the Dead Sea Rift as the result of a collision between the Arabian and Anatolian and Eurasian plates.

During the Cenozoic Era, some 6 to 7 million years ago, the Mediterranean became isolated from the Atlantic due to the Gibraltar Sill's high wall rising above sea level as a result of tectonic compression caused by the interaction between the African and Eurasian plates. The significance of this ancient occurrence is it showed that under these isolated conditions the Mediterranean Sea could virtually dry up. This would have taken up to 4,000 years depending on the evaporation rates at that time. It is known that even with today's conditions the Mediterranean would evaporate given closure of the Strait of Gibraltar because the freshwater influx is slower than the evaporation rate. While there currently does not appear to be any evidence of a closure in recent times, a scenario can be developed to explain cataclysmic flooding in the region of the Mediterranean Sea.

The period we refer to as 'recent times' begins near the end of the Pleistocene Ice Age, however, the ice age did not appear to extend into regions as far south as Gibraltar so freezing of the Strait can likely be ruled out. Other events affecting the Strait during the Pleistocene Ice Age do present an alternative. It is believed

that during the Pleistocene Ice Age the volume of water trapped as ice would account for a 650 foot drop in the level of the oceans. This would initially affect the Mediterranean Sea by exposing considerable land along the shore line as well as around exposed islands or other high points of the sea floor. Other affects would include: 1) an increase in the salinity of the remaining water causing warming of the lower basin which would facilitate habitation in areas with fresh water influx, 2) an increase in the amount of sediment deposited along the Gibraltar Sill near the Strait due to the reduced velocity of the outflow of water, and 3) less weight over the basin floor which would facilitate the occurrence of earthquakes. Portions of the basin floor thus weakened would be susceptible to uplifting due to the subduction of the Eurasian plate by the African plate. A comparison between seismic data and the Glomar Challenger drill results in the southern Alboran Basin (site 979) suggest that tectonic activity including uplifting by folding of the Aboran Ridge occurred from the late Pliocene to the Holocene Epoch. The combination of a reduced sea level and long term buildup of a blockage near the Strait could result in a much diminished volume of water in the sea leaving large areas open for habitation.

As the Pleistocene Ice Age ended and the Holocene Epoch began, two periods of intense warming occurred; the first during the Bolling Period c. 11000-10000 BC and again after a mini ice age c. 8000-7000 BC. A rapid increase in the Atlantic Ocean level would have put added pressure on any Gibraltar restriction which may have existed. Because of the nature in which the blockage would have been formed, it would necessarily be fractured and therefore relatively weak. When the pressure of the Atlantic increased substantially the restriction would give way in a catastrophic manner causing water in excess of 600 feet high by approximately 10 miles wide to begin pouring into the partially drained Mediterranean. In addition to this water inundation, the air in the basin would be expelled at great velocity resulting in a rapid cooling of the air as it rose. This would result in the formation of clouds precipitating torrential rains likely lasting many weeks or months. While this scenario is highly speculative it does fit the descriptions of the Deluge found in Sumerian writings and in the Old Testament, Book of Genesis.

The Mediterranean scenario could explain the onset of the Pleistocene Ice Age as well as its end. It is believed that ice ages in the northern hemisphere are directly related to the northerly flow of warm water in the Atlantic to the Arctic Ocean. Gulf Stream water moving northward along the East Coast of the United States toward Iceland exchanges heat with the air, warming the air and cooling the water in the process. The combination of chilling and evaporation makes surface water denser as it moves north. Near Iceland, the surface water becomes denser than the

water below it and sinks. This dense, cold water moves south along the bottom of the Atlantic, around the Horn of Africa to the surface of the North Pacific.

The surface water moves south passing between Asia and Australia and finally returning to the Gulf Stream in the Atlantic off Central America. As long as this flow remains stable the climate we experience today will also remain stable. It is theorized that a change in this flow pattern would likely plunge the world into the next ice age. It is known that this phenomenon is strongly affected by the outflow of the Mediterranean's highly saline water merging with the northerly flowing Gulf Stream.

If the Mediterranean's outflow was altered or stopped the affects would likely have contributed to the initiation of an Ice Age. An abrupt collapse of the blockage near the Strait would again eventually result in the flow of the Atlantic causing warmer water to flow northward to the Arctic resulting in the end to the Ice Age. The Mediterranean event could also explain why the flood was reported from around the globe. A sudden change in the level of the world's oceans and the change in flow pattern of the Atlantic Ocean would likely initiate catastrophic tsunamis throughout the globe causing flooding of low lying areas up to hundreds of miles inland.

Other scenarios for the occurrence of a great flood have been offered by many other people. One such scenario involves the Tigris and Euphrates rivers which run southward from the mountains of Turkey through Iraq into the Persian Gulf and are known to be prone to flooding. It is not unreasonable therefore, that catastrophic flooding was a powerful image in Sumerian literature. There have been reports of large scale floods in Mesopotamia c. 3500 BC and in China c.3000 BC, but these events are thought to be regional events and not of deluge proportions. In an article in the *Journal of Cuneiform Studies*, Vol. 33, 198 1, pp 210-223, Theresa Howard-Carter makes a case for a major flood in Mesopotamia caused by a massive movement of the sea from the Persian Gulf through the Tigris-Euphrates region. The topography of this region is in the form of a trench which was created as the Arabian shield pushed up against the Asiatic landmass, raising the Zargos Mountains and depressing the land to the southwest of them which includes the Tigris-Euphrates Rivers. This topography would act as a funnel for water rushing northward from the Persian Gulf region. The recent draining of marshes in this region of southern Iraq has revealed what appears to be a two-mile wide meteor impact crater which is believed to have occurred within the past 6,000 years which would be in line with the timing of the flood c. 3500 BC referred to in the Septuagint version of the Bible. If this is so, an impact in this region would have had a devastating effect resulting in major climatic disturbances. The catastrophic effect of an impact of this magnitude (equivalent

to hundreds of nuclear bombs) could explain the reason why the cultures of Akkad, Egypt's Old Kingdom and hundreds of early settlements in the Holy Land went into sudden decline during this period. The crater area is thought to have been a shallow sea at the time of the impact. This would have resulted in great flooding of the region. The fact that the Sumerian populace moved their kingships to the more northern cities of Kish, Isin and Nippur from the southern cities of Ubad, Ur, Larak and Eridu after the flood may be indicative of a flood having destroyed the southernmost regions of the area. The founding of Babylon in this more northern region may have also been an attempt to settle in more fertile areas which had not been totally destroyed by the flood.

The most recognized histories of the Hebrew culture are provided in the accounts found in the Old Testament and the account provided by Josephus. Josephus was a Jewish priest and general c. 37-67 AD who became a Roman citizen c. 67-100 AD residing in Rome where he was commissioned to write a history of the Jewish people. Using the specific events provided by Josephus and the date for the destruction of Jerusalem by the Romans, an interesting date can be calculated for the occurrence of the Deluge as shown in Table 6-1 based on Dissertation V to The Complete Works of Josephus¹¹ as translated by William Whiston where he provides a chronology from the time of the creation of Adam through the destruction of Jerusalem by the Romans in 70 AD. He provides durations for the events which occurred during this period as described by Josephus. Eight of these events are listed in Table 6-1. The durations accepted by Wiston are used to develop the dates in column 3 of Table 6-1. It should be noted that Whiston's agenda was to substantiate biblical events and durations.

The date accepted by historians for the destruction of Jerusalem by the Romans is 70 AD. The duration between the destruction of the Temple by Nebuchadnezzar and the return of the Jews to Jerusalem is accepted by historians as 70 years. Using the 70 AD date as a starting point and the durations (639+4) used by Whiston, it can be seen that the date for the return of the Jews to Jerusalem from exile in Babylon is calculated to be 573 BC. Then, the date for the destruction of the Temple by Nebuchadnezzar using Whiston's duration is calculated to be 643 BC. The date generally accepted by historians for the destruction of the Temple by Nebuchadnezzar is 586 BC, or a difference of 57 years giving a date for the return of the Jews to Jerusalem as 516 BC. If there is an error in Whiston's numbers it must be in the duration he used for the period between the return of the Jews and the destruction of Jerusalem by the Romans (i.e., 643 years). Whiston makes the argument that the duration of the Persian monarchy is approximately 246 years.

Ptolemy however, provides the duration of no more than 207 years; the difference being 39 years. Whiston also uses a period of 18 years to the end of the Seleucus era. These two durations taken together make up 57 years which I suggest should be deducted from the 643 years duration which then gives the date of 586 BC for the destruction of the Temple. This duration is reflected in the calculations shown in column four of Table 6- 1. Given the date for the destruction of the Temple as 586 BC, places the date for the building of the Temple at 1052 BC. A date for the building of the Temple is also arrived at by Whiston but varies by 102 years from the date of 950 BC commonly accepted by historians.

Table 6-1 Chronology of Josephus

ACTIVITY	(Years)	Durations	
		DATE (BC) (Josephus)	DATE (BC) Whiston)
Creation	1556 to	-4674	-4668
Deluge	892 to	-3118	-3112
Birth of Abraham	75+430 to	-2226	-2169
Exodus	612 to	-1721	-1664
Building of Temple	466 to	-1109	-1052
Destruction of King Solomon's Temple	70 to	-643	-586
Return of Jews	639+4 to	-573	-516
Destruction of Jerusalem by Romans (70 AD)		70	70

Whiston uses the duration of 892 years for the period from the deluge to the birth of Abraham. This is based on the age of Nahor of 28 years when his son Terah was born. Whiston also discusses an age of 79 years for Nahor as reported by the Samaritan Pentateuch and Greek Septuagint texts. This duration is also cited by Origen of Alexandria. Adding the difference of 51 years to the 892 year duration gives a revised duration of 943 years. Using this duration in column four of Table

6-1 gives a date for the flood of 3112 BC. This is virtually the same date the Maya use as their day zero for the beginning of the Fifth Sun (i.e., 3113 BC).

Another interesting comparison can be made between the chronology derived from Josephus and Appendix B, Table B-2 which provides a chronology of the kings that were to have ruled in five cities in Mesopotamia following the flood. It can be seen that Sargon and Lugal-Zaggisi of Uruk were contemporaries. The date for the founding of Akkad/Agade by Sargon is generally accepted by historians as c. 2371 BC. Working backwards in time from this date using the durations provided in Table B-2 an average length of the reigns of the 15 kings from Uruk from the time of Gilgamesh to Sargon is determined to be approximately 26 years. It can further be seen from Table B-2 that Gilgamesh of Uruk and En-Mebaragisi of Kish were contemporaries. In addition, the date of 2750 BC for the reign of Etana is supported in the literature. If the date of 3112 BC from the preceding analysis is considered for the date of the flood then a period of 362 years between Etana and the flood is arrived at. According to the Table B-2, 13 kings of Kish ruled during this period for an average of 28 years per ruler. This is certainly not unreasonable, further supporting 3112 BC as a possible date for a flood in Mesopotamia. Considering the uncertainty in the dates for the kings an average of 26 or 28 years is statistically insignificant.

While the Bible refers to a world wide deluge c. 2500 – 2400 BC (Tables B-8 & B-9) the list of Egyptian rulers in Table B-7 does not. This time frame would fall during the reigns of the 4th and 5th Dynasties a time when the Giza pyramids were to have been built. Either the Giza pyramids were built at some other time, as I suspect, or there was no world-wide flood at the time the Bible claims.

The date arrived at for the Biblical Flood appears to be fabricated as shown in Appendix B. Further, there does not appear to be any scientific evidence to support this timeframe. Using a combination of data provided by Josephus, data provided from the Old Testament, data provided by Manetho (Table B-6), data provided by Herodotus (Table B-4), and the relationships between Egyptian, Mesopotamian, Assyrian, and Persian rulers presented in Table B-3, a date of 2543 BC for the flood has been arrived at. The calculations in Appendix B show that dates can be determined which correlate historical events from the time of the Biblical Deluge to the time of Solomon using the information provided from the sources described. The difference between the generally accepted biblical date and the date arrived at using the account of Josephus has to be attributed to the recollections and reporting by Josephus and others as well as those responsible for writing Genesis, Exodus and the two Books of Kings.

As can be seen, several dates can be arrived at for the Biblical Flood depending on what source is used for establishing the durations of the various biblical events. In the book 'Genesis of the Grail Kings', Lawrence Gardner suggests that the Deluge chronology was moved to the time of Noah from its original timeframe before Adam.

A summary of the dates derived for possible Deluge events is as follows.

<u>SOURCE</u>	<u>DATE (BC)</u>
Maya	c. 19607
Maya	c. 14474
Naacal	c. 11500
Sumerian	c. 11 000
Akakor	c. 10468
Vela supernova	c. 35000-9500
Maya	c. 9284
Mediterranean (speculative)	c. 10000-8000
Bosporus	c. 5600
Mesopotamia	c. 3500
Akakor, Josephus, Masoretic Bible	c. 3166, 3112, 2543
Inca	c. 2900-2400

Plato may have been right when he stated there were many previous floods rather than just one.

Many of the deluge stories refer to a 'Noah-like' individual who received the favor of the gods and whose offspring later repopulated the Earth. The Sumerian culture assigns this role to Ziusudra, and the Akkadians, during the time of Gilgamesh, attributed the role to Utnapishtim. The Nahna people of Mexico have deluge stories in which they assign the role of Noah to Nata. The Nahna were Stone Age people and probably relate these stories from the Maya, a much more advanced race. The India account found in the Rig-Veda contains an epic legend of a great flood with a hero named Manu. The Potawatomi Indians of North America had a flood hero who was named Messou. It seems apparent that the account of the deluge in the Bible is borrowed from earlier civilizations, most likely from the Babylonians at the time the Hebrews returned to Jerusalem from captivity. The Sumerian narration describes the Anunnaki leaving Earth for the safety of their airships before the deluge which is consistent with the Akakor account. The Sumerians and the account in the Old Testament report that people had a warning of the coming destruction (i.e., destruction was predictable).

In trying to make sense of the chronology of the cataclysmic events, as describe in mythological accounts, the situation is compounded by not knowing if the myths are referring to near term events such as 5600 - 3000 BC or to some earlier event perhaps c. 11000 - 10000 BC. There is evidence in the Sumerian accounts, the Akakor accounts, the Naacal accounts, and the writings of Plato which support a worldwide deluge c. 11000-10000 BC. Recent discoveries in submerged caves near Warm Mineral Springs, Florida of an 11,000 year old skull and samples of materials in the Gulf of Mexico point to a massive flood occurring c. 10000 BC. Since this date falls into the period in which the Pleistocene Ice Age ended, it is quite possible that widespread flooding occurred as a result of melting ice and a rising ocean level.

Archaeological evidence and the mythologies of civilizations do not support a global flood during a time period more recent than 11000-10000 BC. The fact that the Egyptians had no Flood myth suggests that there was no worldwide flood. If the Bible account is accurate then the flood would have had to have been localized. The Bosphorus flood c. 5600 BC seems to be a more reasonable date for the Biblical account because of its geographical location. A localized flood in Mesopotamia caused by a meteor impact resulting in large scale tsunamis is also a possibility.

It can be surmised that deluge events are a result of increased supplies of water resulting from the melting and breakup of glaciers, beginning c. 12000 BC. With the exception of a period of cooling c. 9000 BC through 8000 BC called the Younger Dryas period, the gradual warming of the globe resulted in an increase in the amount of water flowing into the oceans from the melting of the glaciers. A second mini ice age occurred c. 6200 BC - 5800 BC followed by another period of glacier meltdown which resulted in the worlds oceans reaching their current levels which could have been what triggered the failure of the Bosphorus resulting in the Black Sea deluge.

There are many accounts of cataclysmic events which do not describe great floods but rather describe catastrophes from the heavens. Stories abound from all parts of the globe describing unique and terrifying events relating to the Sun's position. Written accounts of major astronomical events, which were to have occurred during the period 1450-1400 BC, are described in mythologies with emphasis on the Sun. An Egyptian papyrus account states "the sun rose in the west and set in the east, seasons were exchanged". It was reported that "winter is summer and months are reversed". The Pharaoh Akhnaton established Aton as the sun god which was the only monotheistic period in Egypt, c. 1377 - 1356 BC. Inscriptions

on an Egyptian tomb reportedly show constellations of the northern sky being in the southern sky.

The Persians refer to a time when the Earth turned part way over. Reports from Persia state; "a single day became three before turning to night which lasted three times longer than usual". The Assyrians reported that Venus behaved in an erratic manner. Chinese and Mayan records state, "The sun did not set for many days", "the Sun rose in the west and set in the east", "the earth turned part way over". At this same time the Chinese measured and recorded the height of the Sun in relation to the incline of the polar axis. The Sashinauc people of western Brazil reported, "Heaven and Earth changed places". Also described in the Book of Joshua was a day the Sun did not set which was also reported from the other side of the globe by the Maya who described a day of darkness, c. 1400 BC. Some authors have suggested that a near-earth comet could have retarded the Earth's rotation. This is unlikely as the mass of any comet which determines its gravitational properties simply is not great enough. Observations of comets and asteroids passing within the solar system have not affected other planets or their moons. Rather, the affects on the comets by the planets does affect the comets orbit. If a celestial body did affect the Earth's rotation, it would have had to have been massive. If Nibiru exists and passed in close proximity to the Earth, then the Earth's rotation could have been affected.

Plato writes concerning the rising and setting of the sun and the other heavenly bodies: "In those times they used to set in the quarter where they now rise, and used to rise where they now set ... the revolution of the heavens is sometimes in its present sense, sometimes in its reverse sense ... A shudder passes through the world at the reversing of its rotation ... The shock sets up a great earthquake which causes ... destruction of living creatures of all kinds."

These are truly reports of a catastrophic event or events which could have occurred as a result of a shifting of portions of the earth's surface or a shifting of the Earth's axis. The shifting of the Earth's axis and reversals in the Earth's magnetic field, are today, accepted as having occurred in the past and are possibilities which could occur in our future.

While these reports of destruction are amazing, there are other stories from India and Sumeria which are even more astonishing. In Sitchin's book "The Wars of Gods and Men" he describes a major conflict between different factions of the Anunnaki. This conflict was to have resulted in a nuclear war. The Vedic texts Ramayana, Mahabharata, and other texts describe a war which was to have taken place 10-12 thousand years ago between the Rama Empire and Atlantis which like

the Sumerian description was also a nuclear war. There are reports that skeletons were found during the excavation of the Rishi City of Mohenjo-daro just lying in the streets. These skeletons were reported to be among the most radioactive ever found. Also, it has been reported that evidence has been found in India, Ireland, Scotland, France, and Turkey involving stone and brick walls, and clay pottery that had been turned to glass. This could only have happened as a result of intense heat such as occurs with an atomic explosion. If these reports are accurate then the impact on world history should have been alarming. This has not been the case. Either these reports are a hoax or there is a tremendous cover up.

Accounts of destruction from the sky were reported by the Mayas (Popol Vuh) that "people drowned in a sticky substance from the sky". The Mexican accounts of the Cuauhtitlan state that "the sky rained not water but fire and red hot stones" and they describe a lengthened night. The Hebrew story of Exodus describes "a river of blood", while the Book of Joshua describes what might have been a shower of meteorites and states- "Lord cast stones from heaven". The Chinese reported c. 1400 BC that 10 suns appeared in the sky and stars fell like rain.

There are a number of writings which point to a major catastrophe affecting much of the globe including the regions of India, Asia Minor, Syria, Palestine, Crete, Greece, Hungary, Central Germany, and eastern North America. The writings describe 1) destruction by fire, lightning, earthquakes, flooding, tsunamis and drought; 2) precipitous population declines, desertion of large land areas and migrations; 3) loss of wealth, written language, and craftsmanship, and 4) famine, plague and lawlessness throughout the remaining populations. Secondary effects caused by climatic changes including drought followed by global cooling are believed to have affected more distant regions from the immediate catastrophe. These regions include Alaska, British Columbia, central North America, Mexico, Peru, Columbia, Patagonia and Chile. Entire civilizations disappeared during this period including the Olmecs of Central America, the Mycenaeans and Minoans of Crete and Greece, the Phoenicians, and the people of the Indus Valley. Shortly after this period the end of the New Kingdom in Egypt occurred.

These writings include:

- Ipuwer papyrus
- El Hiba papyrus
- Harris Majic papyrus
- Hermitage papyrus
- Medinet Habu tablets

- Bible-Old Testament

Archaeological evidence also supports the occurrence of a devastating event affecting all of the above mentioned regions. Descriptions which refer to "Destruction of Man by the Gods" have been found in the tombs of Seti I (1315-1304 BC), Ramses II (1304-1237 BC), and Ramses III (1201-1169 BC). Assuming these burial references refer to the same event as the writings of total devastation, this would place the timing of these events prior to the reign of Seti I or c. 1315 BC.

An event of mass destruction occurred c. 1628 BC with the explosion of Santorini. This volcanic eruption was of such great magnitude it likely raised havoc on most nations bordering the Mediterranean Sea causing the disruption of law and order and widespread famine throughout the region. It is thought by some that this eruption resulted in the migration of large numbers of people. This may be what is reflected in Appendix B, Table B-7 with the ending of the 13th Dynasty of Egypt and the influx into Egypt of the Hyksos. Table B-3 also reflects a similar chain of events with the Kassites in Mesopotamia.

It has been speculated by some that sometime between 1600 and 1300 BC a comet moving east to west over the earth caused widespread destruction from China to North America. Accounts of the sighting of comets during this period were recorded by numerous sources around the world including Persians, Greeks, Trojans, Babylonians and Chinese. The Chinese described an account of two suns battling in the sky. From the descriptions in the above mentioned writings a comet was to have entered the Earth's atmosphere over India and was to have been described as a pillar with a brilliance of a hundred fires capable of consuming the universe. It is believed that a comet such as this may have been the cause of the destruction of the Indus civilization, c. 1550 BC. The Greeks were to have observed a comet coming from the southeast in the direction of Crete and they reported that their gods fled in terror to Egypt. It is believed they were to have stated this since upper (southern) Egypt would have been expected to have been spared total destruction unlike Greece or Crete. The explosion of a comet in the atmosphere would likely have attracted lightning giving the perception the comet was being attacked. This undoubtedly gave rise to the many myths describing lightning. Looking west from Egypt the Egyptians described Libya as being laid waste by a terrible torch of flame hurled from heaven. It is suggested that the Sahara desert was born as a result of this type of an encounter. If a comet was to break up over the western parts of Africa and Europe the shattered comet would likely have impacted the southeastern coastline of North

America. It is believed that the impact of a comet would be insufficient to cause the earth to wobble on its axis as suggested by some writers. It would likely take a planet sized object, such as Mars, to make this happen. However, the impact of a comet could cause volcanic activity to ensue. Large scale volcanic activity from this impact could have initiated glaciating in North America, British Columbia, Iceland, Baffin Island, Alaska, Patagonia, southern Chile and Norway. Portions of a comet impacting in the ocean would likely have initiated tsunamis and flooding throughout the world. The stories relating fire and substances falling from the sky may also be described by more modern day occurrences such as what occurred in 1833 AD when the Earth passed through the Taurid stream/Encke comet tail. A large meteor shower was recorded with observations of 20,000 meteorites falling per hour and in 1966 a shower of 150,000 meteorites per hour was recorded when the Earth passed through the tail of the Leonids/Tempel-Tuttle comet.

Other stories of cataclysmic events relate to later periods between 900 BC and 1300 AD. The books of Isaiah, Hosea, Joel, and Amos describe a series of catastrophic earthquakes between 888 BC and 700 BC. The sacred books of antiquity report that the Earth tilted 10 degrees on its axis while later (c. 687 BC) the Book of Isaiah reports that "the Sun returned by which degrees it had gone down". The books of Kings and Chronicles report of 'a blast from heaven' while the Chinese report "stars fell like rain", c. 687 BC. The period between 700 BC-600 BC saw a revision of many calendars. The Romans began their festival in honor of Mars in 687 BC. Also in 687 BC, King Manasseh violated the long held worship of Yahweh by bringing a graven image into the Temple's inner sanctuary. This Asherah was later destroyed by Josiah. What would cause the king to make such a drastic change unless he thought he had been abandoned by Yahweh? If the world turned part way over this could explain his actions.

Of particular interest are the myths of Mesoamerica (i.e., Inca, Maya, and Aztec) which come from half-way around the world from those told in the accounts of the Sumerians and Hebrews. Also, their relationship to the Akakor and India accounts is striking. The Mesoamerican myths contain many similarities found in the more ancient myths including many of the same numbers and reports of major cataclysms. These Mesoamerican civilizations have passed on the remnants of their writings which include accounts of creation-destruction cycles which as of today remain somewhat of a mystery.

The accounts offered by the people of Mesoamerica describe a story of a great deluge as well as stories of other cataclysmic events which caused the end of three previous ages and which will cause the end of the current age. The Mayas believed that cataclysmic timing was cyclical and perhaps predictable. Stories of

five ages are also found in the legends given by the Incas of Peru. There chronology predates the Aztec chronology. Unlike the Aztec, the Inca who were contemporaries of the Maya had no written language as we understand the concept of language today. However, some researchers think the quipu knots are indeed a form of language which as yet has not been deciphered. The mythologies of the Incas come to us today as Chronicles of the Inca which were recorded by the missionaries who accompanied the Spanish conquistadors under the command of Francisco Pizarro.

The Chinese also had legends involving world eras. The first three eras were about the earliest men. Following the third era came the golden age which saw the rule of ten emperors. The golden age ended in a flood. They believe we are now in the fifth era. Other accounts of four previous ages come from legends of the Hindus and Navaho Indians and the Greek Hesiod who wrote that four ages and four generations of men had passed and that we are now in the fifth age.

Unlike the Mesopotamian and Inca accounts the Maya predicted the end of what they termed the 5th Sun or our current age. It is believed that the Mayan civilization may have thrived from as early as 1000 BC, peaking c. 600 AD. The myths of the Mayans were later taken by the Toltecs and the Aztecs as their own. As the Toltecs and later the Aztecs rose to power in what is today known as Mexico, the Mayan civilization disappeared, perhaps to the Yucatan Peninsula c. 627 AD followed by the Toltecs c. 1200 AD. The end of the Toltec civilization (c. 1168 AD) and the history of the Mexica (beginning c. 1258 AD), was derived from the Leyenda de los Soles (Legend of the Suns) account, Chapter XI⁵². This account describes the rise and fall of the Toltec and Mexica civilizations and establishes that they had the opportunity to interact.

The stories of Maya/Aztec creation and destruction cycles which have survived the book burning episodes of the Spanish in 1547 AD come from the following three documents.

- Popol Vuh Maya (Guatemala, Quiche')
- Codex Dresden Maya (Possibly Oldest)
- Codex Chimalpopoca Aztec (Leyenda de los Soles) -Translated to Spanish, 1558 AD

The Maya/Aztec accounts of creation and destruction present an opportunity to explore the source involving cyclical events. It is speculated that the source for the Maya/Aztec myths comes from civilizations preceding them and if you accept that

trade occurred with the ancient world such as Egypt, then perhaps the source is also from the Mesopotamian and Egyptian civilizations. The Mayan stories described four previous Ages/Suns before our current Age, all ending with a cataclysmic event (i.e., deluge, strong wind, fire, rain of blood and fire). I will use the terms Suns and Ages interchangeably. The Mesoamerican stories of the five ages/suns provide descriptions which name the Age/Sun, give the year and day names for when the Age was destroyed, the cause of its destruction, which god presided over the Age, what the beings of the Age ate, and what they were turned into as a result of the destruction.

Renditions of the creation-destruction cycles are found in the *Leyenda de los Soles* and the *Codex Vaticanus*. The accounts of the 5 Suns/Ages are summarized in Table 6-2 and are described as follows:

The First Sun was to have had a duration of 4008 years and ended with a flood which killed a race of giants which were to have populated the earth.

The Second Sun, considered the Golden Age, was to have had a duration of 4010 years and ended as a result of hurricane force winds and was to have resulted in the creation of animals (monkeys). The Third Sun was to have had a duration of 4081 years and ended as a result of fire and the creation of birds.

The Fourth Sun was to have begun "5026 years ago" when men were to have died of starvation after a rain of blood and fire and resulted in the creation of fish. The Quiche writers state that at the end of the fourth Sun, three hearthstones marked out a new place for themselves in the sky (i.e., three stars of Orion). The *Codex Vaticanus* account of the Fourth Sun does not specify the date needed to calculate the beginning date of the Fourth Sun (i.e., "5026 years ago" from when?).

The Fifth Sun which represents the current Age is that of Man. The Aztec believed they were in the beginning of the Fifth Sun which would end in another cataclysm. The myth described by the *Codex Vaticanus* does not address the beginning of a new sixth sun.

Modern day scholars have calculated the end date for the Fifth Age to be December 21, 2012 AD based on the duration of 13 baktuns and on a beginning date of Aug 11, 3114 BC for the Fifth Age. The calculation of this end date is as follows:

MAYA/AZTEC - CALCULATION OF THE END OF THE FIFTH AGE

Duration between Aug 11, 3114 and Aug 11, 1582 = 4696 years (Year Gregorian calendar was corrected)

Duration between Aug 11, 1582 and Oct 15, 1582 = 64 days = 0.1752 years

Duration between Aug 11, 3114 and Oct 15, 1582 = 4696.1752 years

Subtracting this duration from the Mayan Great Cycle yields:

$5125.3689 - 4696.1752 = 429.1937$ years to the end of the age from Oct 15, 1582

Oct 15, 1582 + 429 = Oct 15, 2011

Add 0.1937 yr. 2.324 months yields Dec 15 + 0.324 month (9.86 days) Dec 24, 2011

Correcting for the 3 leap years 1700, 1800, and 1900 - deduct 3 days.

Add one year to correct for 0 - 1 AD yields **Dec 21, 2012**

In preparing this calculation it was assumed that the date of October 15, 1582 AD (Gregorian calendar) had been accurately corrected to the solar cycle and is in synchronization with the Mayan Long Count. This correction, which amounts to the addition of 10 days which occurred during October 1582 when Pope Gregory XIII signed an edict restoring Europe's calendar to a proper alignment with the Sun. Further, the years 1700, 1800, and 1900 which would normally have been considered leap years were determined by the Pope not to be such.

TABLE 6-2 AGES/SUNS OF DESTRUCTION

AGE/SUN #	NAME 1 NAME 2	COMMON NAME ⁵	AZTEC NAME ³	YEAR DESTROYED	DAY DESTROYED	PRESIDED OVER BY:	DESTROYED BY:
1	Nahui Ocelotl Four Ocelotl	4 Jaguar	Matlactili	Ce Acatl (1 Reed)	1 Reed	Tezcatlipoca (Chalchiuhtlicue - Jade Skirt) ³	Water Flood ³ ¹
2	Nahui Ecatl Four Ehecatl	4 Wind	Ehecatl	1 Flint	4 Wind	Quetzalcoatl (Topiltzin) God of Wind ³	Wind ¹ Wind ³
3	Nahui Quiyahuitl Four Quiahuitl	4 Rain	Tleyquiyahuillo	1 Flint	4 Rain	God of Fire ³ Tlaloc ⁴	Fire ¹ Fire ³ Rain ⁴
4	Nahui Atl Four Atl	4 Water	Tzontililac	1 House	4 Water	Chalchiuhtlicue ⁴	Flood ^{1,4} Rain of Blood and Fire ³
5	Nahui Ollin Four Ollin	4 Motion (4 Movement)					

NOTES: 1) Leyenda de los Soles
2) Popol Vuh

- 3) Vaticanus - Latin Codex
- 4) Basin of Mexico
- 5) Each age was named on the day the age ended, a name that indicated the type of destruction.

The following is a discussion of the 5 Ages and is depicted in Figure 6-1. The Maya said the present Sun will last precisely thirteen baktuns (1,872,000 days) from point zero which is equivalent to 5,200 perfect years of 360 days each or 5125.36 solar years of 365.2425 days each. Given that there are a total of five ages then five (5) of these Long Count periods is equal to 65 baktuns or 9,360,000 days or 25,627 years based on 365.24 days/year or 26,000 years based on 360 days/year. The 25,627 year duration is suspiciously close to what we consider today to be the precession cycle of the Earth's axis. This is in fact the case. Table 7-2 shows the direct relationships between the 'Special Numbers' used by the ancient civilizations and the degrees of precession of the Earth's axis. The table confirms that at 65 baktuns the Earth will have completed a complete cycle of precession of 360 degrees.

Mayan mythologies refer to the Road of Xibalba (i.e., Milky Way). They also refer to the 'dark rift' in the Milky Way. This is a region, when viewed from our position in space, which appears as a dark area in the Milky Way. This dark region is caused by the presence of interstellar dust between the center of the galaxy and the Earth. The plane of our solar system, known as the ecliptic, is tilted approximately 60 degrees from the galactic plane. Once every 25,627 years as we approach a winter solstice, our two axes, the galactic and ecliptic intersect placing the Sun exactly in the center of the dark rift of the Milky Way as viewed from Earth. The next date of this intersection point is on the winter solstice, December 21, 2012 AD.

Using the fact that the Maya's claimed there were four Ages before the present Age and working backward in time from 2012 AD over a period of 65 baktuns, five periods of 5125.36 solar years can be calculated and are shown in the Ideal Durations column of Table 6-3. The previous galactic alignment therefore would have occurred c. 23615 BC. It can be seen from the Codex Vaticanus account that the durations for the five Mayan Ages are somewhat less than the durations of 5200 ideal years or 5125 solar years shown above (i.e., 4008, 4010, and 4081). I propose that the ancients understood that the duration of the precession cycle and the time between the sun's position relative to alignment with the galaxy was in their terms 65 baktuns or 9,360,000 days. I further propose they knew the timing of the galactic alignment. In other words, they knew the start date of Age 1 and the end date of Age 5.

The Mayan history described a duration of 65 baktuns as being divided into five periods all of which ended in a catastrophic event. This ideally would make each age equal to a duration of 5200 ideal years. It should be noted that the ends of the second, third, and fourth ages are not tied to the galactic event that the beginning

of the first age and the end of the fifth age are tied to. It is assumed that their history indicated that the catastrophic events occurred at the end of the ideal age. This would set end dates for Ages 2, 3, and 4. Since the report in the Codex Vaticanus was transcribed before the end of the fifth age the ideal duration was all that could be given. This galactic event is what makes the year 2012 AD so exact.

The results for the durations of the five periods depicted in Figure 6-1 are listed as follows:

TABLE 6-3 LONG COUNT PERIODS

PERIOD	PERIOD-DATES IDEAL DURATIONS (5125.4 Yrs)	AGE/SUN DATES BASED ON THE CODEX VATICANUS DURATIONS	EQUIVALENT MAYAN END DATES (CALCULATED)
1	23615 to 18490 BC	23615 to 19607 BC	13 House
2	18490 to 13365 BC	18490 to 14480 BC	5 Flint
3	13365 to 8239 BC	13365 to 9284 BC	6 House
4	8239 to 3114 BC	8239 to 3214 BC	9 Rabbit
5	3114 BC to 2012 AD	3114 BC to 2012 AD	13 Flint

As shown above the durations given in the Codex Vaticanus can be converted to actual dates by assuming:

1. The start date for Age 1 is when the Sun lying on the ecliptic intersects and appears to lay in the dark rift of the Milky Way (i.e., 23615 BC).
2. The end date for Age 5 is Long Count date 13.0.0.0.0 or December 21, 2012 AD.
3. Ages 2, 3, and 4 lay within their respective 5125.36 year solar intervals and begin with the start of the 5125.36 year period and each end at the duration given in the Codex Vaticanus.

It can be seen that the Mayan end dates based on beginning an Age with the ideal beginning based on the start of the 5125.36 year durations and using the Codex

Vaticanus durations that the end dates arrived at do not agree with the Codex Vaticanus end dates. The Codex Vaticanus also gives the year in which each Age was destroyed. The Mayan End Dates for the calculated durations are given in Table 6-3. A comparison of these end dates with those given in column 5 of Table 6-2, which are from the Codex Vaticanus, show discrepancies for each date as shown below in Table 6-4. Refer to Appendix A, Table A-1 for the methodology to calculate Mayan dates.

TABLE 6-4 ERRORS BETWEEN CALCULATED & CODEX VATICANUS END DATES

AGE	CALCULATED END DATE (TABLE 6-3)	CODEX VATICANUS END DATES (TABLE 6-2)	YEARS DIFFERENCE
1	13 House	1 Reed	+38
2	5 Flint	1 Flint	+4
3	6 House	1 Flint	+5
4	9 Rabbit	1 House	+21
5	13 Flint	No date given	---

The differences in Table 6-4 are the number of years that need to be added to the calculated end dates in Table 6-3 to bring them into agreement with the Codex Vaticanus published end dates.

If it is assumed that the End Dates given in the Codex Vaticanus are correct and the durations are correct then the calculated periods should be adjusted as shown below.

TABLE 6-5 CORRECTED AGE DURATIONS

AGE	CALCULATED PERIOD	ADJUSTED PERIOD	CORRECT CODEX VATICANUS END DATE
1	23615-19607 BC	23573-19569 BC	1Reed
2	18490-14480 BC	18486-14476 BC	I Flint
3	13365-9284 BC	13360-9279 BC	I Flint
4	8239-3214 BC	8218-3193 BC	I House
5	3114-2012 AD	3114BC-2012AD	13 Flint

The Mayans believed in cycles and cycles within cycles in a never ending series. Several contemporary scholars propose that the accounts of the Codex Vaticanus

and the Leyenda de los Soles are descriptions of the same events. I propose that the Codex Vaticanus account, as discussed above, represents a long-term perspective and the Leyenda de los Soles account represents a short-term perspective of totally different events. Based on smaller cycles within larger cycles, another way to look at the Leyenda de los Soles account is as follows. According to the 1558 AD Spanish translation of the Leyenda de los Soles, it was written that "Here is the wisdom-discourse of fables, how in ancient times it happened that the earth was established, and each individual thing found its place. This is the manner in which it is known how the sun gave rise to so many things, two thousand five hundred and thirteen years before today, the 22nd of May 1558 AD (i.e., 955 BC)". I believe this should be taken literally. This was written by an Aztec who was describing the history of the Aztec nation. What the Aztec is telling us is that the beginning date for the Leyenda de los Soles account is 955 BC, not 3114 BC which was used by the Maya as the start of their last age of 13 baktuns.

The list of time periods from the Leyenda de los Soles is as follows:

- First Sun Duration, 676 years (52 x 13) Ended 1 Reed
- Second Sun Duration, 364 years (52 x 7) Ended 1 Flint
- Third Sun Duration, 312 years (52 x 6) Ended 1 Flint
- Fourth Sun Duration, 676 years (52 x 13) Ended 1 House

The Fifth Sun although not addressed in this sequence is surmised to have a duration of 676 years in order to complete a full round of 52 x 52 years. Once every 52 years, the secular and ritual calendar cycles coincided. At this moment the Mayas/Aztecs believed that time was to have expired.

The writer of the Leyenda de los Soles also wrote, "The name of this Sun is 4 Motion. This is now our sun, the one under which we live today." This was written in 1558 AD. As can be observed below, this date indeed does fit within the Fifth Age which would have ended 1749 AD. Further, no duration was given by the Aztec for the duration of the Fifth Age as this account was written prior to its end.

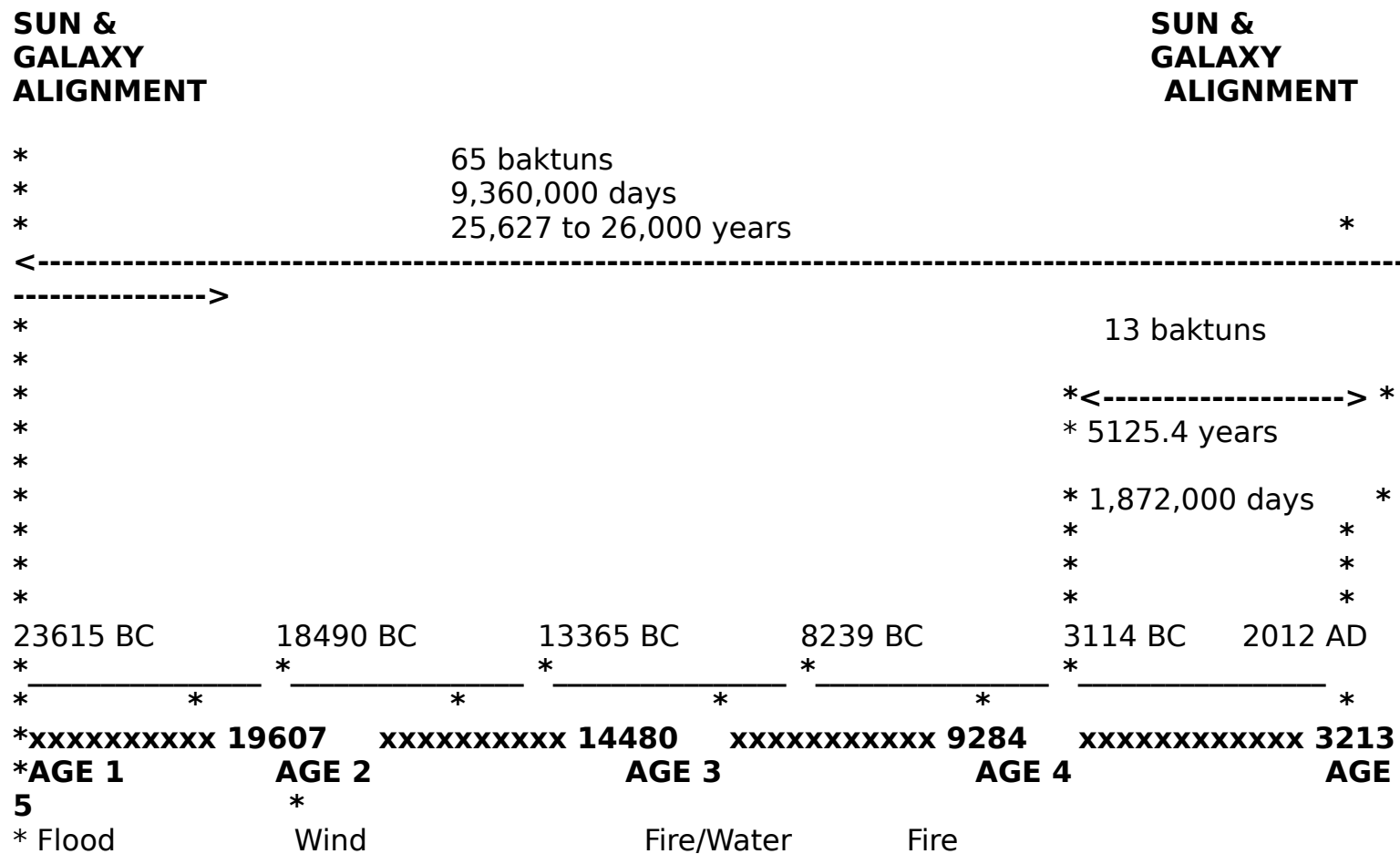
Using the above interpretation of the Leyenda de los Soles yields the following sequence of dates for the Aztec Ages:

<u>DATE</u>	<u>HISTORICAL EVENT</u>
955 BC	Aztec Calendar Day Zero (Leyenda de los Soles)
279 BC End of Age I (Devoured by Jaguars)	Mexican Sun Temple built at Teotihuacan End of Olmec civilization (c. 300 BC)
85 AD End of Age 2 (Destroyed by wind)	Period of cooling and drought Vesuvius eruption (79 AD)
397 AD End of Age 3 (Destroyed in rain of fire)	Mt. Xitle erupts in Mexico (400 AD) Fall of Mayan civilization (c. 900 AD)
1073 AD End of Age 4 (Destroyed by water)	Drought (1000-120 Fall of Toltec civilization (c1100 AD) Destruction of Tula (1170 AD)
Leyenda de los Soles written (1558 AD)	

Where did the Mayans obtain the knowledge to support their stories of past civilizations and the cycles of creation and destruction? It would appear that the civilizations which existed c. 4000 BC also had this same information or possibly fragments of this information. Several of the ancient civilizations established calendars which had their beginnings during the third millennium as shown in Appendix A. If they were recovering from a catastrophic event as suggested by the end of the Mayan Age 4, c. 3213 BC they undoubtedly would try to define a history as they best knew it. If their collective memory recalled that a world wide catastrophe had ended their civilizations, this could have been the reason they used dates relatively close to each others as a starting point for their new beginnings.

A number of Mesoamerican writings exist today of which several are listed below for reference.

- | | | |
|------------------------------|--------------|---|
| • Codex Paris | Maya | |
| • Codex Madrid | Maya | |
| • Borgia Group | | |
| • Codex Zouche-Nuthall | Mixtec | |
| • Codex Florentine | Aztec | (post-Spanish conquest) |
| • Codex Mendoza | Aztec | (post-Spanish conquest) |
| • Codex Vindobonensis | | (post-Spanish conquest) |
| • Codex Magliabechiano | Aztec | (post-Spanish conquest) |
| • Codex Vaticanus A | Aztec | (post-Spanish conquest) |
| • Codex Borgia ⁵³ | Aztec/Mixtec | (late 15 th or early 16 th century) |
| ○ Codex Cospi | Aztec | (post-Spanish conquest) |
| ○ Codex Fejervary-Mayer | Aztec | (post-Spanish conquest) |
| ○ Codex Laud | Aztec | (post-Spanish conquest) |
| ○ Codex Vaticanus B | Aztec | (post-Spanish conquest) |

FIGURE 6-1 CHRONOLOGY OF THE FIVE AGES

NOTES: xxxxxxxxxxxx = durations per Codex Vaticanus
1 baktun = 144,000 days = 400 years of 360 days each
13 baktuns = 5200 ideal years = 5125.24 solar years
Precession cycle = 25,627 years = 5 Suns/Ages

CHAPTER 7

SPECIAL NUMBERS

Communication:

A word, a phrase, a number;

An intent, a meaning;

With recognition - an understanding.

-Author

From what has been written so far, it can be concluded that ancient man had considerable knowledge of his surrounding universe. He wrote of creation, the forces of nature, and his physical relationship with the world in which he found himself. He not only wrote of these topics, he also found the need to measure and quantify what he observed. This he did using numbers.

Symbols which represent numbers have appeared in records found on various media such as clay tablets, papyrus scrolls, and stone carvings. The origin of the use of numbers cannot be positively identified; however, the mathematical systems developed by the ancients were likely influenced by what they observed in nature. They observed that many facets of their lives were affected in a cyclical fashion. Cycles included birth; planting and harvesting; and the motion of the Sun, Moon, known planets, and the apparent motion of constellations.

Systematic astronomical observations occurred throughout the world from locations including Egypt, Babylon, India, China and Mesoamerica. Four thousand years ago the Babylonians were skilled astronomers who were able to predict the apparent motions of the moon, stars, planets and the sun. Mankind's interest in what was going on in the heavens is known to have been recorded at least since 3500 BC. These civilizations were far ahead of what we today give them credit for. It wasn't until c. 1500 AD that Copernicus offered the heliocentric model of the solar system showing the Sun as its center much to the objection of the renaissance Europeans. What Copernicus believed he discovered we now realize was known by the Sumerians 5,000 years before his time. With the advent of deciphering the ancient records of the Sumerians and comparing the records with what modern astronomy is revealing, it has become obvious that the science of astronomy and its associated mathematics were important to, and well understood by, ancient civilizations.

The ancient cities of the Sumerians, Akkadians, Babylonians, Egyptians, Mayans, and Chinese all had solar observation sites where the motions of the Sun, Moon, planets and stars were observed and recorded. There are writings which claim that astronomical observations began at much earlier dates than those recorded by these ancient civilizations. Herodotus, a historian from Asia Minor c. 484 BC, relates a story from Manetho, an Egyptian, which implies the Egyptians were recording observations of the heavens as far back as 39000 BC. A claim made by Diodorus Siculus, a Greek historian c. 60 BC, refers to a period of observation spanning 473,000 years. According to Cicero, a Roman statesman c. 106 BC and later reiterated by Proclus, a Greek philosopher c. 412 AD, the Chaldaeans had made observations of the stars which spanned a period of 370,000 years.

Several locations of ancient observatories discovered by modern-day archaeologists are listed below.

- Nabta Site (Egypt - 5000 BC)
- Sun Temple (Heliopolis, Egypt-3100 BC)
- White Temple of Eridu (Mesopotamia-3100 BC)
- Near Eastern "Stonehenge" (Golan Heights, Israel, c. 3,000 BC)
- Stonehenge I, II, III (England -2900 BC to 2000 BC)
- Mesopotamia Stonehenge (Euphrates-2100BC)
- Sarmizegetusa (Stonehenge by the Black Sea)
- Machu Picchu, Peru (c. 2300 BC)
- Chiche'n Itz'a (Mexico)
- Ziggurat of Babylon (c. 2300 BC)
- Temple of Heaven (Peking)
- Temple of Amon-Ra (Karnack-2100 BC)
- Sacred precinct of Ur (2100 BC)
- Sacsahuaman (Peru)

Dates for the Nabta site have been cited as far back as 5000 BC which makes this the oldest dated astronomical observatory discovered to date. While this location is in the Sahara desert today, at the time of its use there is evidence from dried up river beds and cave paintings that show an area of flowing rivers, lush green pastures and forests. The Nabta site includes a stone circle and five lines of standing and toppled megaliths. Satellite surveys show that some of the stones are aligned north-south, east-west, or pointing to the summer solstice as it would have appeared 6,000 years ago. This is evidence of the existence of an advanced civilization existing long before the Sumerians or the Egyptians. Is it possible

that this is the source of knowledge which was responsible for the proliferation of astronomy to other parts of the globe?

It is interesting to note that several of these observatories have been identified with beginnings, c. 4000-3000 BC. Is this coincidental or did something happen prior to the time of this construction period which peaked the interest of these civilizations? A period of favorable climate worldwide called the Holocene Thermal Maximum began around 5000 BC. Because of these favorable conditions, civilizations exploded worldwide including in Mesopotamia (Sumerians), Egypt, Mesoamerica (Peru, Mexico), Crete (Minoan), Indus Valley, and China. The interest in astronomy could have been a normal evolution of civilization but it is interesting that this evolution occurred at approximately the same time throughout the world especially since these civilizations were not thought to have come in contact with one another.

Some of the earliest evidence of symbols which had numerical meaning comes from the Sumerian civilization c. 3500 BC and later from Babylonian tablets which list numbers and their sexagesimal reciprocals up to several billion. The same numbers appear down through the ages as found on the inscriptions left by the Akkadians c. 2000 BC, Egyptians c. 1800 BC, Babylonians c. 2000-290 BC, Chinese c. 1105 BC, Hindu-Arabic c. 1150 BC-400 AD, and Mayas c. 1000 BC-900 AD. Until recently, historians believed that the mathematical prowess of the people c. 3400 BC-1000 AD was very rudimentary. The utilization of harmonics, fractions, and decimals of infinite length were believed to have been beyond the understanding and capabilities of these civilizations. What we know today as a result of deciphering the ancient tablets and papyrus scrolls is much different.

The Egyptians are believed to have possessed rudimentary algebra (c. 1800 BC) and trigonometry (c. 1550 BC) in addition to their system of addition and subtraction. It is believed that the concept of the Geometric Series and the idea of a fraction with a numerator greater than unity arose in Babylon c. 2000 BC. The Egyptians also had an understanding of the Geometric Series and used fractions, the first treatment of which is found in the Ahmes Papyrus (c. 1550 BC). The essential feature of the Egyptian treatment is the unit fraction ($1/x$), with two notable exceptions (i.e., $2/3$ & $3/4$). Unlike the earlier cultures the Hebrews used the letters of their alphabet for numerical symbols similar to the system which was later used by the Greeks. The use of letters of the alphabet to represent numbers leads to some confusion as the numerical value of a name could be considered as the accepted translation instead of the name itself, or vice versa.

Confusion can also be introduced when deciphering the Babylonian cuneiform as shown in Table 7-9. A series of cuneiform symbols can represent several different decimal equivalents.

In addition to using numerals for day-to-day calculations the civilizations of Mesopotamia, Mesoamerica, Egypt, and the Indus Valley also made use of what I have termed 'Special Numbers'. A comparison of many of the 'Special Numbers' is given in Table 7-1. An interesting characteristic of these 'Special Numbers' is that many are very large. Tablets from Mesopotamia show tables of ready-made calculations from 12,960,000 in a series downward to 60. Scholars have wondered why ancient civilizations had need of a large number such as 12,960,000. The 25,920 year duration of the earth's precession cycle has a relationship with the 12,960,000 'special number' in that it divides into the 'special number' exactly 500 times. This large number is also equivalent to 3,600 cycles of 3,600 year durations and when divided by 2160, the duration of each house of the zodiac, the result is exactly 6000.

Another number used by several ancient civilizations including the Sumerians, Mayans and Hindus is 1,872,000. The Maya referred to this as the Long Count and as explained in Chapter 6 it represented the duration of one Age/Sun. Some other properties of this number are shown below.

- $1,872,000 / 260 = 7200$ years
- $1,872,000 / 360 = 5200$ years
- $1,872,000 / 365 = 5128.77$ years
- $1,872,000 / 365.24 = 5125.4$ years
- $1,872,000 / 20 = 936,000$ months
- $1,872,000 / 52 = 36,000$
- $1,872,000 / 72 = 26,000$
- $1,872,000 / 13 = 144,000$ days = 1 baktun

Why did the ancient civilizations develop these large numbers and what did they use them for? If Proclus and Cicero are correct in their reporting that the Chaldaeans and Egyptians observed the stars for exceptionally long durations, then it is likely they understood the mechanics of the solar system. This indicates the likelihood that advanced civilizations did indeed exist at a much earlier time than we today accept as being possible.

Other civilizations have also used these 'special numbers'. A half world away from the civilization of the Sumerians, the Maya and their ancestors also possessed many of these 'special numbers'. Much of what we know today of the

Mayan number system comes from the Dresden Codex. This Codex provides considerable astronomical data pertaining to the Moon and the planets of Venus and Mars. Hindu records from India state that One Cosmic Cycle is equal to 1,200 divine years. Further, the Mahabharata text records that there were four ages of the world (Yugas) consisting of 12,000 divine years of 360 human years each for a total of 4,320,000 years. Icelandic mythology refers to the number 432,000 as the ending of a cosmic age while the Babylonians referred to the same number as a Great Year.

A number which had some prominence in the Maya literature is 1,366,560. The Dresden Codex contains a table of several pages dedicated to the positioning of Venus and referred to this number. This number appears to have a relationship to the orbits of the planets Venus and Mars as well as to the forming of the Mayan calendars. These relationships are as follows:

- 3,744 (Haab/vague years) X 365 =1,366,560
- 5256 (Tzolkins) X 260 =1,366,560
- 584 (days/Venus orbit) X 117 passes X 20 =1,366,560
- 584 (days/Venus orbit) X 260 X9 =1,366,560
- 780 (days/Mars orbit) X 1,752 =1,366,560
- 72 (calendar rounds) X 18,990 days =1,366,560
- 144,000 days X 9.49 baktuns =1,366,560

If it is assumed that these same numbers did not appear within the various ancient cultures by chance then it seems reasonable that they were derived from a common source. This may be hard to accept. Since modern day scientists believe that worldwide communications between these civilizations (c. 3400 BC) could not have been possible, it leads one to consider the possibility that these numbers originated from a much earlier civilization and were then propagated throughout the world.

Astronomers and mathematicians have speculated as to the practical use of these 'special numbers' and have tried to offer explanations based on motions of the celestial bodies within our solar system. The following discussion provides possible answers as to what these numbers might have meant to the ancients.

These results suggest that the knowledge possessed by these ancient civilizations was far beyond what we consider today to have been possible.

A very important number which appears in the texts of the ancient's is the number 72. Today we recognize this number as the approximate number of years it takes

the Earth's axis to precess by approximately 1 degree. Another number which was important to the Maya was the 'special number' 144,000 or the baktun. Column 1 of Table 7-2 represents multiples of the baktun in terms of numbers of days. Converting these days to years using the Mayan 360 day/year calendar and then dividing these results by the number of years/degree of precession (i.e., 72) gives the number of degrees the Earth will precess during a baktun or 5.555 degrees per baktun. In Chapter 6, it will be recalled, that the Maya stated it would take 65 baktuns to complete five (5) ages which is equivalent to 1 precession cycle of 360 degrees lasting approximately 26,000 years. Table 7-2 indicates that the number 9,360,000 days is indeed equivalent to 65 baktuns or 361.111 degrees. The calculated number of degrees represents an error of 0.3% from the true value of 360 degrees to complete a full cycle. Since the precession constant of 72 degrees per year is an approximation, this error is insignificant.

Taking the Sumerian multiples of 3600 which are the 'special numbers' and dividing them by 72 results in the number of degrees the Earth's axis will precess over each 3,600 year period, as shown in Table 7-3. Also shown in columns 3 & 6 are the number of precession cycles which correspond with the 'special numbers' (i.e., 43600 years). It can be seen that a complete cycle (i.e., column 4) occurs between 25,200 and 28,800 or 26,000 years.

What were the Mayans or their predecessors trying to show, if anything? I believe that by presenting these 'Special Numbers' in their written records the Mayans or their predecessors were describing their understanding of the celestial/physical relationships involving:

- The Earth's position in relation to its precession cycle.
- Alignment between the galactic and solar planes,
- The Earth's position relative to the Sun,

Also, by tying these 'Special Numbers' to the completion of Ages, as discussed in Chapter 4, they were describing worldwide catastrophic events which occurred in their past and they were trying to inform future generations of important coming events.

The 'special numbers' not only represented the cyclical property of the Earth's precession cycle they also were recognized for their harmonic properties. The physical world contains an infinite number of tones. The idea of scales of tones has been wrongly attributed to the ancient Greeks. Several scholars speculate that the concepts of scale and harmonics may have actually originated with the Babylonians. I would go further and speculate that these ideas are from a much earlier period. The Egyptians believed that through the study of numbers, irrationals, and harmony, they could understand the whole of creation and all the laws, principles and functions underlying physical phenomena. The Sumerians may have also considered the concept of harmony or harmonics as they assigned numbers to their gods⁵⁴ which can be seen to correspond with the diatonic scale as shown in Table 7-4.

All of the 'Special Numbers' listed in Table 7-1 are prime numbers and are harmonics represented by the 1:2 octave. That is, they are divisible by $2^p 3^q 5^r$ where p, q, r are integers including zero. From the roots of 2, 3, 5 all harmonic proportions and relationships can be derived. It would appear that these ancient civilizations understood these concepts very well. Today we know that everything in what we term Nature is cyclical or repetitive and therefore predictable. The concepts of Relativity and Quantum Mechanics are being refined by the concepts of String Theory and M-theory which recognize multiple dimensions with vibrational characteristics. Modern physics is showing that everything from subatomic structures to the total expanse of the universe is built upon the concept of vibration (i.e., cycles, harmonics). In other words, the interplay of the harmonic proportions of an infinite number of tones commands the forms of all matter. The formation of matter is dependent on the vibrational characteristics of its subatomic makeup and as such there are nodes formed where these vibrational characteristics are focused (i.e., points of stability).

The primary point of stability selected by the Egyptians was the location of the Great Pyramid of Giza. They designated this location as the 'center of the earth'. By observing the locations of their important cities and structures in relation to the Great Pyramid of Giza it can be seen that these locations or nodes form a grid. The locations of several ancient cities of religious/political significance including the sites of the important oracles are presented in Table 7-5. By placing these locations on a grid it can be observed that they are spaced circumferentially (i.e., east/west from Giza) in even multiples of 15 minutes of arc, or 15 nautical miles. Further, these locations lie on 15 minute of arc multiples north/south of Giza. The locations of Persepolis, Iran; Harappa, India; and Lhasa, Tibet also lie on the 30 degree latitude and are multiples of 1200 minutes of arc east/west of Giza. These were all important cities c. 3500 BC. The locations for Stonehenge, England and

Avebury, England have been included in the table since the dates for their use correspond to the dates that the other locations were in use. The results suggest that a connection between these two sites and Giza may not have existed. The locations of the Greek oracle sites also lie on the 15 minute of arc grid. This tie to Giza would suggest that these oracle sites were much older than the Greek period. The Egyptians considered 7 degrees latitude equivalent to 1 octave (D, c, b^b, A, G, f, e^b, D) and set the north-south boundaries of Egypt at 7 degrees latitude, an equivalent of 420 minutes of arc or 420 nautical miles which is also a multiple of 15 minutes of arc.

Today we recognize that the circumference of the Earth (360 degrees) can be divided into 21,600 minutes of arc which in our terms of distance is equal to 21,600 nautical miles. I believe the ancient civilizations were also aware of this. The Mesopotamians designated the unit of 1 sar = 3,600 which I propose they used to relate to a measure of the Earth's circumference equivalent to $21,600 / 3,600 = 60$ degrees or 3,600 nautical miles. In this manner they would have been able to grid the entire surface of the Earth in a manner similar to our present day grid of latitude and longitude. This implies they knew the Earth was a sphere. Assuming they knew this fact, one has to ask the question; why was it important to establish such a grid? There are three reasons which come to mind that would cause these civilizations to need this information. One is they needed to know the distance between vastly separated regions on the Earth for purposes of travel. The second is they needed locations for the purpose of communicating to distant points on the Earth's surface. Thirdly, they were aware of the vibrational properties of matter and its harmonic affects on the workings of the universe and realized that specific points for locating their cities and important structures could benefit from the harmonic properties of the site. When the circumference of the Earth is divided into segments of 60 degrees or 3,600 minutes of arc each, the following relationships are obtained:

DEGREES	MINUTES OF ARC
480	28,800
420	25,200
360	21,600
300	18,000
240	14,400
180	10,800
120	7,200
60	3,600

It can be observed from Table 7-6, Special Numbers and Their Harmonics, that the above numbers, in terms of minutes of arc can be represented within a series

of approximately four octaves (i.e., 2250:4500 thru 18000:36000). It can further be noted that the segment of 60 degrees or 3,600 minutes of arc is equivalent to 1 octave from 0 to 3600 as is the second segment from 3600 to 7200. The third segment of 180 degrees does not fall into the 1 octave relationship. The next segment which falls into the 1 octave relationship is 240 degrees followed by 480 degrees. By observing the octave relationships it can be seen that each subsequent octave forms a relationship which is represented by the series 1, 2, 4, 8, 16, 32, 64, 128, etc.

Interestingly enough this is the same series which formed the basis for the Titus-Bode Law which describes the location for the planets of the solar system. It has been shown that the entire planetary system can be stable if it is in a resonant configuration. It has long been recognized that naturally occurring arrangements can be linked to number sequences. What this sequence shows is that the regions bounded by 60, 120, and 240 degrees and centered at Giza are in resonance, which suggests that the land and ocean masses are in equilibrium and have reached a point of relative stability. This further suggests that the selection of the Giza plateau for the location of the pyramids was based on knowledge of the planets resonance frequencies.

Referring to the diatonic scale of Table 7-7, Special Numbers and their Corresponding Tones as a Function of Frequency Ratios, it can be observed that this series is represented by the tone of e^b .

When the Earth is divided into areas bounded by the points of resonance measured in each of the four cardinal directions centered at the Great Pyramid, it can be observed that each area includes an interesting collection of regions as described below.

Area 1, created by following the lines of longitude and latitude which are found 60 degrees in each direction from the pyramid ranges from the North Pole to the southern tip of Africa at 30 degrees south latitude. The eastern boundary follows the 90 degree east longitude north through central China and central Russia to the North Pole. The western boundary follows the 30 degree west longitude north to the North Pole. This area includes the continents of Africa, Europe, and a large portion of Asia. Of particular note is the split of Asia occurs precisely through the ancient city of Lhasa, Tibet.

Area 2, created between the 60 degree increment and the 120 degree increment includes the continents of South America, Australia, Indonesia; the portion of Asia not covered in Area 1; portions of the North American continent including Greenland, Canada, the eastern portion of the United States; and extends from the North Pole to the South Pole where it covers the majority of Antarctica including the regions of the Weddell Sea, Queen Maud Land, Enderby Land and Wilkes Land.

Area 3, created between the 120 degree increment and the 180 degree increment covers the South Pacific Ocean, New Zealand, and portions of Antarctica including Byrd Land, Victoria Land, and the Ross Sea. These three Areas centered at Giza cover the entire surface of the Earth.

Another way to represent the circumference of the Earth is to double the 3600 tone for successive 60 degree segments as shown below:

<u>60 DEGREE SEGMENT</u>	<u>3,600 TONE DOUBLED</u>
0 -60	3,600
60 – 120	7,200
120 -180	14,400
180 – 240	28,800
240 – 300	57,600
300 – 360	115,200

From Table 7-6, Special Numbers and their Harmonics and Table 7-8 (Special Numbers and their Corresponding Length Multiples) this harmonic series of double tones is represented by the tone b^b of the diatonic and chromatic scales. From Table 7-7 (Special Numbers and their Corresponding Tones as a Function of Frequency Ratios) this is also equivalent to the frequency tone $f^\#$. This indicates that positions on the Earth's surface located at 60 degree intervals represent harmonics of the $f^\#$ chord. According to ancient Egyptian texts, the notes of the $f^\#$ chord were the harmonics of the Earth's natural resonance frequency. The Great pyramid in Giza is located at what is believed to be the center of the Earth's landmass. A number of investigators have made acoustic measurements inside the king's chamber of the Great pyramid and report that the granite beams of the chamber resonate at the harmonics represented by the $f^\#$ chord (i.e., 438-450 Hz). Christopher Dunn⁶ provides a compelling argument which postulates that the Giza pyramid could act as a coupled oscillator resonating in harmony with the Earth's natural vibration.

The fact that ancient civilizations, c. 3500 BC, made use of numbers in the way outlined in this chapter shows that they had a significant understanding of the layout of the universe, the mechanics of the solar system and the functioning of, and their interaction with, the planet Earth.

It can be seen in Table 7-11 that the mapping of the Earth, in terms of latitude and longitude, has been understood as early as 1137 AD. The discovery of the chronometer by John Harrison in 1761 AD provided seamen during the Middle Ages with the means to measure longitude for the first time in recent history. As can be seen in Table 7-11, several maps depict latitude and longitude well before Harrison invented the chronometer. The cartographers cited earlier maps from which they obtained the data for their maps. Not only did these maps show latitude and longitude, several also show ice-age glaciers c. 12000 BC and some show Antarctica free of ice c. 4000-9000 BC. This leads one to speculate further that earlier, sophisticated societies existed prior to the end of the last ice age and possibly existed prior to the last ice age.

With this background it can be surmised that the ancient societies had an accurate understanding of their history and of creation itself. It is not apparent from the archaeological evidence presented in the next chapter that these civilizations c. 3000-4000 BC developed this knowledge on their own. They appear to be users of and not inventors of technology. This can only point to a much earlier source for the information which they were users of!

TABLE 7-1 SPECIAL NUMBER COMAPRISONS

NUMBER ¹	PRIME NUMBERS 2^p x 3^q x 5^r (p-q-r)	tone ²	SEXAGESIMA L NUMBER	SUMERIAN (GREAT SARS)	INDIA COSMIC CYCLES	COMMENTS
1	0-0-0		60 ⁰			
6	1-1-0					
60	2-1-1	D	60 ¹			
600	3-1-2					
36	2-2-0	f				
360	3-2-1	D				
3600	4-2-2	D	60 ²	1 SAR	3	
36000	5-2-3	D	10 X 60 ²		30	
360000	6-2-4	D	100 X 60 ²		300	
72	3-2-0	f				
720	4-2-1	D				
7200	5-2-2	D	2 X 60 ²		6	
72000	6-2-3	D	20 X 60 ²		60	
720000	7-2-4	D	200 X 60 ²		600	
7200000	8-2-5		2000 X 60 ²		6000	
144	4-2-0	f				
1440	5-2-1	D				
14400	6-2-2	D	4 X 60 ²		12	
144000	7-2-3	D	40 X 60 ²		120	
216	3-3-0	c, f				
2160	4-3-1	A, f				
21600	5-3-2	A, f	6 X 60 ²		18	
216000	6-3-3	A, f	60 ³	1	180	

TABLE 7-1 SPECIAL NUMBER COMAPRISONS (Continued)

NUMBER ¹	PRIME NUMBERS 2^p x 3^q x 5^r (p-q-r)	tone ²	SEXAGESIMA L NUMBER	SUMERIAN (GREAT SARS)	INDIA COSMIC CYCLES	COMMENTS
432	4-3-0	c, f				
4320	5-3-1	f				
43200	6-3-2	f	12 X 60 ²			
432000	7-3-3	D	2 X 60 ³	2	360	Hindu – Kali Yuga & Babylonian Great Year
4320000	8-3-4		20 X 60 ³	20	3600	Hindu - 1 Yuga era
86400	7-3-2	f	24 X 60 ²			
864000	8-3-3		4 X 60 ³			Hindu – Dvapara Yuga
8640000	9-3-4		40 X 60 ³			Hindu - 2 Yuga eras
129600	6-4-2	c	36 X 60 ²			
1296000	7-4-3	f	6 X 60 ³			Hindu – Treta Yuga
12960000	8-4-4		60 ⁴	60		Hindu – 3 Yuga eras
1200	4-1-2	b				
120000	6-1-4	b				
25920	6-4-1	c				Precession cycle of the Earth's Axis
241200	na				201	
456000	na				380	
172800	8-3-2	f				
1728000	9-3-3		8 X 60 ³			Hindu - Krita Yuga
17280000	10-3-4		80 X 60 ³			Hindu – 4 Yuga eras
155520000000	16-5-10					Hindu duration of

000

the Universe-life of
Brahma

1-Special Numbers found throughout writing of ancient Sumerian, Akkadian, Indian and Mesoamerican cultures.
2 -Tone values are all products of 3 primes 2, 3, 5

TABLE 7-2 SPECIAL NUMBERS & CORRESPONDING DEGREES OF PRECESSION

SPECIAL # (DAYS)	BAKTUNS	PRECESSION # DEGREES	SPECIAL # (DAYS)	BAKTUNS	PRECESSION # DEGREES
144000	1	5.556	4896000	34	188.889
288000	2	11.111	5040000	35	194.444
432000	3	16.667	5184000	36	200.000
576000	4	22.222	5328000	37	205.556
720000	5	27.778	5472000	38	211.111
864000	6	33.333	5616000	39	216.667
1008000	7	38.889	5760000	40	222.222
1152000	8	44.444	5904000	41	227.778
1296000	9	50.000	6048000	42	233.333
1440000	10	55.556	6192000	43	238.889
1584000	11	61.111	6336000	44	244.444
1728000	12	66.667	6480000	45	250.000
1872000	13	72.222	6624000	46	255.556
2016000	14	77.778	6768000	47	261.111
2160000	15	83.333	6912000	48	266.667
2304000	16	88.889	7056000	49	272.222
2448000	17	94.444	7200000	50	277.778
2592000	18	100.000	7344000	51	283.333
2736000	19	105.556	7488000	52	288.889
2880000	20	111.111	7632000	53	294.444
3024000	21	116.667	7776000	54	300.000
3168000	22	122.222	7920000	55	305.556
3312000	23	127.778	8064000	56	311.111
3456000	24	133.333	8208000	57	316.667
3600000	25	138.889	8352000	58	322.222
3744000	26	144.444	8496000	59	327.778
3888000	27	150.000	8640000	60	333.333
4032000	28	155.556	8784000	61	338.889
4176000	29	161.111	8928000	62	344.444
4320000	30	166.667	9072000	63	350.000
4464000	31	172.222	9216000	64	355.556
4608000	32	177.778	9360000	65	361.111
4752000	33	183.333			

TABLE 7-3 SPECIAL NUMBERS & THEIR CORRESPONDING PRECESSION RELATIONSHIPS

PRECESSION # DEGREES	PRECESSION # CYCLES	# 3600 (YEARS)	PRECESSION # DEGREES	PRECESSION # CYCLES	# 3600 (YEARS)
50	0.14	3600	1900	5.28	136800
100	0.28	7200	1950	5.42	140400
150	0.42	10800	2000	5.56	144000
200	0.56	14400	2050	5.69	147600
250	0.69	18000	2100	5.83	151200
300	0.83	21600	2150	5.97	154800
350	0.97	25200	2200	6.11	158400
400	1.11	28800	2250	6.25	162000
450	1.25	32400	2300	6.39	165600
500	1.39	36000	2350	6.53	169200
550	1.53	39600	2400	6.67	172800
600	1.67	43200	2450	6.81	176400
650	1.81	46800	2500	6.94	180000
700	1.94	50400	2550	7.08	183600
750	2.08	54000	2600	7.22	187200
800	2.22	57600	2650	7.36	190800
850	2.36	61200	2700	7.50	194400
900	2.50	64800	2750	7.64	198000
950	2.64	68400	2800	7.78	201600
1000	2.78	72000	2850	7.92	205200
1050	2.92	75600	2900	8.06	208800
1100	3.06	79200	2950	8.19	212400
1150	3.19	82800	3000	8.33	216000
1200	3.33	86400	3050	8.47	219600
1250	3.47	90000	3100	8.61	223200
1300	3.61	93600	3150	8.75	226800
1350	3.75	97200	3200	8.89	230400
1400	3.89	100800	3250	9.03	234000
1450	4.03	104400	3300	9.17	237600
1500	4.17	108000	3350	9.31	241200
1550	4.31	111600	3400	9.44	244800
1600	4.44	115200	3450	9.58	248400
1650	4.58	118800	3500	9.72	252000
1700	4.72	122400	3550	9.86	255600
1750	4.86	126000	3600	10.00	259200
1800	5.00	129600	3650	10.14	262800
1850	5.14	133200	3700	10.28	266400

TABLE 7-4 TONAL INTERPRETATION OF THE SEXEGISIMAL SYSTEM⁵⁴
Babylonian Multiplication Table; ¹⁰ (i.e., product of number & reciprocal = 60)

SUMERIAN GODS ³⁶	NUMBER ¹	SEXAGESIMAL RECIPROCAL	STONE	RECIPROCAL
	2	30	c [#]	e ^b
	3	20	f [#]	b ^b
	4	15	c [#]	e ^b
Ninmah/Ninharsag ²	5	12	A	G
Ishkur/Adad	6	10	f [#]	b ^b
	8	7,30	c [#]	e ^b
	9	6,40	b	f
Marduk ⁸	10	6	A	G
	12	5	f [#]	b ^b
Inanna/Ishtar ³	15	4	D	D
	16	3,45	c [#]	e ^b
	18	3,20	b	f
Utu/Shamash	20	3	A	G
	24	2,30	f [#]	b ^b
Ningal ⁴	25	2,24	f	b
	27	2,13,20	e	c
Nannar/Sin	30	2	D	D
	32	1,52,20	c [#]	e ^b
Ninki ⁵	35			
	36	1,40	b	f
Enki/Ea	40	1,30	A	G
Ninlil ⁶	45	1,20	G	A
	48	1,15	f [#]	b ^b
Enlil (later Ninurta) ⁹	50	1,12	f	b
	54	1,6,40	e	c
Antu ⁷	55			
An/Anu	60	1	D	D

NOTES: 1) Numbers 30 thru 60 = Diatonic Scale (35 & 55 added to complete the circle of 12 Great Gods)

2 & 3 Single

4, 5, 6, 7) Female: wives of Sin, Ea, Enlil, and Anu respectively.

8) Marduk was not initially included in the circle of 12 Great Gods.

9) Ninurta succeeded his father Enlil and assumed the number 50.

10) Babylonian reciprocal tables (c. 2000 BC) actually have reciprocals of numbers up to several billion.

EXAMPLE: Sexagesimal reciprocal 1, 6, 40 =

$$1/60 + 6/60^2 + 40/60^3 = 0.016666 + 0.0016666 + 0.0001851 = 0.0185177$$

The reciprocal of x = 1/x = 1/ 0.0185177 = 54

TABLE 7-5 LOCATIONS OF ANCIENT SITES RELATIVE TO GIZA

LOCATION	DEGREES LATITUDE	DEGREES NORTH FROM GIZA	DISTANCE- MINUTES OF ARC NORTH	DISTANCE /15	DEGREES LONGITUDE	DEGREES FROM GIZA	DISTANCE MINUTES OF ARE EAST	DISTANCE /15
GIZA, Egypt	30N	0			31E			
Persepolis, Iran	30N	0	0	0	51E	20E	1200	80
Harappa, India	30N	0	0	0	71E	40E	2400	160
Lhasa, Tibet	30N	0	0	0	91E	60E	3600	240
Easter Island	27S	303	18180	1212	251E	220E	13200	876
Maya, Guatemala	15N	345	20700	1380	271E	240E	14400	960
Matchu Picchu, Peru	13S	317	19020	1268	287.5E	103.5W	15390	1026
Sacsahuaman, Peru	13.5S	316.5	18990	1266	288E	103W	15420	1028
Nazca, Peru	15S	315	18900	1260	285E	254E	15240	1016
Tiahuanaco, Bolivia	16.5S	313.5	18810	1254	291E	260E	15600	1040
Avebury, England	51.4286N	21.4286	1285	85.71	359.15E	328.15E	19689	1312.6
Stonehenge, England	51.178N	21.178	1270.68	84.7	359E	328E	19680	1312
Samos, Greece	38.75N	8.75	525	35	27E	-4W	-240	1424
Baalbek, Lebanon	34N	4	240	16	36E	5W	300	20.8
Cyrene, Libya	33N	3	180	12	13E	18W	1080	1368
Athens, Greece	38N	8	480	32	23.75E	-7.25W	-435	1411
Cythera, Greece	36.5N	6.25	375	25	23E	-8W	-480	1408
Delphi, Greece	38.5N	8.5	510	34	22.5E	-8.5W	-510	1406
Dodona, Greece	39.5N	9.5	570	38	20.8E	-10.2W	-612	1212

NOTES: 1) One degree of arc = 60 nautical miles

2) 15 minutes of arc = 15 nautical miles

TABLE 7-6 SPECIAL NUMBERS AND THEIR HARMONICS

<u>1:2</u> <u>RATIO</u>			<u>450:900</u>	<u>900:</u> <u>1800</u>	<u>1800:</u> <u>3600</u>	<u>3600:7200</u>	<u>7200:</u> <u>14400</u>	<u>14400:</u> <u>28800</u>	<u>28800:</u> <u>57600</u>
			450	900	1800	3600	7200	14400	28800
			480	960	1920	3840	7680	15360	30720
			540	1080	2160	4320	8640	17280	34560
			600	1200	2400	4800	9600	19200	38400
			675	1350	2700	5400	10800	21600	43200
			720	1440	2880	5760	11520	23040	46080
			750	1500	3000	6000	12000	24000	48000
			810	1620	3240	6480	12960	25920	51840
			900	1800	3600	7200	14400	28800	57600
<u>1:2</u> <u>RATIO</u>	<u>2250:4500</u>	<u>4500:9000</u>	<u>9000:18000</u>	<u>18,000:</u> <u>36,000</u>	<u>36,000:</u> <u>72,000</u>	<u>72,000:</u> <u>144000</u>	<u>144,000:</u> <u>288,000</u>	<u>288,000:</u> <u>576,000</u>	<u>576,000:</u> <u>1,152,000</u>
D	2250	4500	9000	18000	36000	72000	144000	288000	
d #			9375	18750	37500	75000	150000	300000	
e ^b	2400	4800	9600	19200	38400	76800	153600	307200	
e	2500	5000	10000	20000	40000	80000	160000	320000	
E			10125	20250	40500	81000	162000	324000	648000
f	2700	5400	10800	21600	43200	86400	172800	345600	
f #			11250	22500	45000	90000	180000	360000	
G	3000	6000	12000	24000	48000	96000	192000	384000	
g			12150	24300	48600	97200	194400	388800	
g #	3125	6250	12500	25000	50000	100000	200000	400000	
a ^b	3200	6400	12800	25600	51200	102400	204800	409600	
A	3375	6750	13500	27000	54000	108000	216000	432000	864000
b ^b	3600	7200	14400	28800	57600	115200	230400	460800	
b	3750	7500	15000	30000	60000	120000	240000	480000	
b #			15625	31250	62500	125000	250000	500000	
C	4000	8000	16000	32000	64000	128000	256000	512000	
c	4050	8100	16200	32400	64800	129600	259200	518400	
c #			16875	33750	67500	135000	270000	540000	
D	4500	9000	18000	36000	72000	144000	288000	576000	

NOTES TO TABLES 7-8 & 7-9: 1) Scale of eight tones without the chromatic intervals. 2) Smallest integers which define the diatonic scale.

3) Scale of 13 successive half tones to the octave.

4) Smallest integers which define chromatic order.

**TABLE 7-7 SPECIAL NUMBERS AND THEIR CORRESPONDING TONES
AS A FUNCTION OF FREQUENCY RATIOS**

<u>DIATONIC</u> <u>SCALE</u> ¹	<u>1</u> <u>5:3</u> <u>0</u>	<u>30:6</u> <u>0</u> ²	<u>60:</u> <u>120</u>	<u>1</u> <u>20:</u> <u>240</u>	<u>2</u> <u>40:</u> <u>480</u>	<u>4</u> <u>80:</u> <u>960</u>	<u>960:</u> <u>1920</u>	<u>1</u> <u>920:</u> <u>3</u> <u>840</u>	<u>3</u> <u>840:</u> <u>7</u> <u>680</u>	<u>7680:</u> <u>15360</u>	
D	15	30	60	120	240	480	960	1920			
e ^b	16	32	64	128	256	512	1024	2 048			
f	18	36	72	144	288	576	1152	2304			
G	20	40	80	160	320	640	1280	2560			
A		45	90	180	360	720	1440	2880			
b ^b	24	48	96	192	382	764	1528	3056			
b	25	50	100	200	400	800	1600	3200			
c	27	54	108	216	432	864	1728	3456			
D	30	60	120	240	480	960	1920	3840			
<u>CHROMATIC</u> <u>SCALE</u> ³	<u>4</u> <u>5:9</u> <u>0</u>	<u>90:</u> <u>180</u>	<u>1</u> <u>80:</u> <u>360</u>	<u>3</u> <u>60:</u> <u>720</u> ⁴	<u>7</u> <u>20:</u> <u>1</u> <u>440</u>	<u>1</u> <u>440:</u> <u>288</u> <u>0</u>	<u>2</u> <u>880:</u> <u>5</u> <u>760</u>	<u>5</u> <u>760:</u> <u>1</u> <u>152</u> <u>0</u>	<u>1152</u> <u>0:</u> <u>2304</u> <u>0</u>	<u>2304</u> <u>0:</u> <u>4608</u> <u>0</u>	<u>4608</u> <u>0:92</u> <u>160</u>
D	45	90	180	360	720	1 440					
d [#]				375	750	1 500					
e ^b	48	96	192	384	768	1 536					
e	50	100	200	400	800	1 600					
E				405	810	1 620	3240	6480	1296 0	25920	
f	54	108	216	432	864	1 728					
f [#]			225	450	900	1 800	3600	7 200	1 440	28800	5760 0

[illegible]

TABLE 7-8 SPECIAL NUMBERS AND THEIR CORRESPONDING LENGTH MULTIPLES (X2)

<u>DIATONIC SCALE</u> ¹	<u>LENGTH RATIOS</u>	<u>30:6</u> <u>0²</u>	<u>60:</u> <u>12</u> <u>0</u>	<u>120:</u> <u>240</u>	<u>240:</u> <u>480</u>	<u>480:</u> <u>960</u>	<u>960:</u> <u>1920</u>	<u>1920</u> <u>3840</u>	<u>3840:</u> <u>7680</u>	<u>7680:</u> <u>1536</u> <u>0</u>	<u>15360</u> <u>30720</u>	<u>30720</u> <u>61440</u>
D	144	144	288	576	1	2304	4608	9216	18432	36864	73728	
e ^b	135	135	270	540	1 152	2160	4320	8640	17280	34560	69120	
f	120	120	240	480	960	1920	3840	7680	15360	30720	61440	
G	108	108	216	432	864	1728	3456	6912	13824	27648	55296	
A	96	96	192	384	768	1536	3072	6144	12288	24576	49152	
b ^b	90	90	180	360	720	1440	2880	5760	11520	23040	46080	
b												
c	80	80	160	320	640	1280	2560	5120	10240	20480	40960	
D	72	72	144	288	576	1152	2304	4608	9216	18432	36864	
<u>CHROMATIC SCALE</u> ³		<u>360:</u> <u>720</u> ⁴	<u>72</u> <u>0:</u> <u>14</u> <u>40</u>	<u>1</u> <u>440:</u> <u>288</u> <u>0</u>	<u>2</u> <u>880:</u> <u>5</u> <u>760</u>	<u>5760</u> <u>1152</u> <u>:</u> <u>1152</u> <u>0</u>	<u>1152</u> <u>0:</u> <u>2304</u> <u>0</u>	<u>2304</u> <u>0:</u> <u>4608</u> <u>0</u>	<u>46080:</u> <u>92160</u>	<u>9216</u> <u>0:</u> <u>1843</u> <u>20</u>	<u>18432</u> <u>0:</u> <u>36864</u> <u>0</u>	<u>36864</u> <u>0:</u> <u>73728</u> <u>0</u>
D		720	1 440	2880	5 760	1152 0	2304 0	4608 0				
d [#]												
e ^b		675	1 350	2700	5 400	1080 0	2160 0	4320 0	86400	17280 0	345600	691200
e		648	1 296	2592	5 184	1036 8	2073 6	4147 2				
E												
f		600	1 200	2400	4 800	9600 0	1920 0	3840 0				
f [#]		576	1 152	2304	4 608	9216 2	1843 4	3686 4				
G		540	1 080	2160	4 320	8640 0	1728 0	3456 0				
g												
g [#]												

a ^b											
A	480	960	1920	3 840	7680	1536 0	3072 0				
b^b	450	90 0	1 800	3 600	7200	1440 0	2880 0	57600	1152 00	23040 0	46080 0
b	432	864	1728	3 456	6912	1382 4	2764 8				
b [#]											
C											
c	400	800	1600	3 200	6400	1280 0	2560 0				
c [#]	384	768	1536	3 072	6144	1228 8	2457 6				
D	360	720	1440	2 880	5760	1152 0	2304 0				

**TABLE 7-9 ALTERNATE DECIMAL EQUIVALENTS FOR
CUNEIFORM NUMBERS**

Babylonian Cuneiform

Y = 1 = 60^N = 60, 3600, 216000, 12960000

< = 10 = 10×60^N = 600, 36000, 2160000

Y> = 100

Y> = minus sign

DECIMAL	CUNEIFORM	ALTERNATE DECIMAL POSSIBILITIES
10,800	YYY	180, 121, 62, 3
28,800	YYYYYYYY	480, 185, 126, 67, 8
36,000	<	600, 10
43,200	<YY	720, 661, 602, 130, 71, 12
46,800	<YYY	780, 721, 662, 603, 190, 131, 72, 13
50,400	<YYYY	
54,000	<YYYYY	
64,800	<YYYYYYYY	1080, 608, 195, 136, 77, 18
72,000	<<	
108,000	<<<	
144,000	<<<<	
432,000	YY	7200, 3660, 120, 2
70	Y<	660, 601, 11
105	Y>YYYYY	400, 341, 282, 223, 164
150	YY<<<	91, 32
162	Y>YYY	221, 103
165	Y>YYYYYY	242, 283, 224
170	Y>Y<	111
182	YYYYY	241, 123, 64, 5
187	YYY<Y>YYY	128, 69, 10
250	YYYY<	191, 132, 73
1656	<<YYYYYYYY<<<YYYYYY	

TABLE 7-10 COMPARISON OF DIFFERENT BASE NUMBER SYSTEMS

DECIMAL	BASE 9	BASE 20	BASE 60
10,800	15730	1,700	300
28,800	42361	D00 Where D=10	7DD Where D=46 & 40
36,000	54340	D00 Where D=10	D00 Where D=10
43,200	65230	5,800	D00 Where D=12
46,800	71170	5D00 Where D=17	D00 Where D=13
64,800	107800	8,200	D00 Where D=18
25,920	38500	34D0 Where D=16	7D0 Where D=12
144,000	238470	D,000 Where D=18	D00 Where D=40
432,000	727530	2D000 Where D=12	2,000
720,000	1316580	4D000 Where D=10	3D00 Where D=20
1,008,000	1805640	66,000	4D00 Where D=40
1,296,000	2384700	82,000	6000
1,584,000	2873750	9D000 Where D=18	7D00 Where D=20
1,872,000	3462810	DD000 Where D=11 & 14	8D00 Where D=40
2,160,000	4051860	DD000 Where D=13&10	D000 Where D=10
2,448,000	4541020	D6000 Where D=15	DD00 Where D=11&20
12,960,000	26342700	41,000	10,000

D = decimal

EXAMPLE 1: Decimal number=25,920

Divide decimal by base number = 9

9/25920 = 2880 with a remainder = 0

9/ 2880 = 320 with a remainder = 0

9/320 = 35 with a remainder = 5

9/35 = 3 with a remainder = 8

9/8 = 0 with a remainder = 3

The base 9 equivalent = 38,500 (The reverse order of the remainders)

$$\begin{aligned}
 \text{CHECK: } 3 \times 9^4 + 8 \times 9^3 + 5 \times 9^2 + 0 \times 9^1 + 0 \times 9^0 &= 3 \times 9 \times 9 \times 9 \times 9 + 8 \times 9 \times 9 \times 9 + 5 \times 9 \times 9 + 0 \times 9 \times 9 + 0 \times 9 \\
 &= 19,683 + 5,832 + 405 + 0 + 0 \\
 &= 25,920
 \end{aligned}$$

EXAMPLE 2: Decimal number=25,920

Divide decimal by base number = 20

20/25920 = 1296 with a remainder = 0

20/1296 = 64 with a remainder = 16 (since this is more than a single digit, assign D)

20/64 = 3 with a remainder = 4

20/3 = 0 with a remainder = 3

The base 20 equivalent = 34D0

$$\begin{aligned}
 \text{CHECK: } 3 \times 20^3 + 4 \times 20^2 + 16 \times 20^1 + 0 \times 20^0 &= 3 \times 20 \times 20 \times 20 + 4 \times 20 \times 20 + 16 \times 20 + 0 \times 20 \\
 &= 24,000 + 1600 + 320 + 0 \\
 &= 25,920
 \end{aligned}$$

TABLE 7-11 ANCIENT MAPS

DATE (AD)	MAP/CARTOGRAPHER	HISTORICAL EVENT	INFORMATION SHOWN ON MAP
Millions of years ago		Antarctica Ice Free	
13000 to 4000 BC		Coasts of Antarctica Ice Free	
100-170 AD	Claudius Ptolemy		Glaciers in Southern Sweden
1137	Chinese map/stone pillar		Latitude & Longitude
1339	Dulcert Portolano		Latitude & Longitude of Europe & North Africa
1380	Zeno		Greenland, Latitude & Longitude
1487	Portolano / Iehudi Ibn Ben Zara		Glaciers @ Latitude of England, Mediterranean @ Ice Age Sea Level
1513	Piri Reis		Antarctica, Ice Free Coast, South America, Amazon River, Falkland Islands
1531	Oronteus Finaeus		Antarctica, Coast Ice Free, Rivers, Mountains, Ross Sea
1538	Mercator / Gerard Kremer		Antarctica, Coast Ice Free, Coast of South America - detailed
1559	Hadji Ahmed		Bering Land Bridge
1569	Mercator / Gerard Kremer	Spanish explorers in South America since 1519 - Cortez	Antarctica & South America, data from Spanish explorers
1592		Discovery of Falkland Islands	
1737	Philippe Buache		Antarctica totally Ice Free
1761	John Harrison	Discovery of Chronometer to measure Longitude	
1818		Discovery of	

		Antarctica	
1958	International Geophysical Year Survey	Discovery that Antarctica is comprised of multiple land masses	

CHAPTER 8

PHYSICAL EVIDENCE

Facts do not cease to exist because they are ignored.

-Aldous Huxley

When you have eliminated the impossible,
what ever remains, however improbable, must be
the truth.

-Sir Arthur Conan Doyle (Sherlock Holmes)

As discussed in Chapter 6, many of the ancient myths describe stories of cataclysmic events. If the intent of these ancient story tellers was to relay important information to future generations, can these stories be explained or supported by the physical evidence we have knowledge of today? Does the geophysical record we observe today support or refute the stories of creation, the stories of cataclysmic destruction and the possibility of advanced civilizations prior to the end of the last ice age? Clues as to man's thinking can be derived from his environment and his construction projects. A starting point in determining who we are and where we are headed is to review the physical evidence left behind from the regions where we came from and to correlate the timing of natural occurrences in these areas with this physical evidence. A timeline of relevant historical information is presented in Appendix B, Table B-1. The basis for this information is from mythology, archaeology, geology and other emerging sciences. As such, the accuracy of many of the dates is suspect and should be used only as a framework to help fashion reality as new information becomes available which will either support or refute the timeline.

DATING TECHNIQUES

The accurate dating of ancient historic events is often criticized. Not only do the different dating techniques offer different dates for the same events, there is often a lack of consistency within any given dating technique. Many of the dates which have been reported in the past were determined by a technique based on the decay cycle of the carbon-14 element. The accuracy of the carbon-14 dating technique is based on several assumptions, not the least of which includes:

1. The amounts of atmospheric and oceanic carbon have remained the same for the past several million years,

2. the levels of cosmic rays and neutrino radiation reaching the earth were the same in the past as they are now,
3. nothing has ever contaminated the specimens containing carbon-14,
4. and the earth's magnetic field has remained constant throughout its history.

Since it is known today that none of these assumptions are reliable, the accuracy of the carbon-14 dating technique, especially for older dates, must be suspect. In order to try to substantiate the dates obtained through the use of carbon-14 techniques researchers have employed a method using tree-ring calibrations. The Bristlecone pine and the giant sequoias may be the oldest known living things on Earth. Living Bristlecone trees and deadwood pieces are postulated to provide a year-by-year tree ring sequence back to 3435 BC while the sequoias are no older than 4000 years. A problem arises when using the Bristlecone tree-rings as a method for calibration since several researchers believe the Bristlecone pine can produce two tree-rings per year or can even skip a year of ring production.

It is generally accepted that carbon-14 dates, going back about 2,600 years, tend to be the most accurate since it is believed that carbon-14 levels since that time would have been close to early nineteenth-century levels. However, radiocarbon dating is reported by many to be accurate for dating events back to c. 9500 BC. It can be said that methods used to date materials older than a few thousand years are notoriously unreliable. A less precise marine carbonates calibration can be used for dating prior to c. 9500 BC. It has been suggested that 2000 years be added to radiocarbon determinations earlier than 8000 BC and as much as 3000 years be added to radiocarbon determinations earlier than 10000 BC.

It has been shown that the abundance of carbon-14 in the earth's atmosphere varies as a function of sunspot activity. During periods of great sunspot activity the abundance of atmospheric carbon-14 diminishes. It has been reported⁵⁴ that during the twelfth and thirteenth centuries as well as during the Maunder Minimum (1630 – 1720 AD) the levels of carbon-14 in the atmosphere varied widely.

What may further complicate radiocarbon dating is the belief by some scientists that a natural phenomenon may have taken place some 12,500 years ago which reset radiocarbon clocks in North America and possibly throughout the planet. Scientists believe that substantial areas of the Earth were subjected to particle bombardment and nuclear radiation that produced large quantities of plutonium 239. Neutron bombardment transmuted residual nitrogen to radiocarbon which in effect causes errors to be introduced in the radiocarbon dating technique. When

atomic explosions are involved, the dates obtained seem much younger. Dates at many sites could be 10,000 years to young. It has been suggested that one such trigger for a neutron bombardment could be from a burst of radiation from the Vela supernova which occurred 12,500 years ago. Other evidence of the presence of nuclear radiation in our past comes from the Harappa and Mohenjo-Daro sites in India where numerous skeletons have been found with high concentrations of radioactivity. These skeletons have been carbon-dated to 2500 BC. Other sites in India and Libya have been discovered which show signs of intense heating such as would be tied to nuclear explosions. Sitchin in his book 'The Wars of Gods and Men'⁴⁵, describes a nuclear war reported in Sumerian mythology which was to have taken place c. 2024 BC.

Since radiocarbon dates may be the only ones reported in the published literature they have been used in the comparisons reported in Appendix B, Table B-1. However, they should not be considered as gospel. Other new technologies which have been developed for dating material include: Thermal Ionization Mass Spectrometry and Accelerator Mass Spectrometry. Proponents of these techniques believe that the researcher is able to identify dates much further back in time than with radiocarbon dating and with repeatable results to within 40 years for material 10,000 years old. These dating techniques have been applied by the researchers in determining the dates for the collapse of the Bosphorus reported by Ryan and Pitman⁵⁰, as discussed in Chapter 6.

ARCHAEOLOGICAL EVIDENCE

Archaeological evidence pertaining to the development of ancient cultures has been found throughout the world in the ruins of the structures which these ancient cultures created. Archaeological evidence shows that the settlements at Jericho in Palestine and Catalhoyuk in southern Turkey are the oldest cities excavated to date. While archaeologists are learning a great deal about the daily lives of the inhabitants of these long lost cities, there is still much to be learned. There are great numbers of ruins for which we today have little or no understanding as to why they were built, who built them, or for what purpose. In general, the reason for constructing structures is to provide physical protection, for artistic expression, to show wealth and power, and to provide function. Because of this, much can be learned about the motivation, personality, security, and philosophy of the people who constructed these structures. We are tempted to either believe that the ancient people lived much like we do today or that they were primitive precursors to today's societies. I believe that a great deal of the evidence to the contrary is simply being set aside or ignored because the data does not fit the pattern drilled into the heads of today's scientists by the academic community. To

categorically accept that advanced civilizations did not precede the civilizations of 5000 years ago is to limit ones thinking to a very narrow range.

Several sites which represent some of the earliest known civilizations and which have been referenced in this writing include the following:

<u>CULTURE</u>	<u>DATE (BC)</u>	<u>LOCATION</u>	<u>MAJOR CITIES</u>
Natufian	c. 10500-8500	Palestine/Syria	Jericho
	c. 7500-5500	Anatolia (Turkey)	Catalhoyuck
Hassuna	c. 6000-5200	Northwest Iraq	
Halafian	c. 5500-4700	Northern Mesopotamia	
Ubaidan	c. 4500	Southern Mesopotamia	Eridu
Sumerian	c. 3500	Mesopotamia	Eridu, Kish, Ur, Uruk/Erech
Egyptian	c. 3200	Egypt	Memphis, Thebes, Heliopolis
Eblanite	c. 2500	Northwestern Syria	Ebla
Akkadian	c. 2300	Mesopotamia	Akkad, Nippur, Erech, Ur, Lagash, Mari
Sumerian	c. 2100	Mesopotamia	Isin, Mari, Susa
Babylonian	c. 2000	Mesopotamia	Babylon, Hazor, Nineveh

The exploration of many sites is driven by the availability of written records such as found in the Old Testament. Since there are no written records for sites possessing megalithic structures they tend to be looked at in awe with no serious archaeological investigations underway or planned.

a) Megalithic Structures

The monuments of antiquity such as pyramids, ziggurats, vast platforms of Lebanon, and stone megaliths of Peru provide physical evidence to bygone events. What we know today about these megaliths is their age is uncertain, their creators are obscure, and their purpose is unclear. Megalithic structures and statues made from stone are gigantic in size with individual blocks weighing over 1,000 tons. If the ancient civilizations wanted to leave a message for future

generations then stone would have been the building material of choice. The obvious reason for using stone is that it was available. Considering all of the choices of building materials we have available to us today, stone would still be the material of choice if one wanted to achieve the condition of permanence. None of the materials developed by modern science have the durability and permanency that natural stone possesses.

Perhaps the largest megalithic structure from the ancient world is in the modern day country of Lebanon and is known as Baalbek. The largest granite blocks which are precisely shaped and perfectly fitted together measure over 60 feet in length with sides of twelve and fourteen feet. These blocks weigh well over 1,000 tons. As a point of reference, the largest granite blocks used in building the Giza pyramids weigh only 200 tons. Local legends hold that this place existed from the days of Adam and Eve, built by Cain in the year 133 of Creation. Other myths report that after the deluge, Nimrod sent giants to rebuild the fortress of Baalbek.

At the prehistoric site of Sacsahuaman (Figure 8-1), located near Cuzco in Peru, there is an immense stone and earthen work six hundred yards long, consisting of megalithic stones, some which are 27 feet in length and weighing over 1,000 tons. These stones are irregular in shape (Figure 8-2) yet they fit together perfectly with no observable space between stones and with no mortar being used.



Figure 8-1 Sacsahuaman



Figure 8-2 Sacsahuaman Interlocking Fit

Also in the Andes Mountains of Peru and Bolivia, the ancestors of the Inca also constructed cyclopean structures. One of their most extraordinary achievements was the city of Tiahuanaco located near the southern shore of Lake Titicaca. Archaeologists have estimated that this city could have been built 10,000 to 16,000 years ago. Blocks of stone exist some 36 feet in length. Approximately a mile north of Tiahuanaco towards the southern shore of Lake Titicaca lays the ruins of Puma Punku. This is a region which appears to have undergone cataclysmic destruction. Huge stone blocks up to 27 feet long and weighing 300 tons are scattered about the countryside like toy building blocks. There is also evidence of a great canal being destroyed by a massive earthquake. It has been speculated that Puma Punku is much older than its neighbor Tiahuanaco. It has also been speculated that the Puma Punku site is the remains from a giant uplift of the Andes as evidenced by sea fossils found in the area indicating that Lake Titicaca, currently at an elevation of 13,000 feet, was one time at sea level. What could have occurred in this region over 15,000 years ago? At this time the Earth's climate was getting warmer and the Pleistocene Ice Age was coming to an end. The great mass of ice was converted to

water resulting in a major redistribution of weight on the tectonic plates. Motion of these plates could have been sudden and violent resulting in the rising of great mountain ranges throughout the American continents. This of course is contrary to the popular belief that the mountain ranges were created gradually over a period of millions of years.

One must ask; why in a day and age that we today believe to have been limited to the use of manual labor did these people use such gigantic building materials? Not only were the stones large, they were cut with precision, moved over great distances, lifted and fitted in place with no discernible spacing or use of mortar. The obvious answers are that these large rocks were available, there may not have been other materials available, and they provided a certain degree of permanence.

Why not use smaller stones? Several hundred smaller stones could have been cut, hauled over shorter distances with greater ease, and lifted into place to form a fortification or platform. If the stonework was to have provided protection from animals or the weapons of the age, such as rocks, arrows, and spears, then a wall constructed with smaller rocks would have offered essentially the same protection as a wall built with large rocks. Smaller rocks would have been easier for an enemy to disassemble and remove than the larger gigantic rocks; however, this would take time and expose the enemy to attack from above. If these were fortifications they could easily have been scaled with the use of ladders. These structures have the appearance of terraces and not fortifications. Also supporting this viewpoint is the fact that open stairways are built-in from ground level to the top of the structure. Terraces are meant to support loads and not meant to keep intruders out.



Figure 8-3 Author at Sacsahuaman, Peru

Had megalithic rocks been incorporated into walls where they were originally found would be one thing. Moving them across rivers, up mountains and over many miles of rugged terrain doesn't make sense unless:

- technologies existed at that time beyond what we possess or understand today,
- people who lived then were of much greater stature than any known today,
- the structures were required to support great weights or forces,
- there was an overwhelming need for permanence and stability as the structures were used to identify specific locations and directions.

An interesting fact regarding location and direction is the positioning of these large structures. They are all placed with their sides in the precise alignment with Earth's cardinal points (i.e., north, south, east, and west). Other alignments which are of interest are the alignments of the sacred cities of Eridu, Sumeria; Heliopolis, Egypt; Harappa, India; Lhasa, Tibet; the ritual center of Persepolis, Persia; and the Giza Pyramids all lying precisely on the 30th parallel. Further the Sphinx is also positioned, looking directly east, along the 30th parallel. It was shown in Chapter 7 that these and other sites are located on a precise grid covering the entire globe.

Other large scale sites have been found in South American including Nazca, the Atacama Desert, and the Bay of Paracas Trident. Archaeologists have suggested these megalithic works of art were for religious purposes. The ancients may have pursued religious beliefs because they were superstitious and needed a reason to explain their being and required something greater than themselves to provide hope that their miseries would improve. However, if these sites were created for religious purposes then I would expect that the people would have created something tangible that they could see and touch. Why then scribe figures throughout the desert landscape that any religious observer strolling through the area could not even recognize as being there. Walking through the 200 square mile area one could not begin to realize or visualize what they were part of. Defining these drawings as religious artifacts seems to me to be unreasonable unless the inhabitants had the ability to view them from a great elevation. The natural elevations, such as offered by high hills or mountains which exist in this region do not provide observational vistas.

We can ask, why build these highly detailed forms, covering many acres of extremely arid desert, at these particular locations? Some reasons could include:

- material was available which provided a permanent difference in color when disturbed,
- the arid landscape provided a high degree of permanence,
- the areas were open, unobstructed expanses,
- these figures provided identification of specific locations,
- the figures were beacons for airship navigation.

Many sites have been discovered which relate to observation of the Sun as it progressed through the winter solstice, the equinox, and the summer solstice. The most famous is the circle found at Stonehenge, England. This type of site has also been found in Mesopotamia, the Golan Heights, Israel, Egypt, and at a site near the Black Sea called Sarmizegetusa.



Figure 8-4 Stonehenge Megalithic Observatory - View 1



Figure 8-5 Stonehenge Megalithic Observatory - View 2

b) Pyramids

Of all the ancient megalithic structures the pyramids of the Giza Plateau are among the most famous. A list of kings/pharaohs and their pyramids and tombs are listed in Appendix B, Table B-4. According to Egyptologists the first pyramid was a six-step pyramid constructed by Djoser during the beginning of the Old Kingdom period, c. 2630-2611 BC as seen in Figure 8-6.



Figure 8-6 Step Pyramid

The next pyramid construction was to have consisted of a series of three pyramids for the pharaoh Snefru c. 2575 BC which Egyptologists believe were failed attempts to achieve a true pyramid shape. Snefru later directed that the 8-step pyramid located at Maidum be refurbished to represent a true pyramid with a slope of $51^{\circ} 50' 35''$ or 51.844 degrees. Three of the steps were completed; however, the remainder was never finished as Snefru died in the process. His burial site is unknown. How did Snefru know the shape of a true pyramid? Perhaps he had a model! According to mainstream Egyptologists the next pyramids to be built were the three pyramids of the Giza Plateau which Egyptologists attribute to Snefru's son Khufu. If Khufu built the Great Pyramid at Giza, he learned a great deal in the 25 years between Snefru's attempt to rebuild the Red pyramid and the reported beginning of construction on the pyramid complex at Giza, c. 2550 BC.

For 300 years following the time when Khufu was to have constructed the Great Pyramid several pyramids were constructed, all of poor quality. The explanation Egyptologists give for poor construction following the three Giza pyramids is that the pharaoh Khufu bankrupted the State with his construction projects.

There are facts which have been ignored by Egyptologists which do not support the construction of the Great Pyramid by Khufu. The size, precision,

workmanship, choice of materials, and preparation of the base of the pyramid are all superior to any pyramid constructed prior to or since construction on the Giza plateau. Further, the interior of the Great Pyramid is finished masonry, unlike any other pyramid constructed as a burial chamber.

The three pyramids of the Giza Plateau are so significantly different than other pyramids or burial tombs that their intended function must be reconsidered. The internal layout of the Giza pyramids is not found in any earlier or later pyramids. The Giza pyramids represent a precise, unique layout whereas the other later pyramids are of rough construction and contain spaces for sarcophagi and the pharaoh's possessions. If the Giza pyramids were constructed during the Old Kingdom as Egyptologists contend, then there should be other evidence of quality construction during this period. This is not the case. Further, there is absolutely no evidence of this quality in the construction of megalithic structures either before or after the proposed time for the Giza construction. No personal possessions were ever found in the Giza pyramids nor has any hard evidence been found attributing their construction for the purpose of providing a burial place for the pharaoh. In 820 AD an Arab prince, Abdullah El Maman, tunneled into the great pyramid and found both the Queen's Chamber and King's Chamber absolutely empty and clean. When the pyramid was first opened, no body or evidence of a burial was found. I propose that the pyramids other than the three Giza Pyramids are attempts to copy the existing true pyramid shape of the Great Pyramid by people without the knowledge, engineering, and craftsmanship required to achieve its perfection.



Figure 8-7 Giza-Great Pyramid

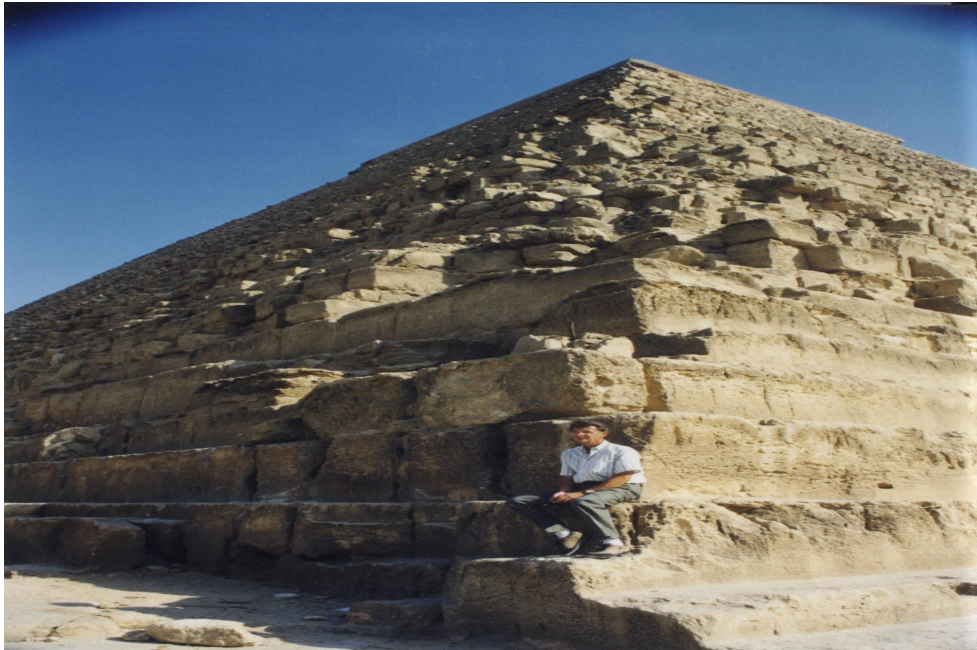


Figure 8-8 Author at Great Pyramid

There is evidence that the true builders of the Great Pyramid had knowledge of the dimensions of the planet. Planetary dimensions in use today are given in Appendix C. The three key measurements of the earth (i.e., equatorial circumference, polar radius, and weight) appear to be incorporated in the dimensions of the Great Pyramid.

1. The perimeter of the pyramid, measured at approximately 3024 feet, equals to within 0.6 % a half minute of the Earth's circumference at its equatorial latitude (i.e., $1/43200$ of earth's circumference = 3042.11 feet)
2. The height of the pyramid, measured at approximately 481 feet including the platform, equals to within 3.7 % a half minute of the Earth's polar radius (i.e., $1/43200$ of the Earth's polar radius = 482.777 feet)
3. The weight of the pyramid (5,273,834 tons) is proportional to the weight of the earth (5,273,000,000,000,000,000,000 tons) or a factor of $1:10^{15}$.

It should be recognized that the measurements of the Great Pyramid are approximations as they are dependent upon where and how measurements were taken as well as the fact the pyramid has not been in mint condition for millennia.

As mentioned before, harmonic measurements performed in the Kings Chamber indicate a resonance frequency of between 538-540 Hertz or the note of f-sharp (f[#]) which is a harmonic of the planet Earth's natural vibration. In Chapter 7 I discussed the use of the Giza Pyramid complex as a possible communications instrument based on a worldwide harmonic grid.

If the Egyptians built the great pyramid to reflect the key measurements of the Earth (i.e., equatorial circumference/radius, polar circumference/radius and weight) they would have had to have known the relationship of Pi in order to convert the Earth's circular circumference to a square perimeter. The transcendentalism of Pi implies there is no way possible to exactly construct a square, such as the base of the pyramid, equal in area to a given circle, such as the circumference of the Earth.

According to the traditional history of mathematics, the present value of Pi was not known until approximately 150 AD when it was to have been developed by the Greeks. Actually, the fact that the ratio of the circumference of a circle to its diameter is constant has been known for so long that its origin is quite untraceable. However, according to ancient tablets from Mesopotamia and papyrus scrolls from Egypt the value of Pi was reported to have taken on several different values over time. Historical values for Pi include:

$25/8 = 3.125$	from ancient Egyptian sources
$= 3.1605$	from the Egyptian Ahmes papyrus (1550 BC)
$4(8/9)^2 = 3.1605$	from the Egyptian Rhind papyrus (1650 BC)
$(10)^{1/2} = 3.162$	Mesopotamia
$= 3$	Bible, Talmud, Chinese and Hindu works (950BC)
$3 \frac{1}{7} = 3.1623$	Heron (Greek, 50 AD)
$= 3.1416$	Ptolemy (Greek, 150 AD)
$= 3.1416$	India, Aryabhatiya (c. 520 AD)
$= 3.14159..$	Today's accepted value

One must ask why the pharaohs from the time of Djoser would have chosen the pyramid shape for some of their tombs. If the Giza Pyramids were of very great antiquity there could have been myths available to the ancient Egyptians describing their origin and purpose. If the Giza Plateau had been described in these myths as a communications complex between Earth and the gods, the pharaohs might have believed they too could communicate with the gods if they could replicate the shape of a pyramid. What they may not have realized was the pyramid shape was not all that was required for communications to occur.

If you accept that the Giza pyramids were of great antiquity, then the remaining pyramids beginning with Djoser's occurred in two phases both of which were preceded by periods of severe drought throughout Egypt and Mesopotamia. The first building spree occurred during the Old Kingdom and lasted for approximately 350 years. The second occurred 350 years later during the Middle Kingdom. I propose that the superstitions held by the Egyptians influenced them to build pyramids, other than those at Giza, as an appeasement to the gods with the thought that their construction might help end the long droughts.

Half way around the world archaeologists working in Peru have unearthed evidence that monumental architecture, complex societies, and planned developments appeared in the New World between 3,500 and 16,000 years ago. One of the oldest Peruvian pyramids is believed to predate the time period when the great pyramids were built in Egypt and when the Sumerian city-states reached their zenith in Mesopotamia by 800 years.

All of the pyramids constructed in Mesoamerica were of the step design similar to those at Tikal and Caracol.



Figure 8-9 Jaguar Temple, Tikal



Figure 8-10 Caracol Temple

South of the university campus of Mexico City stands a circular step pyramid. It was partially excavated in the 1920's from beneath a mantle of lava from a volcanic eruption which had completely buried three sides from an eruption which occurred at least seven thousand years ago predating the Egyptian pyramids by 2,000 years. It is believed to be the oldest temple yet uncovered on the American continent.

c) Artifacts

Inscriptions and artifacts can tell us a great deal about a society's lifestyle, beliefs and observations. What these societies observed and then replicated in the forms of inscriptions on stone, artwork, statues, and models should give us some fair idea as to what they considered important. Some of the more curious shapes and perhaps the most telling inscriptions and artifacts deal with astronomy and flight.



FIGURE 8-11 Aircraft Designs from a New Kingdom Temple at Abydos, Egypt

Egyptian tombs show depictions of what appear to be rocket ships, an underground silo, and the upper stage of the rocket with a module on top. Details of instruments, piping and exhaust ducts are shown. This is found in the tomb of Huy, an Egyptian noble. Images (Figure 8-11) of what appear to be aircraft have been found in an Egyptian Old Kingdom Temple at Abydos. Figure 8-11 is a picture taken December 2000 by Ellie Crystal and published on her “Crystalinks website”. Inscriptions on the Temple at Edfu describe aerial battles among the gods which show a vessel with fins and wings and jet like tails from the back and rays projecting from the front. Working bird-shaped gliders have been found within tombs in Egypt. While these may have been toys, they are evidence that Egyptians were aware of this technology. A wooden model of an aircraft with reversed dihedral wings was found in a tomb in Saqqara, Egypt. The use of this advanced feature requires an extensive knowledge of aerodynamics. Other evidence that ancient civilizations were aware of flight has been found in tombs of the Incas. Several small gold trinkets have been recovered, dating back thousands of years which clearly depict structures that appear to be workable flying airplanes. A conclusion that could be arrived at since we are seeing workable airplane models in two different cultures separated by the Atlantic Ocean, is that a large-scale technological society with full-sized, working aircraft may have been in existence at one time as well.

Near Jericho by the river Jordan archaeologists have found colored murals dating c. 610 - 556 BC which show bulbous objects with eye-like openings, extended support legs and what could be a rocket engine extending beneath the main body. As previously discussed in Chapter 2, these objects are believed to be

representative of the vehicles described by Ezekiel in the Bible and come from the time period he was thought to have prophesied.

A palette was discovered in Egypt which is believed to be of great historical significance. This palette has been named the Narmer Palette after the location at which it was found. The slate palette was found in the late pre-dynastic Temple of Horus at Hierakonpolis (near Edfu in Upper Egypt). The palette is believed to commemorate the conquest and unification of Egypt perhaps by Menes c. 3100 BC.

Sumerian and Akkadian texts refer to men from the sky and men lifting off the earth to the sky. The Hindus, Assyrians, Egyptians, Aztecs, and Chinese have also provided archaeological evidence of model airplanes, model space capsules, and pictures of flying chariots. Scale models of aircraft have been found in Egypt, Colombia, and Yugoslavia that are thought to be thousands of years old. Descriptions of flying machines (Vimanas) of various shapes and sizes are provided in the Vedas and later Indian literature.

Unique objects requiring expert machining and assembly; the techniques for which have only been realized in modern times have been found in Egypt. An example of these advanced drilling techniques has been observed by Christopher Dunn³². The granite coffer that is located in the King's Chamber of the Great Pyramid show signs of advanced drilling techniques that surpass anything within our current capability. Also, vases carved from diorite, a material which is considered to be one of the hardest stones on earth have been found in several Egyptian tombs. These vases have very long and thin necks, are carved from one piece of diorite, and have been hollowed out perfectly. This required a drill with flexibility as well as being capable of precision cutting.

During 1965, seven hundred and sixteen stone disks made from granite were reported to have been found in graves on the border between Tibet and China along with skeletons whose height averaged four feet-four inches tall. The disks which were described as having a hole in the center were about a foot in diameter and one-third of an inch in thickness. They were reported to have been engraved with inscriptions on one side which resemble double grooves spiraling out from the center to the rim. It was speculated that these grooves represented a writing system which was to have been partially decoded relating a story of survivors from a planet in the Sirius-system who crash landed in the remote region of Tibet. The disks seem to have disappeared and may be in the keeping of the Chinese Government, if they do indeed exist. Ancient Chinese myths tell of small yellow-skinned people, known as the Dropa, with large heads and slender bodies who

came from the clouds in their air-gliders. Drawings depicting the relationships between the sun, moon, earth, and stars have also been found on the cave walls where the graves were discovered. These paintings have been dated to c. 10000 BC.

A number of artifacts have reportedly⁵⁶ been found throughout the world which do not get the attention of the mainstream archaeologists probably because they are quite bizarre and cannot easily be explained. A geode was reported to have been picked up near Olancho, California in which an object was to have been found made of metal and porcelain. It was reported that the geode was encrusted with fossil shells determined to be at least half a million years old.

A fragment of a flute was found in Slovenia which was determined to be 45,000 years old. Spiral-shaped objects have been found in Russia made of copper, tungsten and molybdenum. Exact measurements of these often microscopically-small objects have shown that the dimensions of the spirals are in the so-called Golden Mean ratio. Tests give an age for the objects of between 20,000 and 318,000 years old, depending on the depth and the situation of the site.

The most ancient evidence of the production of art predates the generally accepted earliest dates for the appearance of modern humans. Cup marks and lines were etched into a sandstone cave in India two or three hundred thousand years ago. Line markings on bone, teeth, ivory and bone of equal antiquity are known from the campsites of archaic humans. Sculpture in the form of modified natural forms, has been dated to 250-300,000 years ago in the Near East. The oldest known rock art in Australia has been dated to 55,000 years ago. Radiocarbon dates for European paintings range back to more than 32,000 years. A California rock art site has been dated to about 20,000 years ago, based on analysis of mineral varnish covering a pictograph. By 30,000 years ago rock art included hand stencils, complex finger markings and two-dimensional paintings. Rock art in the El-Hosh area of Upper Egypt has been dated to at least 5900 BC, making it the oldest artwork recorded in the Nile Valley. Other estimates suggest that the date of this artwork could extend as far back as 11000 BC.

In 1959 AD, at a site known as Tetela, Mexico Dr. Juan Armenta discovered engravings on mastodon and mammoth bones of extraordinary artistic ability for the period in time that they were carved. It is believed that these fossils and carvings date back to the long ice-free period before the beginning of the Wisconsin Glaciation³ (10 to 50,000 years ago).

What these artifacts are strongly suggesting is that unknown civilizations must have existed in our very distant past and possessed sophisticated technologies, a fact that we today have been unable to come to terms with.

GEOLOGICAL EVIDENCE

a) Plate Tectonics

According to the theory of plate tectonics, the earth's lithosphere is divided into rigid moving plates that interact at their boundaries, where they come together, move apart, or slide past each other. The physical disturbances caused by tectonic movements are observed in the building of mountains, changes in sea and ocean levels, rifts in the ocean floors and faults of the earth's crust. It is not understood if these physical events are caused by activities generated within the earth or if they are triggered by something outside the Earth's control, such as the Sun, or both.

Today, geophysicists offer a theory that the earth's crust is made up of seven major tectonic plates consisting of North American, South American, Pacific, African, Eurasian, Australian-Indian, and Antarctic; each capable of moving with respect to one another. The largest of these plates is the Pacific plate. These plates move independently in various directions at rates generally varying from one to ten centimeters per year. Since these rates are relatively slow it is not likely that these motions are responsible for the catastrophic events recorded in the myths of the ancients. However, if these slippages were to exhibit far greater motions than are currently observed today, then their effects could indeed be catastrophic. Rapid motions would affect the surface of the Earth by 1) effecting the rapid growth of mountain ranges, such as is suspected in the case of the rise of the Andes as observed at Lake Titicaca in Peru and 2) possibly causing the disappearance of large land masses beneath the sea or submergence beneath other continents, as may have occurred with the disappearance of the mythological lands of Atlantis and Mu.

A theory which predated the plate tectonics theory suggested that large landmasses can be elevated or submerged from or to the ocean floor. Plate tectonics theory alone does not account for the elevation and subsidence of continents.

b) Ice Cores

Geologists hypothesize that during the past 2 billion years the earth has experienced physical cycles known as Ice Ages, two occurring during the Precambrian Era, two during the Paleozoic Era and the latest one during the current Cenozoic Era. The Cenozoic Era is divided into two periods, the Tertiary and the Quaternary, the later which began about 2 million years ago. Within our present Quaternary period there are two further subdivisions known as epochs. These are the Pleistocene which began about 2 million years ago and the Holocene which is approximately 10,000 to 12,000 years old. The five major ice ages which have been defined over this period are postulated to have occurred during the geologic periods shown below.

START OF ICE AGE (Million years ago)	GEOLOGIC PERIOD
2,000	Middle of Huronian Era in Precambrian time
670	End of Proterozoic Era in Precambrian time
420	Middle of Paleozoic Era, between the Ordovician and Silurian Periods
290	Late Paleozoic Era, Late Carboniferous and early Permian Periods
1.7	Cenozoic Era, Pleistocene Epoch of the Quaternary Period

During ice ages the boundary of the ice sheet is hypothesized to spread and contract in cycles. These cycles are called glacials (cooling) and interglacials (warming), and are thought to last about 100,000 years. We are currently in the interglacial cycle of the Pleistocene Ice Age. The glacial cycle of the Pleistocene Ice Age consisted of five phases. In North America these phases are known as the Nebraskan, Kansan, Illinoian and Wisconsin. Corresponding periods in Europe are known as Gunz, Mindel, Riss, and Wurm. Between each was a relatively warm period comparable to our present one. Results from a three-kilometer long ice core taken from the Dome C site in Antarctica indicate that over the past 740,000 years the Earth experienced up to eight ice phases within the most recent Pleistocene Ice Age. A commonly accepted theory pertaining to the evolution of ice ages assumes the polar ice caps spread outward from their Arctic and Antarctic starting points. This theory is only partially supported by modern science. Ice sheets of continental size have appeared in temperate and tropical zones in regions such as Africa, Madagascar, India, and Brazil. Further, the direction of some of the flows has been from south to north as well as east to west.

The size of the polar ice caps has a great effect on the warming and cooling of the Earth's atmosphere and oceans. Cold alone will not produce glaciers. Moisture in the atmosphere is necessary to create snow. This requires heat to cause evaporation. The polar ice caps reflect approximately 80-85 % of sun that hits them and with the shrinking of the Antarctic ice cap that we are witnessing today less sunlight is being reflected resulting in a period of increased warming. Today the pack ice in the Arctic Ocean has experienced a thinning of about 40 percent over the past 30 years and may completely disappear in the next few decades. This melting provides a source of fresh water to the Arctic Ocean. When this melting stops, the salinity of the Arctic Ocean will increase due to the influx of saltier water flowing northward from the Mediterranean and the Gulf Stream. The saltier the water the warmer the surface water becomes in contrast to the colder land mass it surrounds. This differential in temperature causes storms resulting in heavy snows. As many scientists believe today, this warming trend may be the precursor to the next ice age. The ocean temperatures affect the direction and force of the ocean currents which in turn affect the changing global weather patterns which we are also experiencing today.

Ice cores have been drilled deep into both the Greenland and Antarctic ice sheets. Since the 1960s several long ice cores have been extracted from the polar ice caps, including those from Camp Century, Crete, Dye-2&3, GSEP 1&2, Milcent and Summit in Greenland, and from Byrd, Dome C, Dome Summit South, Misuho Station, Siple Dome, and Vostok in Antarctica. In theory, ice cores are believed to provide a continuous record of past climactic events including local temperature and precipitation rates. It is postulated that the constituents which represent the local climactic conditions are entrapped in yearly snow fall thereby providing a climactic record on a yearly and sometimes seasonal basis. As snow falls on the ice sheet and is packed over time, it forms layers indicating annual accumulations. The ice cores are being used to determine changes in past atmospheric composition by measuring trace gas concentrations, chemical impurities, acidity, isotope concentrations, the presence of extraterrestrial material, and concentrations of aerosols of volcanic origin.

It is theorized that the oxygen-isotope ratio provides a method for estimating the temperature of the ocean or the atmosphere in the past. Oxygen isotopes in ice cores extracted from polar regions exhibit a decreasing trend in the ratio of the heavy to light oxygen isotopes from the beginning of the 'Ice Age' to its end, at which time the trend reverses sharply and then remains fairly constant for several thousand years. This has been interpreted to have occurred over about 100,000 years and is believed to be due primarily to changes in oceanic and atmospheric

temperatures as the lighter isotope of oxygen is preferentially transferred slowly from the oceans to ice during glaciations and the rapid transfer back to the ocean during de-glaciations. By tracking the oxygen-isotope ratios within the ice cores it has been concluded that the last ice age ended in the Northern Hemisphere, c. 10000 BC with the current warm Holocene era beginning, c. 8000 BC. The warming at the end of this glaciation was characterized by a series of abrupt returns to glacial climate, periods known as the Older and Younger Dryas, which ended c. 8000 BC. Results from the Greenland Ice Sheet Project (GSIP) indicate that the transition from the colder period to the following warmer period occurred in one to five years during which snow accumulation doubled. The eventual reduction of the ice mass on the continents with the resulting increase in water mass into the oceans not only caused oceans to rise by approximately 400 feet but also caused changes in the stress levels experienced by the Earth's crust and mantle.

Besides temperature, many other types of information can be extracted from ice cores by analyzing wind-blown dust, volcanic matter, sodium and chlorine levels, and carbon dioxide levels entrapped in air bubbles. More wind-blown dust is found in ice layers created during spring and cold periods than during warm intervals. This suggests that glacial periods tended to have dry weather and strong winds. A record of volcanic activity is preserved in the amount of acid found in the ice as measured by the sulfuric matter expelled to the atmosphere and then entrained by the snow at a time after an eruption. These intervals also tend to show low temperature. More volcanism means cooler summers and more severe winters. The air trapped in the ice can be analyzed for trace gases such as carbon dioxide and methane. An ice core taken near the Vostok Station in Antarctica provides evidence how carbon dioxide and methane concentrations track temperature-the higher the concentrations, the higher the temperature. Sodium and chlorine levels are also indicative of temperature changes. In colder periods, seas become stormier because of the great contrast in temperatures between the tropics and the poles resulting in more sodium and chlorine on the ice caps.

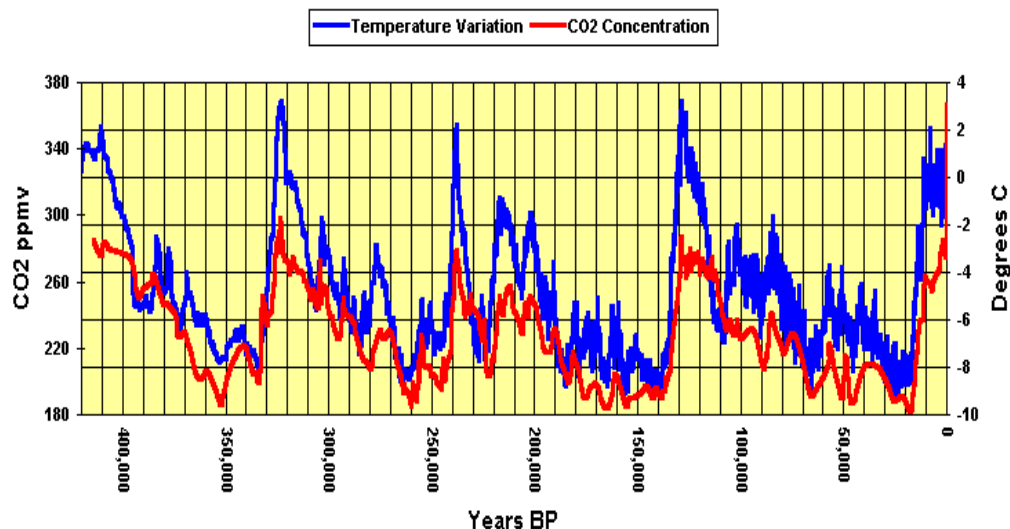
Like carbon-14 dating, the techniques used to determine dates represented by the ice cores are not without controversy. Under the conditions of cyclic melting-freezing-melting and the condition of extreme pressure at the lower regions of the ice sheet, ice can exhibit fluid properties. Some scientists question the premise that constituents deposited in a given year are actually found at depths which accurately correspond to the year they were deposited. Further, the transport mechanism by which the constituents reach a given area is not well understood. Concentrations of any particular constituent can be affected by the wind conditions which transport the constituents to the area where ice cores are taken.

Another uncertainty comes from the level of understanding of how any given constituent can migrate through the ice sheet over thousands of years. While the ice sheets have been in place for thousands of years it is not clear how stable they are from layer-to-layer.

Many geologists view the changes caused by the changing ice sheets as taking place gradually, from warm to cold and back again. This is not supported by geophysical phenomena such as depression of the earth crust beneath the continental glaciers which point to sudden and dramatic upheavals. Fractures in the earth crust with associated cliff formation, as illustrated by Olduvai Gorge, also show sudden upheavals. Observations of the Vostok Antarctic ice cores as published in 1999 by Petit et al in the journal "Nature" (Figure 8-12) show that the transition from the interglacial warm period to intense glaciations is precipitous and may take less than 10 years. Each glacial period was preceded by a warming spike lasting about 20 years.

FIGURE 8-12 VOSTOK ANTARCTICA ICE CORE

Antarctic Ice Core Data 1



Recent explorations of the Antarctic Ice Cap have revealed evidence that there may have been a meltdown of at least a portion of the ice cap in ancient times. This is based upon the finding of fossils recovered from ice cores. The estimate of the age of the fossils is 3-million years old. Other evidence indicates the 3-mile deep ice has been stable for over 500 million years. Unfortunately, ice cores only represent a small area of the ice cap. While the area in which the cores were

extracted might have been stable for this long a period, it is not necessarily a reliable indicator that other areas of the ice cap had this same stability.

Today there is evidence that the west Antarctic ice sheet is breaking up and is loosing mass to the oceans. A huge iceberg broke free of the Larsen ice shelf in 1995 AD. Shortly thereafter, a 40-mile-long crack opened in the adjoining shelf area affecting the flow of ice streams through the sheet in an erratic manner.

Again, in 2002 AD a section of ice the size of Manhattan Island broke off. Is this the beginning of another event like that reported by the Sumerians of a giant ice slippage c. 11000 BC which was to have caused the inundation of the globe and destruction of Man? It has been calculated that if the east and west ice sheets of Antarctica were to melt today, the oceans would rise 200-250 feet.

The evidence of four major geophysical periods tied to warm and cold twin segments, with abrupt transitions, suggest the memories handed down in mythologies of four past world ages, ending with cataclysmic events, may be more than mythological invention.

c) Underwater Cores

Core samples have been taken from drilling the Bosphorus Strait and the Black Sea bed by a group of scientists from Colombia University Lamont-Doherty Earth Observatory. Data which supports the coring results was also collected by sonar mapping of the seabed and canyon bottom through the Bosphorus Strait.

Extensive coring has taken place throughout the Mediterranean Sea beginning with the Glomar Challenger expedition in 1973. Investigations included: 1) a study of Mediterranean-Atlantic water exchanges during the late Cenozoic Era, 2) biological productivity patterns, 3) studies of plate tectonics, and 4) studies to understand the kinematics and deformation of the Mediterranean lithosphere. The discovery of anhydrite from cores taken at 1,270 feet into the seabed provides additional evidence that the seabed was dried up between seven and five million years ago. Anhydrite is a very dry form of selenite that forms at temperatures exceeding 110 degrees Fahrenheit implying that the seabed was not only dry, it was very hot.

Sediment core samples have also been taken from Lake Titicaca in Peru which shed light on the climate of this region of South America over the past 25,000 years. According to a Scientific American article, analysis of the cores' oxygen isotope ratios, magnetic values, calcium carbonate concentrations, and fossilized

diatoms indicated that this region was wet both during the last Ice Age and during later cold periods in the North Atlantic Ocean region. During warm periods in the North Atlantic the Triticaca region experienced drought.

d) Volcanic Activity

Today there are roughly 1,500 potentially dangerous volcanoes throughout the earth. During the year 2004, seventy-two incidents of volcanic activity occurred world wide. Of these, twenty-four occurred during the months of October and November. The activity varied from purely seismic incidents (e.g. Sheveluch, Kamchatka, Russia; Soufriere Hills, Montserrat, West Indies) to lava flows (e.g. Kilauea, Hawaii; Colima, Mexico) to explosive eruptions (e.g. Mt St Helens, Oregon; Grimsvotn, Iceland). While the Hawaiian Islands were formed by five volcanoes 700,000 years ago they still have three active volcanoes. Huala last erupted in 1801; Mauna Kea, the worlds' tallest sea mountain erupts approximately every five years; Manua Loa is the largest volcano on earth.

While there have been hundreds of volcanic eruptions over the past several thousand years the majority do not appear to occur with any periodicity. However, when the dates of the major eruptions are compared it can be seen that four of the most significant eruptions exhibit a relationship with a 3600 year period as shown in Table 8-1.

TABLE 8-1 VOLCANIC ACTIVITY

<u>VOLCANIC ERUPTIONS</u>	<u>DATE c.</u>	<u>NUMBER OF 3600 YEAR PERIODS FROM 2000 AD</u>	<u>COMMENTS</u>
Mt. Toba	73500 BC	20	Near annihilation of the human race
Mt. Somma/Vesuvius	16000 BC	5	Largest eruption
Mt. Mazama	5200 BC	2	Crater Lake Oregon
Thera/Santorini	1628 or 1650 BC	1	End Minoan culture
Proto-Krakatau	535 AD	0.4	Caldera eruption
Mt Tambora	1815 AD	0	Year without a summer
Krakatau	1883 AD	0	Largest eruption in recorded history
Mt. Etna	2003 AD	0	Most continuously active volcano

The Toba caldera, located in Sumatra, Indonesia, produced the largest eruptions in the last 2 million years. Large eruptions occurred 840,000; 700,000; and 75,000 years ago. The eruption which occurred 75,000 years ago is the largest eruption in the past 500,000 years and is believed to have caused a volcanic winter. There is DNA evidence, involving genetic drift, that this eruption very nearly destroyed the human population. Today, there is evidence that a similar supervolcano event may be brewing in Yellowstone Park. Over the past two million years the Yellowstone supervolcano has erupted approximately every 600,000 years. It last exploded 640,000 years ago, therefore some believe the next eruption is long overdue. Signs of increased volcanic activity have been observed in and around Yellowstone. The north part of Yellowstone Lake has bulged by nearly 170 feet over the past 50 years spreading the lake into the surrounding forest. The reservoir of magma under the lake is estimated to be approximately 40 miles long by 20 miles wide by six miles deep. A massive eruption of the Yellowstone supervolcano would be catastrophic for North America and would likely trigger the onset of the next ice age.

The largest eruption of Mt. Somma/Vesuvius occurred, c. 16000 BC with peak fallout c. 15000-14000 BC as determined from the Greenland ice cores. This eruption resulted in the collapse of Mt. Somma and the raising of Vesuvius. Archaeological records indicate other major eruptions of Mt. Vesuvius occurred, c. 10657 BC, c. 9285 BC, and 3580 BC. The last known eruption occurred in 1944 AD. These eruptions spewed large amounts of dust into the upper atmosphere which likely influenced the climate on the Earth's surface by lowering the average temperature as a result of reflecting sunlight back into space. As the dust particles drifted back to the surface of the Earth, they tended to seed rainfall in the process. This could have contributed to the flooding of coastal regions. One of the more famous eruptions of Vesuvius during recent history occurred in 79 AD resulting in the destruction of the city of Pompei. This is also the time frame the Aztec Leyenda de los Soles account claims as the end of their Age 2 which was to have been caused by wind during a period of cooling and drought.

Another eruption which would have impact on the Aztec population was that of Mt Xitle in 400 AD. This local event corresponds to the end of the Aztec Leyenda de los Soles Age 3 which they say was caused by a rain of fire.

The only significant volcanic activity during the time of the collapse of the Bosphorus was the eruption of Mt. Mazama (Crater Lake, Oregon) which occurred, c. 5200 BC. Since this is 400 years after the collapse of the Bosphorus and halfway around the world, it is not likely a cause; however, it may be an effect of plate tectonics which caused major shifts and stresses on the Earth's

surface. There is evidence of a volcanic dirt band in ice cores taken at the Mizuho Station in Antarctica dated c. 5200 BC which can be attributed to this eruption. The last known eruption occurred c. 2290 BC.

A major eruption on the island of Santorini destroyed the Late Bronze Age town of Akrotiri and is attributed as the cause for the end of the Minoan culture. The date of this eruption is not conclusive; however, a suggested date c. 1628 BC is perhaps the most likely. Aspects of the Santorini eruption have been suggested as a possible source for the Exodus story. Radiocarbon dates from Jericho, which according to the Bible was destroyed c. 40 years after the Exodus, are almost identical with the dates from Akrotiri on Santorini. Data obtained from northern hemisphere ice cores show aerosols of volcanic origin beginning c. 1644 BC and peaking c. 1628 BC. Evidence of volcanic activity in southern hemisphere ice cores is absent, however, there is evidence of a significant increase in electrical conductivity and oxygen-18 concentrations peaking c. 1628 BC. An analysis of Bristlecone Pine tree-rings frost damage indicates severe climactic change which could be the result of the occurrence of a volcanic eruption in 1626 or 1628 BC.

Mt Etna is one of the world's most continuously active volcanoes. The first recorded eruption occurred c. 6190 BC during the time of the second mini ice age. Other eruptions occurred about the same time as the Mt. Mazama eruption c. 5150 BC; about the time of a meteor impact in Mesopotamia c. 2330 BC; about the time of the destruction of the Indus Valley civilization c. 1500 BC; and about the time of the fall of the Egyptian New Kingdom c. 1050 BC. The most destructive eruption of Mt Etna occurred in 1669 AD and lasted for four months. An unusually explosive eruption occurred during July 2001 AD with other eruptions occurring as late as 2003. An analysis of the 2001 lava revealed a mineral called amphibole which has been present in Etna's ancient lava flows but not seen in large amounts in the past 15,000 years indicating that a new source of lava may be feeding the volcano.

In August 1815 AD Mt Tambora erupted explosively throwing debris containing large amounts of sulphur about 50 km into the atmosphere. During 1816 a unique record of intense summer cold was recorded. It has been speculated that large amounts of sulfuric acid were created in the atmosphere which contributed to the intense cold period.

The volcano Krakatau is located on Rakata, an island in the Sunda Strait between Java and Sumatra, Indonesia. Its eruption in 1883 AD was one of the most catastrophic ever witnessed in recorded history causing a dimming of the sun's rays, tsunamis reaching a height of 120 feet, and drifting pumice dust observed

around the world. A larger eruption, termed Proto-Krakatau, is speculated to have occurred around 535 AD. Evidence supporting this includes tree ring data indicating climate perturbations of up to 15 years, and ice cores from Greenland and Antarctica which show sulfuric acid spikes, the Byrd core spike from Antarctica being the largest in the past 2000 years. The sun was dimmed for over a year resulting in crop failures, famine, plague, and destruction of a large part of the human population.

Many individuals in today's scientific community believe that a major earthquake, volcanic eruption and even the next ice age is overdue.

e) Formation of Mountains

According to the translations of Indian documents by Colonel Churchward, "Mountains were relatively unknown before 20,000 years ago. Most of our mountains were not raised until about 10000-11000 BC." Many of the central Asiatic tribes date their time from the raising of the Himalayas and mountains of Central Asia. The Zulus claim that they came to South Africa from the north, as their country in the north was ruined by the raising of the mountains. It is believed that gas belts could not form until the rock above the pockets was so thick that it could not be raised or punctured. This buildup of gasses is believed to have occurred about 12,000 to 13,000 years ago supporting the premise that mountains are of recent origin.

As mentioned earlier, the Lake Titicaca region of Peru is suspected to have been formed as the result of a giant uplift of the Andes Mountains as evidenced by the presence of sea fossils and marine life found in and around the lake today. The presence of oceanic species of sea life points to a rapid rather than gradual uplift of the region.

ASTEROIDS, COMETS, AND METEORS EVIDENCE

Professor Mike Baillie a dendrochronologist of Queens University, Belfast has identified several periods in which global climate crises could have occurred. Most of these dates, derived by observations of tree rings, are supported by findings of large concentrations of micro-meteorites located in peat bogs as reported by Lars Franzen at the Earth Sciences Center, Gotenberg, Sweden. Table 8-2 shows the dates of increased cosmic influx and possible consequences to mankind.

TABLE 8-2 COSMIC INFLUX

<u>COSMIC INFLUX DATES</u>	<u>TREE RING PERIODS</u>	<u>COMMENT</u>
7000 BC 3000 BC		Second destruction -Akakor myth
2300 BC 1700 BC	2354-2345 BC 1628-1623 BC	IRAQ Asteroid crater Typhon comet, Possible destruction of Minoan civilization, Thera/Santorini erupts
1000 BC	1159-1141 BC	Possible destruction of Mycenaean civilization, large southward movement of people.
500 BC	208-204 BC	Last time the Taurid stream was closest to Earth
550 AD	536-545 AD	Super-volcano erupts in southeast Asia
850 AD		Possible destruction of Maya civilization
1300 AD		Possible destruction of Anasazi & Toltecs

There is increasing evidence that the Earth has been bombarded over its' recent history by asteroids, mountain size boulders, and dust particles. More than 100 craters have been located on earth with diameters greater than 50 miles. One source of this celestial debris is termed the Taurid stream and includes the remains of the Encke Comet. This stream orbits around the sun and continues outward towards Jupiter with an orbital period of approximately 3.35 years, the shortest known. This stream has a biannual crossing of the Earth's orbit during the months of June and November. It takes the Earth from mid-September to mid-December to traverse this band of debris. The last close Encke comet encounter with Earth occurred between 500 BC and 0 AD. It is predicted that the Encke comet debris will be at a peak between 2000 and 2400 AD. During September 2004 AD two asteroids passed in close proximity to the earth. A mountain sized asteroid passed

within 960,000 miles and a smaller asteroid was tracked at White Sands Missile Range within 4,000 miles of the earth.

I believe that references to the Taurids have been recorded in the myths of civilizations for over 5000 years. From Earth the Taurid stream appears to radiate from two areas in the night sky; one appears to radiate near the Pleiades star cluster and the other from close to the Hyades star cluster. Both the Pleiades and the Hyades star clusters are in the constellation of Taurus which lies near but above the constellation of Orion.

An interesting observation can be made from the mythologies of the Maya and the Aztec. These two civilizations were especially interested in the movement of the Pleiades star-cluster. The Maya performed what has been termed the 'New Fire Ceremony' on a yearly basis while 300-400 years later the Aztec performed the same ceremony every 52 years. It was believed that if the Pleiades passed the zenith at midnight then the movement of the heavens was not to cease and the world would last another 52 years. The Pleiades cross the meridian every day; however, there is only one day in the year when they do so precisely at midnight. Since this crossing occurs during mid-November, is it possible the New Fire Ceremony also involved observing large meteorite showers from the Taurid stream coming from the direction of the Pleiades? The absence of a massive shower might have implied the world was saved from another catastrophe.

The newly recognized population of near-Earth-objects provides sound astronomically based argument for a much higher frequency of impact events than was estimated two decades ago. It is believed that the Taurid debris stream contains some 300,000 'planet killer' sized objects. Some of these large objects have struck the Earth in the past releasing energy equivalent to 20-5000 megatons. Three of these impacts which occurred in the recent past are the Winslow, AZ impact crater (50,000 years ago), an impact in southern Iraq (4,300 years ago), and an air burst explosion which occurred over the Tunguska River in Siberia (1908 AD). This air burst type of impact is believed to occur on the average of every 1,500 years. Two sources of comets are postulated. The Kuiper Belt is thought to be located beyond the orbit of Neptune and is the source of comets with short orbital periods of less than 200 years. Beyond the Kuiper Belt is the Oort Cloud which is postulated to surround the solar system and is thought to be the source of long period comets.

Asteroids can vary in size up to several miles across. The Geographos asteroid which is 3.2 miles by 1.2 miles has had close encounters with the earth in 1969 and 1994. It is believed that a possible impact could occur with the Earth or the

moon within the next few hundred years. This would certainly bring on an ice age. It has been estimated that several thousand large earth crossing asteroids exist which are greater than 1 km in size. Smaller earth crossing asteroids in the order of 30-60 meters across are believed to exceed 100,000 in number. The asteroid which impacted near Winslow, AZ is estimated at 30 meters and the asteroid which exploded over the Tunguska River is estimated at 30-60 meters across. It has been estimated that an asteroid 200 meters across impacting an ocean would cause a tsunami which would destroy all coastal cities. Asteroid induced tsunamis which exceed 100 meters in height are believed to occur every few thousand years. If a 1 km asteroid were to impact the earth it is predicted that it would create a dust cloud which would block the sun for more than a year causing a worldwide winter. This is the size asteroid that is believed to have annihilated the dinosaurs.

FOSSIL EVIDENCE

Paleontologists have discovered fossilized geological evidence which shows the presence of pre-humans and early hominids presence in Africa 2-4 million years ago. The evolution of modern man is believed to have progressed from Homo erectus and Homo habilis culminating with Homo sapiens 130,000-180,000 years ago. DNA evidence of the Neanderthal species, which is now believed to be a separate species from what developed into modern man, has been analyzed in terms of its mtDNA sequences and is believed to date back to approximately 300,000 years ago. The Neanderthal species is believed to have diverged from the human species some 500,000 to 800,000 years ago. The Neanderthal disappeared around 30,000 years ago.

Skulls of humans living in China and Indonesia hundreds of thousands of years ago are considered by some physical anthropologists to exhibit features still found in modern Chinese and in Aboriginal Australians. If true, that finding would suggest parallel evolution and multi-regional origins of modern humans, rather than origins in a single region. Radiocarbon dated sites in Australia and New Guinea place human presence around 30,000-40,000 years ago.

While this is interesting data to the Paleontologist, the species of importance to the development of modern man is Homo Sapiens-sapiens. This species is thought to have emerged approximately 120,000 years ago. It is this species to which the mythology of the ancients is addressed. There is evidence from studies of mitochondrial DNA that all human beings have descended from one common female genotype who lived in Africa between 200,000 and 100,000 years ago.

The implications of DNA on the creation of Man were discussed in detail in Chapter 3.

SOLAR EVIDENCE

The Sun is certainly the closest-largest body which can influence the Earth, being 109 times larger. The Sun introduces effects on the Earth as a result of the following variables:

- Sunspot activity
- Sun's intensity (brightness)
- Solar winds between the sun and the earth
- Interaction of the sun's and earth's Magnetic fields
- Precession of the earth's axis
- Position of the sun/solar system within the galaxy
- Distance between the Sun and the Earth (eccentricity of the Earth's orbit)
- Earth's axis Obliquity / Tilt (varies 21.1 to 24.5 degrees; current 23.5 degrees; period= approximately 41,000 years)

a.) Sunspot cycle (approximately 11 years)

Unlike the Earth, the Sun does not rotate as a solid object. The sunspots reveal that there is differential rotation, the rotation rate at the equator being about 27 days, and about 34 days close to the poles. The Earth's orbital motion adds about 2 degrees per day to the solar rotation rate, as measured from the moving Earth. The true rotation rate at the solar equator is about 25 days. The Sun's polar and equatorial fields complete a mutual cycle every 87.4545 days. Galileo was aware that sunspots were carried across the sun's disk by its 27-day rotation. He first observed sunspots with his telescope in 1611 AD.

For approximately 100 years between 1630-1720 AD sunspots became nearly absent on the sun's surface when only about 50 spots appeared as opposed to the typical 40 – 50,000 spots. This period is known as the Maunder Minimum⁵⁴. During this period Europe experienced the so-called Little Ice Age. There were at least two more periods of minimum sunspot activity. One was the Sporer Minimum (1460 – 1550 AD) and the other was the Medieval Minimum (1280 -1350 AD).

The ancients were aware of the presence of sunspots at least as early as 370-290 BC. This written evidence was provided by Theophrastus of Athens who was a pupil of Aristotle. Chinese records from 28 BC describe sunspot observations by the naked-eye. Naked-eye sunspots were abundant from 300-400 AD and from 500-579 AD. The greatest outburst occurred between 1100 and 1387 AD, with a peak around 1200 AD. This is known as the Medieval Maximum.

More than two hundred years after the first telescopic observations of sunspots, their 11 year periodicity was discovered by Heinrich Schwabe. It has been shown in recent years that the sun's temperature varies with the 11 year sunspot cycle. When there are many sunspots the temperature is warmer and when there are few sunspots the temperature is cooler. At the peak of the 11 -year sunspot cycle the sun's surface is covered with hundreds of sunspots which trigger solar flares or huge magnetic clouds several times per day. The sun's magnetic field rapidly undergoes complex changes and can become twice as strong as normal. When magnetic field lines erupt as solar flares they can give off as much energy as a million atomic bombs. These solar flares contain radiation and charged particles traveling near the speed of light. The X-ray brightness, at maximum, increases by 100 times that at minimum. These fields interact with the Earth's magnetic fields. Whether or not this phenomenon by itself can cause catastrophic occurrences on the Earth is not fully understood. This anomaly in conjunction with other phenomena such as cosmic expulsions from the center of the galaxy interacting with high solar wind activity may be a different story. It is interesting to note that a 15,850 year old ice core from Antarctica exhibits acid layers which have been attributed to solar wind mass outflow.

Data from the Sunspot observatory in Sunspot, New Mexico show the occurrence of maximum activity to have occurred around December 2000 AD. Using this date as a basis and 11.1 years for the average sunspot cycle, I calculated maximum and minimum sunspot activity corresponding to historical dates of various cataclysmic events. This provided mixed results. Some cataclysms occurred during maximum sunspot activity and some occurred during minimum sunspot activity. This should not be surprising as the sunspot activity varies from 9 to 12.5 years. Therefore it is clear that the sunspot cycle does not make a very good clock. It should be noted that the next date for which the sunspot maximum is expected to occur is December 2011.

b.) Solar winds between the Sun and the Earth

The sun continuously gives off charged particles called the solar wind which carries the Sun's magnetic field into space filling the interstellar medium between

the Sun and its planets. These solar winds can be extremely variable in intensity. Co-rotating shocks are formed in interplanetary space by the interaction of long-lived fast and slow solar wind streams. Maximum shocks occur in synchronization with the rotational rate of the Sun. During a solar maximum, transient events such as solar flares and coronal mass ejections will greatly disturb the solar wind affecting the levels of cosmic rays and solar particles reaching the Earth. Cosmic rays are deflected by the outermost magnetic field of the sun in accordance with the 11 year cycle of solar activity. When sunspots are numerous, the sun's magnetic field penetrates strongly into space and thereby shields the earth from cosmic rays. It has been shown that the impact of high energy cosmic rays in the earth's upper atmosphere produces carbon-14. When sunspot activity is numerous, carbon-14 is diminished in the earth's atmosphere.

c.) Interaction of the Sun's and Earth's magnetic fields

The Earth's magnetic field acts as a protective shield against the effects of the solar flares. When the solar flares encounter the Earth's magnetic field, they effect changes in the Earth's magnetic field which have affected electrical power distribution and have caused power outages. The strength of the magnetic field varies, sometimes dropping to zero. Mass extinctions are believed to have occurred in the past in correlation to magnetic field reversals.

During each 11-year sunspot cycle the Sun's north and south magnetic poles flip direction. While the Sun's magnetic field undergoes dramatic changes it always returns to its original shape and longitudinal position. The flip of the Sun's magnetic field every 11 years appears to have little or no effect in terms of triggering catastrophic events on the Earth. It may or may not affect weather patterns on a short term basis.

Rocks containing grains of magnetite are used to indicate the direction of the Earth's magnetic field. There is evidence from these rocks that the Earth's magnetic field has changed polarity about a dozen times since humanoids dwelled on the Earth (3 million years) and about 170 times since the earth was formed. It is believed that the last major reversal occurred about 780,000 years ago. The reversals appear to occur at random from a few tens of thousands of years to more than a million years. On the average a reversal takes about 5,000 years to complete and there does not seem to be any periodicity in their mean frequency of occurrence. Magnetic alterations were of regular occurrence during the formative years of earth history as shown by various rock formations. They continued down to the end of the Tertiary Era, approximately 1.8 million years ago when the earth's crust had been so thickened and compacted that the earth went into the

final magnetic balance. During normal times the Earth's magnetic field varies by as much as 50% over a few thousand years which is the case that has been observed over the last 2,500 years. Cases have been identified of irregular movements of the poles with short durations and sometimes not achieving opposite polarity. Today, the Earth's geomagnetic axis is inclined by approximately 11 degrees to the Earth's geographical axis (79° N, 70° W, Vs 79° S, 110° E). From the rock evidence it is postulated that the Earth's crust and mantle rotated 90 degrees over the core approximately half a billion years ago. Continents at the poles were to have shifted to the equator and those at the equator shifted pole-ward over a period of 15 million years. The planet continued to spin on the same axis as before. There is no evidence that periods of either polarity are systematically of longer or shorter duration. According to electromagnetic and hydrodynamic theory there is no reason why the Earth's magnetic field should have a particular polarity and no fundamental reason why its polarity should or should not change. As a point of reference, the planet Mars has no magnetic field, however, there is volcanic evidence that a magnetic field existed in its distant past. There is some speculation that if the Earth's magnetic field ceased to exist, the Earth would become a dead planet like Mars.

d.) Precession of the Earth's axis.

A review of the mythology of the ancients leads one to speculate that they appeared to have had precise scientific knowledge regarding the precession of the earth's axis before the supposed dawn of scientific thought. Evidence of the Sumerian civilizations' awareness and use of precession information was presented in Chapter 6.

The plane of the earth's orbit is known as the ecliptic and is at an angle with the equator of approximately 23.5 degrees due to the tilt of the earth's axis. During the nighttime sky one can observe a ring of stars in the form of constellations that extend approximately 7 degrees north and south of the ecliptic. These are the twelve constellations of the zodiac named by the ancients: Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius, and Pices.

On any particular day of the year at sunrise the sun will be seen to rise in the east portion of the sky occupied by one of the zodiacal constellations. Of most significance to the ancients was the constellation in which the sun was observed to rise on the morning of the spring/vernal equinox. This point in time was the reference point which indicated the position of the earth within the precession cycle of almost 26,000 years duration. It takes roughly 72 years for the sun to migrate one degree along the ecliptic.

Because of the tilt of the earth's axis there are four astronomical moments in the year as the earth orbits the sun. These moments were of immense importance to the ancients as they marked the beginning of the four seasons. In the northern hemisphere these moments are known as the winter solstice (December 21), summer solstice (June 21), spring equinox (March 20), and autumn equinox (September 22). In the southern hemisphere the dates are the same but winter and summer as well as spring and autumn are reversed.

The northern hemisphere's summer solstice falls at the point in the orbit when the North Pole is pointed in the direction of the sun; six months later the winter solstice marks the point when the North Pole is pointed away from the sun. During the equinoxes the earth's axis of rotation lies broadside to the sun.

e.) Position of the Sun/Solar System within the Galaxy.

Physical evidence of man's past is generally sought in the areas that can readily be observed either on the Earth or in relatively close proximity to the Earth (i.e., solar system). The vastness which exists beyond the solar system is virtually incomprehensible to most human beings and the distances to other systems so great that it is easy to accept the premise that any impact from this great distance to life on the Earth would be inconsequential.

Today, this pattern of thinking is changing. Advances in science, both in theory and hardware, have caused us to begin to re-think what we thought we knew about the universe and particularly our galaxy, the Milky Way. Observations of extragalactic events such as impacted Earth during 1983, 1997, and 1998 have led astronomers to believe that the cores of galaxies undergo major explosions releasing high energy cosmic ray particles on a periodic basis every 10,000-26,000 years lasting between 100-1,000 years. In some galaxies these emissions have been observed to equal the energy from billions of supernova explosions and in our galaxy it has been determined the energy levels have reached hundreds of thousands of supernova explosions. These rays are believed to propagate radially outward from the galactic center at near light speed.

Evidence of Galactic core explosions impacting the Earth have been observed from polar ice core samples which show records of these cosmic ray events having occurred as recently as 10,000-15,000 years ago^{57,58}. A large acidity spike was observed in the Antarctic ice core record which is believed to have been produced by a major solar wind mass outflow that began c. 13880 BC and ended c. 13785 BC. Further evidence of interstellar dust has been found which includes

high levels of iridium and nickel as well as the isotope beryllium-10. It is believed that low-intensity outbursts occur approximately every 500 years.

Astronomical observations indicate that during the past 6,000 years, the galactic center has expelled 14 clouds of ionized gas⁵⁹. These cosmic expulsions bombard the Earth and could be entrapped by the Earth's magnetic field to form radiation belts in the upper atmosphere. In addition to forming radiation belts, these bombardments could transport cosmic dust from the Kuiper belt, Oort cloud, or from outside the solar system into the solar system seriously affecting the Earth's climate and possibly triggering a new ice age. It has been hypothesized^{60, 61} that such a bombardment may have been responsible for the termination of the last ice age and the mass extinctions of the mega-fauna c. 11000 BC.

It is believed that an influx of debris may have caused an increase in the intensity of the Sun's solar flare activity causing an increased global warming period lasting 2,000 years. There is evidence of a large solar flare event occurring c. 10750 BC. This could have been responsible for the rapid melting of the ice caps resulting in increased ocean levels and serious flooding.

The IRAS satellite team has reported observations of a zodiacal dust cloud tilted 3 degrees to the ecliptic and aligned with the Galactic center, implying the dust entered the solar system from the direction of the Galactic center. Mayan mythologies refer to the Road of Xibalba (i.e., Milky Way). Were they referring to the ecliptic-Galactic plane intersection? From our position in space, the center of the galaxy lies in the direction of the zodiacal sign Sagittarius. This unmoving axis locates us in space in relation to the center of the galaxy. The plane of our solar system is tilted 60 degrees from the galactic plane. The sun's orbit around a center point in the Pleiades and the earth's axis around the sun create another moving axis marked by the zodiacal sign of the spring and autumn equinoxes. As we approach a spring equinox that falls at the beginning of the sign of Aquarius, our two axes, the galactic and local, approach a 90 degree angle. The date the Earth's axis will be maximally tipped in the direction of the Galactic plane intersection point is 2012 AD. Table 8-4 shows the date relationships between this galactic alignment, the precession of the Earth's axis, the zodiac ages, and a cycle of some uncertain event of 3600 years. The precession cycle of 2160 years and the 3600 year cycle are in synchronization every 10,800 years.

f) Climate

Climate is the result of the exchange of heat and mass between the land, ocean, atmosphere, ice sheets, and space. Large climate variations seem to be the cause

of many major changes in Man's living style. The study of ice cores is perhaps the best source of climatic data for periods greater than 5,000 years before the present time. For the period from 5,000 years ago to the recent past the study of the growth rings of trees, such as found with the Bristlecone Pine and the Giant Sequoias as well as ice cores, have been used. Table 8-3 provides a summary of the major climate changes over the past 1,700,000 years.

There have been several factors which have been considered which account for global climate change including long-term variation of the Earth's orbit and the Earth's rotation and position of its tilt axis. The Earth's orbit becomes more circular every 400,000 years. It has been theorized that this change in orbit pushes the earth into and out of ice ages. Cores taken from the seabed in Antarctica indicate that major glacial advances are followed by ice sheet retreat in a rhythmic way. Over a period of 400,000 years, cycles of 40,000 and 100,000 years were observed. It is speculated that these cycles are tied to 1) variations of the eccentricity of the Earth's orbit around the sun, 2) the tilt of the Earth's axis, and 3) the direction the Earth's axis is pointing (Milankovitch cycles). The 100,000 year eccentricity parameter is believed to be the predominant cycle.

Other factors which have been considered to account for global climate change include 1) the impact on the Earth by space debris such as comets, asteroids or meteors; 2) a change in the Sun's output as a result of solar flare or solar wind activity; 3) volcanic activity; and 4) ocean current activity such as seen with El Nino or the flow of the Gulf Stream. The theory which is receiving the greatest attention involves the changing circulation pattern in the North Atlantic Ocean. As discussed in Chapter 6, the world's climate is affected by the flow of the Gulf Stream water moving around the globe. As long as this flow remains stable the climate we experience will also remain stable. Today, the time to complete this flow cycle is approximately 1,000 years. It is theorized that a change in this flow pattern would likely plunge the world into the next ice age. It is suspected that the large oscillations in climate observed in the ice cores were caused by different patterns of ocean circulation. What triggered these different patterns is uncertain.

As mentioned earlier, a series of eight global glaciations followed by eight periods of warming have been observed in ice cores from Antarctica. These glaciations cover a period beginning approximately 1,700,000 years ago and ending approximately 12,000 years ago. It has been concluded from the Greenland and Antarctic ice core analysis that over the last 800,000 years the advancing and retreating of glaciers occurred about every 100,000 years with approximately 10,000 years of interglacial periods. Cores from both Greenland and Antarctica show similar trends in magnitude and timing. Whatever the cause of an 'Ice Age'

it appears to occur globally at the same time in both hemispheres. While this statement can be generally accepted, there are always exceptions to the rules.

Antarctic ice cores indicate air temperatures 19,000 years ago exhibited the largest and most abrupt warming spike ever recorded in the Southern Hemisphere. Evidence from the Byrd and Vostok ice cores support this warming trend as to the time of occurrence but with a less dramatic warming increase. This occurred prior to a warming period during the Late Wisconsin Glaciation in the Northern Hemisphere. A second warming event nearly as strong and swift as the first occurred about 15,000 years ago as observed in the Antarctic Siple Dome ice cores. This is more in line with the timing of increased temperatures observed in Northern Hemisphere ice cores. This rapid global warming exceeded anything experienced in our own time.

Following a number of short-term oscillations beginning about 12000 BC, a rise in temperature that set in about 8300 BC led to sustained warm climates in northern Europe. This temperature rise was not experienced in North America for another 2,000 years.

Ice cores taken on Tanzania's Mt. Kilimanjaro show that these glaciers began to form about 11,700 years ago. This is consistent with the cold sub-arctic temperatures of the Older Dryas period observed in the Northern Hemisphere. These same cores show evidence of three catastrophic droughts in the tropics 8,300, 5,200, and 4,000 years ago. The first drought occurred at the time of the second mini ice age c. 6200 BC. Maximum summer temperatures occurred in Europe about 6000 BC. In North America the maximum summer temperature was reached about 4000 BC or shortly before the second drought which occurred at a time many of the ancient civilizations referenced the beginning of their calendars. The third drought occurred at the time of a severe drought in Egypt c. 2180 when the Old Kingdom fell.

Ice cores from the Peruvian Andes Nevado Coropuna volcano yielded a wetland plant which through DNA testing dated back 5,200 years ago. Since this plant was well preserved it is assumed that it was caught in an abrupt climate change. In the European Alps a well preserved Neolithic hunter was discovered in the ice. It has been estimated that this occurred around 5,200 years ago at a time approximately 200 years after the sea levels reached their current levels, c.3500 BC.

There were periods of warming accompanied by periods of severe drought between 700 and 850 AD and between 1000 and 1200 AD. It is not known for

certain what caused the downfall of the Mayan civilization c. 900 AD, however, it is speculated by some that their demise was hastened by periods of severe drought and over population and the failure of their leaders to find solutions to the changes they were experiencing. It is also believed the Moche civilization, located on the Peruvian coast, collapsed c. 800 AD as a result of a long drought followed by devastating earthquakes and catastrophic floods. A warming period, which ended as early as 1100 AD in North America and later in Europe, was followed by approximately 500-600 years of severe cooling known as the Little Ice Age ending between 1550 and 1750 AD. The region which today is known as the Southwestern United States experienced severe drought conditions during this period. Pollen analysis and tree ring studies in the Four Corners Region of the US southwest indicate that the region was hit by a devastating combination of drought and cold beginning 1200 AD and lasting for 600 years. Around 1150 AD, the Hohokam, Anasazi, and Mogollon systems began to collapse due to the severe drought. At this same time they also experienced growing populations. This added pressure depleted their resources, resulting in the population drifting away. Civilizations in Central and South America would have experienced severe hardships which likely contributed to their downfall. The disappearance of the Toltecs c. 1200 BC was also likely do to overpopulation and severe drought conditions while the disappearance of the Aztecs occurred at the hand of the Spanish invader Cortez who in a little more than two years completely destroyed the Aztec empire (c. 1521 AD), while the Inca disappeared at the hands of the Spaniard Francisco Pizarro (c. 1534 AD).

It is likely that these periods of severe drought were triggered by the large outburst of sun spot activity known as the Medieval Maximum between 1000-1387 AD peaking c. 1200 AD. Tree ring evidence in the Southwest US between 1276 and 1299 AD was unusually narrow, indicating a drought and cold spell occurred at this time. Cores of the sediments of Lake Chichancanab in the Yucatan peninsula indicate severe drought occurred between 800-1000 AD. These cores point to a 208 year cycle in which noticeable drying of the lake bed occurs. This drying is thought to be related to an increase in the output of energy from the Sun which occurs on a 206 year average cycle. An interesting observation can be made when considering the 206 year intensity cycle of the Sun and the period approximate 200 years after the oceans had more water than ever before. With all the water available from the oceans and a highly intense Sun, evaporation could have reached a maximum. Snowfall of intense magnitude would have resulted when this humid air reaching the high altitudes of the Alps and Andes mountains, thereby entrapping man and plants. The period between 3200 BC and 934 AD is 20 periods of 206 years.

TABLE 8-3 CLIMATE CHANGES

YEARS BP (approx)	PERIOD	CLIMATE	SOLAR EVENT	GALACTIC EVENT
1,700,000 – 700,000	Early Pleistocene	Cold		
750,000- 350,000	Middle Pleistocene	Warm		
350,000- 250,000	Middle Pleistocene	Cold		Cosmic dust influx
250,000- 200,000	Middle Pleistocene	Warm		
200,000- 130,000	Middle Pleistocene	Cold		
130,000-72,000	Late Pleistocene- Begin Early Wisconsin Glaciation	Warm		
72,000-25,000	Middle Wisconsin Glaciation	Cold		Cosmic dust influx - ice cores
25,000-15,000	Late Wisconsin Glaciation	Cold		
15,000-13,000	Late Wisconsin Glaciation	Warming	Radiation intensity increase 50 times present levels	Galactic core explosion
13,000-12,000	Bolling period	Dramatic Warming		
12,000-11,800	Older Dryas period	Cold, Sub- arctic	Large solar flare c. 10750 BC	3-7% increase in radiocarbon levels
11,800-11,000	Allerod period	Warmer		
11,000-10,000	Younger Dryas period	Sub-arctic, dry		
11,500-9,000	Holocene period	Warmer		
9,000-6,500	Holocene period	Warmer		
6,500-3,600	Holocene period	Climactic optimum		
3,600-2,800	Holocene period	Climatic cooling		

TABLE 8-3 CLIMATE CHANGES (Continued)

YEARS BP (approx)	PERIOD	CLIMATE	SOLAR EVENT	GALACTIC EVENT
2,800-1,600	Holocene period			
1,600-900	Holocene period	Warmer, dry		
900-400	Holocene period	Cooling, dry		
400-150	Holocene period	Cold, Little Ice Age		
150-Present	Holocene period	Warming		

WRITTEN EVIDENCE

A century ago, most people believed that the human race was no more than 5,000 to 10,000 years old. Archaeologists today have extended this time to a much earlier period. The presence of early hominids occurred some 2.5 million years ago and the presence of early Homo sapiens occupying Europe about 500,000 years ago. The beginning for modern man (Homo Sapiens-sapiens) is believed to have occurred some 100 to 120, 000 years ago in Africa.

It has been hypothesized, from various archaeological findings that mankind had rudimentary oral communication abilities beginning c. 100000 - 70000 BC; however, archaeologists and historians state that it took approximately 65,000 years for mankind to formulate a written language. Archaeologists have uncovered thousands of clay tablets describing Assyrian, Babylonian and even much older cities and events. Most of the ancient nations kept writings which were recorded on either stone or burnt clay tablets in their temples. An interesting circular clay tablet was unearthed at an ancient Minoan palace at Phaistos, on the island of Crete. The tablet contains 45 distinct signs and the writing is thought to be syllabary rather than an alphabet. As of today it has yet to be deciphered. What makes this tablet unique is rather than being etched by hand it was formed by using stamps to punch the signs into the soft clay. It is estimated that the date of this tablet is c. 1700 BC. This suggests this tablet may be the first example of the printing of a document. Printing, using blocks applied to paper, next occurred in China c. 800 AD and then in medieval Europe c. 1400 AD.

There are hundreds of records in India reportedly dating back 35,000 years with some suspected to be even older but without a date. It is said that some of the oldest writings are in the Himalayan monasteries of Tibet which are reported to date man back 200,000 to 270,000 years ago. The dates for these writings were to have been determined by the positions of stars which were recorded at the time of the writings.

Historically, the period between 3400 BC and 3100 BC has proven to be one of the most important periods regarding three of the world's most ancient civilizations: Sumer, Egypt and India. Historians acknowledge that writing began in these regions during this period.

While many writings came from a period 4,000-6,000 years ago the evidence presented throughout this book suggests that their origin may actually have come from a much earlier time. Writing likely began with numbers. In Sumer accounting records were determined using clay tokens c. 9000 BC. The Vedas from India are considered by many to be the oldest known written text on our planet today (c. 4000 BC). They are reported to date back to the beginning of the pre-Hindu civilization and, according to some accounts, are to have been passed through oral tradition for over 10,000 years. The writings of Herodotus, 485-424 BC, and Plato, 427-347 BC, provide additional information which support the claims to the very ancient dates suggested for the Egyptian civilization. Herodotus relates a story which reports the Egyptians recorded observations of the heavens as far back as 39000 BC while Plato reported that the Egyptians had observed the stars for 10 thousand years. The dates reported for the beginning of the Hindu civilization are far older than any dates mainline historians would admit to.

The presence of writing provides evidence of the advanced development of the people within a given region reflecting in what we term today as 'civilization'. Given the discovery of early settlements and the writings of their inhabitants, there is strong evidence for the development of civilization, as we understand it today, in Sumeria in the region between the Tigris-Euphrates Rivers. It is believed that the Ur culture of Sumeria developed between 10000 and 8000 BC however, their origins are disputed.

Accounts from the Mahabharata and Ramayana texts, which appeared in written form between 4000 and 2000 BC, support a migration out of India by a group called the Naga-Mayas into the regions surrounding the Black Sea c. 16000 BC, nearly 10,000 years before the collapse of the Bosphorus as surmised by Ryan and

Pitman ⁵¹. These authors suggest that the survivors of this deluge, described as the Ubaidians, migrated overland to central Europe and western Asia and southeast into the Levant, Mesopotamia and ultimately to Egypt. At present, archaeological evidence does not support settlements this ancient. Typologically, the language of Sumer resembles Chinese, which suggests an eastern origin. Further, the word 'Sumer' in the Naga-Maya language of India means 'flat lands or plains' and the word 'Akkad' means 'soft and marshy ground'; both terms which describe the two regions of Mesopotamia.

The archaeological evidence supports early settlements, such as Eridu, dating c. 5500 BC. It is believed that the oldest cities lay in the northern part of Sumer in what today is called Iraq and northeastern Syria. Cities eventually spread down the Euphrates River into the valley of the Tigris River reaching the lowlands at the head of the Persian Gulf before 4000 BC. At this time southern Mesopotamia became identified as Sumer and truly municipal cities flourished and were recognized as city-states which operated as individual kingdoms. The cultural expansion included a revolution in both technical and academic areas, a phenomenon which has baffled scholars and historians even today.

Numerous examples of writing have been recovered from archaeological sites throughout the world. Cuneiform writing from Mesopotamia predates the Hieroglyphic texts found in Egypt. What are believed to be the oldest Egyptian hieroglyphs have been uncovered at Abydos. These examples of hieroglyphic signs spell out the names of places from which commercial goods came from. Uncharacteristically, these are carved on ivory and bone. Hieroglyphics were usually written on wood and papyrus.

Some of the most famous writings come from thousands of tablets found in the library of the Assyrian King Ashurbanipal in the city of Nineveh in Mesopotamia and from 15,000 clay tablets uncovered in the royal library of the ancient city of Ebla in what is modern-day Syria. Many of the tablets and writings which have been found relate myths of -catastrophic destruction, -internal bickering among the gods, as well as lists of rulers. Some of the more notable tablets include: 1) the Erra Epos Text, and the Story of Atrahasis written by the Akkadians, c. 2500 BC; 2) the Kings List, c. 2125 BC, and 3) the Epic of Creation/Enuma Elish, written by the Babylonians, c. 2000 BC. It is believed that most of these stories originally came from the Sumerians, c. 3500 BC.

Over the past 30-50 years the discovery and the subsequent translation of the written evidence left by ancient civilizations has been a process of continuous astonishment and of incredible realization. We owe what little we know today

about these civilizations to the ancient scribes who used monuments, artifacts, foundation stones, bricks, utensils, and weapons of any conceivable material, as slates on which to write down names and record events. By some accounts modern man began to develop historical records in the form of inscriptions and symbols placed upon structures, pottery and tablets c. 9500 - 8000 BC.

As previously stated many myths address a destruction of the world as a result of a deluge. These deluge stories have held the attention of writers over the past several thousand years. A great deal has been written during recent times about the ancient kings who were to have ruled prior to the Deluge. The basis for the stories comes from four sources, namely:

1. Sumerian Kings List (c. 3500 BC) - WB 144
2. Akkadian Kings List (c. 2125 BC) - WB 62
3. Babylonian Kings List (c. 290 BC) - Berossus
4. Old Testament, Book of Genesis (c. 1500 BC) - generations of Adam

The Sumerian Kings List is believed to be a chronological record of rulers, cities, and events which divide prehistory and history into two parts: first the record of the rulers before the Deluge; the second the record of the rulers during and after the Deluge. A comparison of the first three sources is provided in Table 8-5. As can be seen, the durations for the periods for which the kings were to have ruled are unreasonably large.

The designation of the first two lists, WB144 and WB 62 refer to catalog numbers of the Weld-Blundell collection in the Ashmolean Museum of Oxford University. I have assumed the date of the WB 144 Sumerian Kings List to be earlier than that for the WB 62 Akkadian Kings List. Why are there differences in the two 'WB' lists? One answer is they were prepared at different times and were both correct at the times of their preparation. This would hold true for the names but not for the numbers. Because WB 144 is a shorter list, I propose that it must have been the first list to have been prepared. Since Ziusudra/Xisuthros is not included in WB 144 I suggest this list may have been prepared prior to the flood at a time there had only been eight kings. WB 62 contains a list of 10 kings including Ziusudra, the king at the time of the flood. I therefore suggest this was prepared after the flood had occurred. The differences in some names and their sequence could possibly be explained if sufficient time had elapsed between the preparations of the two lists. The names could have changed through a normal course of events such as the death and replacement of one or more kings. The third account, which is similar to the Sumerian and Akkadian accounts, was

prepared in the Greek language c. 290 BC by Berossus and was likely copied from the Sumerian lists.

The start of the three lists places Alulim/Aloros as the ruler who ruled in the city of Eridu. Nine other antediluvian rulers and the cities of Badtibira, Larak, Sippur and Shuruppak are listed for the period between the rule of Alulim and the Deluge. It should be noted that I have taken the liberty to adjust the order of the king's names in WB 62 to be consistent with those in WB 144. The important facts in these lists are the number of kings and their cities of kingship and not durations.

Some scholars have assumed that the large numbers assigned to each king represents the duration of their reign although they have yet been unable to explain the differences in the durations among the three lists. I propose that these so called durations were not intended to represent the length of a king's rule at all.

How did the scholars arrive at the conclusion that the numbers on the Kings Lists represent the duration of the kings reigns? This has to be laid at the feet of the Chaldean Berossus. Berossus, like the Hebrews, may have been trying to establish a history for his Babylonian heritage. He was undoubtedly aware of the Babylonian mythologies which contain a story of the coming of the Anunnaki some 120 sars (432,000 years) before the Deluge. He may have also had access to what we now refer to as Kings Lists WB 144 & WB 62. The sum of the durations of the ten kingships in the Berossus list is the 'Special Number' 432,000. Is this coincidental or was Berossus trying to fit durations to the earlier mythologies? There is some evidence that this is the case. Nine of the durations are prime numbers whereas the duration of kingship for Amelon, the fourth king, is not. This may indicate that the fourth kingship may have been inserted in order to obtain the desired total of 432,000. Many scholars seem to have accepted the Berossus interpretation over the other two lists even though they could never make sense of it.

A possibility that the list created by Berossus is a compilation of durations and names from sources other than the Sumerian King Lists has not been considered before. The movement of Sumerian kingships from Eridu to Bad-tibira to Larak to Sippur and finally to Shuruppak explains the settlement of Sumer and ties kingships to the various cities. I suggest that the durations assigned to the kingships were coupled to previous events as shown in Table 8-4. If so, Berossus had to have access to some other source of information not known to us today.

If it is assumed that the durations reported by Berossus are actual time spans an interesting scenario can be developed as shown in Table 8-4. The date 440788

BC from this table is seen as a date in which the Milky Way/Sun alignment occurred and is a multiple of the Earth's precession cycle and a multiple of the 3,600 year cycle working back from the year 2012 AD when the galactic alignment is to again occur. Using 440788 BC as the date for the start of the Aloros kingship it can be seen from Table 8-4 that the end of the first nine kingships occurs at the time Homo sapiens sapiens were to have appeared on Earth. Further, comparing the kingship durations of these rulers with the findings of the Vostok ice core data as shown in Figure 8-10 it can be seen that the kingships of Alaparos, Amelon, Daonos and Euedorachos, and Xisuthros correspond to the ends of the Nebraskan, Kansan, Illinoisan, and Wisconsin ice ages. The durations of Ammenon, Megalaros, Amempsinos and Opartes occur at the times of extreme minimum temperature during each ice age. It can also be seen that the kingships alternate between dates of peak temperatures and minimum temperatures with one exception that being a minimum temperature date c. 140000 BC for which there is no corresponding kingship.

The end of the Xisuthros kingship is coincident with the end of the Mayan Age 3 and the beginning of the Mayan Age 4 which is also coincident with the synchronization of the 3,600 year and 2,160 year cycles. It is also interesting to note that the Mayan Age 3 ended on the day 4 Rain which indicated that that age was destroyed by water just as was the Xisuthros kingship destroyed by a deluge.

As discussed in Chapter 3, the thought process during the period c. 3500 - 1500 BC was unlike that at the time of Berossus c. 290 BC. By the time Berossus prepared his Sumerian Kings List the populace had shifted to a left hemisphere thinking process such that the concept of time would not have been a problem for them to comprehend. The population of the earlier period did not think in terms of sequential dates or large periods of time. The writings of the period attest to this. When referring to a time before their present they indicated the years by important events relating to religious, civil or military life of the state (e.g., 'year of the campaign against city state X'; 'year in which King Y died'). They did not refer to durations such as 36,000 years. However, the ancients did use large numbers when referring to populations of their cities. This has been shown by the tablets found at Ebla describing the administration of the city. Ebla was a Canaanite city discovered in northwestern Syria whose culture is thought to have extended throughout the area of the Fertile Crescent.

An interesting fact pertaining to the kings of Ebla was their fixed length of rule (usually for 7 years), and their system of governors who served under the king (usually 14, who could serve under different kings and served for life). Under the 14 governors there were a total of 7000 functionaries who were responsible for 20

individuals each. The clay tablets found at Ebla provide a breakdown of the population of each city/village for each administrator as well as the total population under the King. Since Ebla was contemporary with the Sumerian cities of Uruk and Kish, c. 2600-2500 BC, why would the Sumerians/Akkadians not use a similar system?

A key to solving the riddle of the Kings Lists may lay in the fact that there were a total of five cities in which the ten kings were to have reigned. As an alternative to the ice age scenario I propose that WB 144 gives the populations of the five cities prior to the deluge and WB 62 gives the population of the five cities just after the deluge. While the seat of kingship moved through the five cities as described, the cities themselves did not disappear but continued to grow or decline in population. The second list reflects this growth or decline from the time the first list was prepared. Table 8-6 provides a different view of the Kings Lists using the figures to describe the size of the cities from the time the first list was prepared to the time after the deluge when the cities were destroyed. The Sumerian Kings List reports that at the end of the second kings' reign in the city of Eridu ended and kingship moved to Bad-tibira. The populations of Bad-tibira diminished after arriving from Eridu and then rose to 72,000 at which time war occurred forcing the next move of kingship to Larak. During the reign of the sixth king war again occurred forcing the move of kingship to Sippar where the population flourished again reaching what would appear to be a maximum number. The number 72,000 may have been an administrative limit or the maximum population a region could support. After Sippar the kingship moved to Shuruppak in southern Mesopotamia where, during the reign of the tenth king, the Deluge occurred. Depending on the list being reviewed this king was named Xisuthros, Ziusudra, Utnapishtim, and later Noah.

Some interesting observations can be made by analyzing the numbers provided by these three lists;

- All numbers are both evenly divisible and even multiples of 60, 600, 1200, and 3600.
- All numbers are harmonics and can be represented as musical tones.
- All numbers are prime numbers with the exception of King Amelon (46,800), Alulim (67,200), Enmendur-anna (21,000) and Ubartutu (18,600). That is, they are multiples of $2^p 3^q 5^r$ where p, q, r are integers including zero.
- The total (432,000) is divisible by $3600 = 120$ sars; and by 2160 ($1/12$ the Earth's precession cycle) = 200 zodiac houses.

Another interesting observation can be made by taking the numbers supplied by Berossus in Table 8-5 and converting the cuneiform equivalents to alternate decimal numbers as suggested in Table 7-9. This is shown below.

ALTERNATIVES TO BEROSSUS' DURATIONS

BEROSSUS- KING LIST	BEROSSUS- DURATIONS (YRS)	BEROSSUS- OPTIONAL DURATIONS
Alorus	36,000	600
Alaparos	10,800	180
Amelon	46,800	780
Ammenon	43,200	720
Megalaros	64,800	1080
Daonos	36,000	600
Euedorachos	64,800	1080
Amempsinos	36,000	600
Opertes	28,800	480
Xisuthrus	64,800	1080
TOTAL YEARS UNTIL DELUGE	432,000	7200

The sum of the optional numbers is 7200 which is a number used by the Mayans with their sacred Tzolkin Calendar to arrive at the Long Count Number 1,872,000 (i.e., $7200 \times 260 \text{ days/year} = 1,872,000 \text{ days}$). Is it possible that Berossus was describing a period ending in a deluge much like the Mayans were describing an Age/Sun?

Since actual lifetime durations in real life do not follow any particular pattern, I conclude that the numbers presented in the various kings lists were never meant to represent the actual duration for the reign of the rulers.

Akkadian and Babylonian cuneiform tablets list the rulers of the city states of Kish, Erech, Ur, Lagash, and Umma from the time following the Deluge through 2095 BC as shown in Appendix B, Table B-2. Since dates cannot be established for all of the rulers listed in the table, the date that the Deluge was to have taken

place cannot definitively be determined. In Chapter 4 I have attempted to establish dates for a deluge based upon the recollections of the Hebrew historian Josephus as well as make a comparison with the post flood kings list. After the Deluge, kingship was to have moved from Shuruppak to Kish approximately 100 miles upriver from Eridu. The Kish dynasty was the beginning of kingship of men and lasted through 23 man-kings ending c. 2750 BC when the Erech dynasty was founded by Meskiaggasher and moved the kingship from Kish to Uruk/Erech. The fifth ruler of the Erech dynasty was Gilgamesh, c. 2600 BC who was a contemporary of the last two kings of the Kish Dynasty (Enmebaragese and Aggal). He became involved in a power struggle with King Mesanepadda of the Ur dynasty who eventually became victorious. The dynasties of Kish, Erech, and Ur eventually weakened and could no longer control all of Sumeria. Around 2540 BC the rulers of Lagash declared themselves kings of Kish and were ultimately disposed by Lugalzagese, King of Uruk, around 2370 BC.

Sargon I defeated Lugalzagese and became the king and founder of the kingdom of Akkad c. 2350 BC. Sargon was credited with uniting both Sumer and Akkad and established his reign in the city of Agade which he founded. This period ended when Naram-Sin, the grandson of Sargon, was defeated by the Gutti from the area of the Zargos Mountains. After a few decades of Gutti rule the Sumerians of Uruk ousted them and Ur-Nammu established the third Ur dynasty, c.2112 BC. After a short rule this dynasty fell to the invading Amorites, c. 2000 BC.

The dates that the historians have assigned to rulers such as Gilgamesh, Etana, and Sargon are interesting in that they provide a reference point that when coupled with assumptions of the durations of previous rulers can be used to calculate the time frame that kingship began following the deluge. This gives a time period between 4800 and 3000 BC which when considering the error in dating techniques, described earlier, is close to the dates derived from Josephus or from Ryan and Pitman as discussed in Chapter 6.

Other writings which provide a history of rulers come from Egypt. While the writings I have reviewed pertaining to the Egyptians do not discuss a deluge they do provide a history which shows that the ancient Egyptians believed that their history extended far back beyond what has been termed the dynastic period which has been defined by archaeologists and Egyptologists as beginning with the rule of Menes c. 3100 BC. These ancient Egyptians kept records of the rulers of this much earlier period in their temples. The original records of this period do not exist; however, there are references to these lists which were developed during the fifth dynasty (Palermo Stone) and the nineteenth Dynasty (Turin Papyrus).

A Heliopolitan priest named Manetho from the third century BC is reported to have compiled a comprehensive history of Egypt which extended much further back into the past when gods were to have ruled the Nile Valley. Manetho's list is compared with the lists of Eusebius, Diodorus Siculus and the Turin Papyrus in Appendix B, Table B-3. A list of the dynastic rulers is given in Table B-4. The writings of Josephus (60 AD), Julius Africanus (300 AD), Eusebius (340 AD), and George Syncellus (800 AD) reference the writings of Manetho.

The "Chronica" of Eusebius is believed to give perhaps the most complete chronology of this ancient time. Eusebius gives a list of the seven gods comprising the Ennead of Heliopolis. He then goes on to report that following the rule of the gods, the kingship passed through a total of 13,845 more years up thru the time of Manetho c. 280 BC. This period of 13,845 years is comprised of 1) Demigods which ruled for 1255 years, 2) a line of kings which ruled 1917 years, 3) another line of kings which ruled 1790 years, 4) ten kings which ruled during a period of chaos for 350 years, 5) "Spirits of the Dead" for a period of 5,813 years, 6) the dynastic kings who ruled 3100 BC to 343 BC, and 6) the Persian Kings which ruled up to the time Manetho wrote his account.

Manetho's account of a 350 year period of chaos is interesting in that it could be describing a period which occurred either before, during, or shortly after a catastrophic event c. 9263 BC. Interestingly enough, this date is virtually coincident with an eruption of Vesuvius c. 9285 BC. Just as interesting is the period of 5,813 years following the period of chaos which was to have been ruled by "Spirits of the Dead". If there truly was an earthshaking catastrophe which could have propelled mankind into the stone-age then a period of this duration might explain why mankind appeared to be coming out of a dark-age c. 8000-4000 BC.

The Turin Papyrus, dated c. 1400 BC supports Manetho's claim that there were three historical periods prior to King Menes. The first period of pre-dynastic kings is given as lasting 13,420 years. The second period for the Horus-kings is given as lasting for 23,000 years. This gives the duration for Egyptian history of 36,420 years as compared with Manetho's duration of 26,082 years.

Another account by Diodorus Siculus (first century BC) states that the gods and heroes ruled for 'a little less than 18,000 years', the last god being Horus. He goes on to state that mortals have been kings for less than 5,000 years. I believe these are statements of two distinct but separate periods which were not meant to represent a consecutive chronology. These two periods agree very well with the durations reported by Eusebius. Eusebius reports a period of 12,300 years for the

gods plus another 1255 years for the demigods plus another 3607 years duration for the kings/heroes. This gives a total duration of 17,162 years compared to Siculus' period of 'a little less than 18,000 years'. The period of a little less than 5,000 years includes the dynastic period of 2575 years plus a period extending back into the period ruled by 'Spirits of the Dead'. Since details of the period of 5,813 years have not been described, it is safe to assume that some portion of that period was ruled by mortals and has been included by Siculus in his description.

An account by the Greek historian Herodotus who lived during the fifth century BC also provides information for dating the beginning of Egyptian history. According to Herodotus Egyptian priests were to have read from a written record the names of 330 monarchs who ruled Egypt from the time of Min/Menes. This list was to have included 18 Ethiopians and one woman named Nitocris. Herodotus reasoned that if three generations spanned 100 years then a total of 11,340 years would have elapsed from the time of Min/Menes up to the time of Amasis c. 570 BC. King Min would have reined c. 12000 BC during the period of Kings and Heroes and prior to the 350 year period of chaos. Herodotus further reports that all of these rulers were men and not gods. He further reports that prior to the rule by men there were 8 gods who ruled Egypt followed by twelve other rulers followed by what he termed the 'third order' who were descended from the twelve. This is consistent with the stories reported by Manetho and Eusebius.

Herodotus also relays a story told to him by the Egyptians who stated: "The sun changed his usual position four times since Egypt became a kingdom; the Sun rose contrary to its want; twice rising where he normally sets and twice setting where he normally rises". The French mathematician Schwaller de Lubicz has interpreted this to mean that the sun had gone through one and a half complete cycles of the zodiac. The ancients observed sunrise against the constellation in which the sun rose each day. If it can be assumed that the Egyptians were referring to a period back from the time of their discussion with Herodotus c. 500-450 BC then the timing would be referenced to the zodiacal house of Aires. Going back one half of a precession cycle consisting of 13,000 years, the sun would rise in Libra rather than Aires. One half more cycle back and the sun would again rise in Aires and going back one more half cycle the sun would rise again in Libra fulfilling twice where he now sets and twice set where he now rises. Following this line of thought places the beginning of Egyptian history c. 39330 BC which is within the same order of magnitude as the Turin papyrus account of 36763 BC.

SUMMARY

A great deal of physical evidence points to the existence of ancient civilizations which possessed extraordinary knowledge of the universe in which they lived.

This knowledge appears fully formed in the civilizations of Sumeria and Egypt c. 4000-3000 BC. Archaeological evidence in the form of megalithic structures found worldwide and artifacts recovered from building sites point to civilizations far more advanced than the civilizations that modern-day scholars assign to them.

Many of the writings of these ancient civilizations describe events in their history which involved the destruction or near-destruction of their civilizations. The geological and meteorological footprints which we observe today provide overwhelming evidence of events of cataclysmic proportions which support the writings.

There are a number of historical periods in which cataclysmic events occurred which relate to the descriptions offered by the ancient writings. Two events coincide with the past alignment between the solar system ecliptic and the plane of the Milky Way. The first event occurred c. 74000 BC when the super-volcano Toba erupted, which according to DNA evidence very nearly destroyed the human population. The next event occurred c. 49000 BC when a meteor struck near Winslow, Arizona. While I have not been able to identify any cataclysmic events during the third alignment with the Milky Way c. 23600 BC, it is the time the Mayans assigned for the beginning of their Age/Sun 1. The next alignment is to occur during 2012 AD, the end of the Mayan Age 5.

There are four periods around which cataclysmic events seem to cluster. The first is 12000-11000 BC; the second is 9000-8000 BC; the third is 6000-5000 BC; and the fourth is 2300-1300 BC. What makes these periods interesting is they closely follow a 3,600 year cycle and occur in 1,000 year durations. Following the four periods of cataclysmic events are periods of revival and expansion (11000-9000 BC, 8000-6000 BC, 5000-2300 BC).

The significant events for each period are as follows:

12000-11 000 BC

- End of Pleistocene Ice Age
- Mega-fauna disappear
- End Beringia migrations (increased sea levels)
- Vesuvius erupts

11000-9000 BC

- Begin present interglacial period
- Begin farming
- Colonization of North & South America

9000-8000 BC

- First mini ice age (Younger Dryas Period)
- Possible Vela explosion

8000 BC

- Farming
- Cities of Jericho, Asikli Huyuk, Catal Huyuk
- Mexico-Step pyramids

6000-5000 BC

- Second mini ice age
- Collapse of Bosporus
- Mt. Mazama erupts
- Warming-melting of glaciers

5000-2300 BC

- Copper Age
- Holocene Thermal Maximum

- Civilizations (Sumeria, Egypt, Olmec, Cuzco, Crete, Indus Valley)

2300-1300 BC

Meteor impact in Mesopotamia

- Migration of Semites to Egypt
- Akkadian Empire falls
- Severe drought in Egypt
- Egypt-Old Kingdom falls
- Assyrian Empire falls
- Egypt-Middle Kingdom falls
- Santorini erupts
- Destruction of Indus Valley civilization
- Destruction of Cnossus, Crete
- Heavens come to a stop (Egypt, Persia, China, and Mesoamerica)
- Egyptian tombs record destruction of Man by the gods

As can be seen from Table 8-2, dates in increments of 3600 years backwards in time from 2012 AD fall within these periods described above as follows: 2012 AD, 1588 BC, 5188 BC, 8788 BC, and 12388 BC.

According to modern day physicists, string theory suggests that everything of a physical nature is based on the principle of vibration or is cyclical. Since the basic building blocks of matter are cyclical in nature it stands to reason that what occurs in our environment is also cyclical. The before mentioned historical events support this premise and strongly suggest that we can expect a major catastrophic event to occur in our near future (i.e. 2012 AD).

TABLE 8-4 CATAclysmic VS HISTORICAL DATES

ZODIAC	DATE 3600 yr Cycle	DATE Precession 2160 yr Cycle	CODEX VATICANUS	GALACTIC ALIGNMENT	HISTORICAL DATES (-) = BC	COMMENT
Aries	-440788	-440788			-440788 -404788 -393988 -350788 -239188 -203188 -138388 -102388	Zero degrees sidereal Aries Start Aloros epoch-36,000 yrs Alaparos epoch-10,800 yrs Ammenon epoch-43,200 yrs Amelon epoch-46,800 yrs Daonos epoch-36,000 yrs Amempsinos epoch-64,000 yrs Eudorachos epoch-36,000 yrs Opates epoch-28,000 yrs Homo Sapien sapien man
	-95188 -84388	-95188		-100496		
				-74869		Milky Way / Sun Alignment
Aquarius	-73588	-73588			-73588 -73000	Start Xisuthros epoch-64,800 yrs Toba Super Volcano Erupts
		-71428				
Scorpio	-69988 -66388					
Leo	-62788	-62788				
Aries	-55588					
Pices	-51988	-51988		-49242	-49000	Milky Way/Sun Alignment Meteor Impact in Winslow, AZ
Libra	-41188	-41188				
Virgo		-39000				Completion of axis tilt cycle, Referenced to 2012 AD
Taurus	-30388	-30388				
Pices	-26788		-23615	-23615		Milky Way / Sun Alignment
Aquarius	-23188					BEGIN AGE/SUN 1

TABLE 8-4 CATAclysmic VS HISTORICAL DATES (Continued)

ZODIAC	DATE 3600 yr Cycle	DATE Precession 2160 yr Cycle	CODEX VATICANUS	GALACTIC ALIGNMENT	HISTORICAL DATES (-) = BC	COMMENT
Sagittarius	-19588	-19588	-18593 -17375			END AGE/SUN1 - DELUGE BEGIN AGE / SUN 2
Scorpio		-17428				Migrations Asia to N America
Libra	-15988	-15268	-13366		-16000 -15000	Vesuvius Erupts Vesuvius peak fallout END AGE / SUN 2
Virgo	-12388	-13108			-12500	Mega fauna Disappear BEGIN AGE / SUN 3
Leo		-10948			-10657	Vesuvius Erupts Migrations N&C Americas
					-9500	Super nova fragment, Deluge
			-9284		-9285	Vesuvius erupts END AGE 3
Cancer	-8788	-8788			-8788	End Xisuthros epoch
Gemini		-6628		-8239		BEGIN AGE / SUN 4
	-5188				-5600 -5200	Collapse of Bosphorus Mt Mazama erupts Volcanic dirt band in ice cores
Taurus		-4468			-3500	Ocean Level Peaks Explosion in cultures END AGE / SUN 4 BEGIN AGE / SUN 5
			-3213 -3114			
Aries		-2308			-2348	Possible meteor impacts in Mesopotamia
	-1588				-1638	Santorini erupts

TABLE 8-4 CATAclySMIC VS HISTORICAL DATES (Continued)

ZODIAC	DATE 3600 yr Cycle	DATE Precession 2160 yr Cycle	CODEX VATICANUS	GALACTIC ALIGNMENT	HISTORICAL DATES (-) = BC	COMMENT
					-1400	Heavens come to a stop (Mexico),Yupanqui takes on name meaning cataclysm Sporer minimum, cold
Pisces		-148				
	2012	2012	2012	2012		Milky Way / Sun Alignment
Aquarius						

TABLE 8-5 SUMERIAN KINGS LISTS

BEROSSUS-KING LIST	CITY OF KINGSHIP	BEROSSUS-DURATIONS (YRS)	WB - 144	WB – 144 DURATIONS (YRS)	WB – 62 ADJUSTED	WB – 62 DURATIONS (YRS)
Aloros	Eridu	36,000	Alulim	28,800	Alulim	67,200
Alaparos	Eridu	10,800	Alagar	36,000	Alagar	72,000
Ammenon	Bad-tibira	43,200	Enmenlu-Anna	43,200	Enmenlu-Anna	21,600
Amelon	Bad-tibira	46,800	Enmegal-Anna	28,800	Enmegal-Anna	72,000
Megalaros	???????	64,800				
Daonos	Bad-tibira	36,000	Divine Dumuzi	36,000	Divine Dumuzi	28,800
Amempsinos	Larak	64,800	Ensibzi-Anna	28,800	Ensibzi-Anna	36,000
Euedorachos	Sippar	36,000	Enmendur-Anna	21,000	Eumendur-Anna	72,000
Opartes	Shuruppak	28,800	Ubartutu	18,600	Arad-gin	28,800
Xisuthros	Shuruppak	64,800			Ziusudra/Utnapishtim	36,000
TOTAL YEARS UNTIL DELUGE		432,000		241,200		456,000

NOTE: Bold durations are not prime numbers.

TABLE 8-6 ANTEDILUVIAN SUMERIAN CITIES AND THEIR RULERS

<u>KING</u>	<u>ERIDU</u>	<u>BAD-TIBIRA</u>	<u>LARAK</u>	<u>SIPPUR</u>	<u>SHURUPPAK</u>
1) Alulim	28,800-67,200				
2) Alagar	36,000-72,000				
3) Enmenlu-Anna		43,200-21,600			
4) Enmegal-Anna		28,800-72,000			
5) Divine Dumuzi		36,000-28,800 WAR			
6) Ensibzi-Anna			28,800-36,000 WAR		
7) Enmendur-Anna				21,000-72,000	
8) Arad- gin/Ubardudu					18,600-28,800
					FLOOD
9) Ziusudra					? – 36,000

CHAPTER 9

AT-ONENESS WITH LIFE

He who cannot change the very fabric of his thought
will never be able to change reality,
and will never, therefore, make any progress...
....change is a prerequisite of progress.

- Anwar -el Sadat

Many of the esoteric writings stress oneness with Creation. A oneness with Creation is a positive notion which, when invoked, is expected to be long-lasting; permeate our being; foster creativity and productivity; and be consistent with our inner values and ideas (i.e., our consciousness, a oneness with Creation).

At the moment of our birth we each acquired a consciousness and free will. The modern-day religions have defined the consciousness, which we have termed the soul, as the repository for all the spiritual attributes we develop in our experiences on a journey back to oneness with Creation. Free will is the capability with which we choose many of our experiences. Because of free will many have chosen to seek oneness with life rather than oneness with Creation. Many of the practitioners of modern-day religions are hopelessly absorbed with themselves. When you combine this natural narcissism with the basic need for self esteem, you create a culture which has to feel itself as an object of primary value. Our Western society has attempted to fulfill its goals through material gain, medical developments promoting longevity, and technological advancements to ostensibly ease our life.

Given all the physical evidence we have available today, which describes a universe filled with so many things we believe we have no control over, one has to ask why bother to try to understand them. Even ancient myths refer to cataclysmic events that will end our troubles should they occur. For the most part, we live in complete darkness about whom we are and why we are here. We strive to somehow believe our life has some meaning. What is more natural than to take this mystery and dispel it by addressing our performance to another, (i.e., God)? Once a person begins to assign this relationship to an ultimate power and to fashion his links to that ultimate power, he runs the risk of opening up a life which he believes has unlimited possibilities, for which he is not required to exercise control over, thereby absolving himself of his inadequacies. He finds himself no

longer compelled to seek meaning for his life since it rests with God. Freud believed that much psychological illness is attributed to the fear of knowledge of oneself or of being confronted by too many possibilities. Faced with the enormity of these possibilities man develops a means of self protection through creative self-restriction. This self imposed restriction becomes a substitute for instinct. This is what occurred when mankind replaced his bicameral, instinctive consciousness with a developed, subjective consciousness.

It is believed by many that psychology has to give way to theology, that is, to a view that absorbs the individuals' conflicts and guilt and offers him the possibility for some kind of godliness. It is further believed by many that Man cannot endure his own littleness unless he can translate it into meaningfulness on the largest possible scale. The churches of today have attempted to fill this role by inventing a god out of necessity in order that individuals can survive as a rational being and to conquer their fears of the unknown thereby establishing their permanence in creation. Mans greatest fear is that of death. This acceptance of something greater than himself allows him to temporarily transcend this fear. When the unexpected occurs he regains his fear and without a true understanding of spirituality such as explained by the Genesis Model he will be hopelessly lost.

Man must accept responsibility for his being. Because of this necessity to arrive at a reason for being and to convince oneself that there is permanence beyond death, man seeks proof that god exists, otherwise he must repress, displace, deny, rationalize, dramatize himself and deceive others in order to be normal, healthy and happy. When he is forced to see through these deceptions he removes the protection which makes him psychologically wholesome. Without the acceptance of a god he becomes neurotic spiritually.

A basic proposition is that man has either invented god or God exists! It is my conclusion that what we understand today is an invented God in order to explain what we have not understood. In fact, man has invented many gods down through the ages as can be seen in Table 11-1. The absence from this table of the so-called gods of Mesoamerica is intentional. The Maya and Aztec did not worship a hierarchy of gods as is presented here. They considered their so-called gods as impersonal forces of the universe rather than having an independent existence as suggested for the other cultures listed. They focused on the universal events which modern-day religions have chosen to ignore. Somehow the ancient civilizations had an understanding of the workings of the universe and in particular the workings of our planet and solar system. They understood that they were integrated with All-That-Is. This is perhaps how the Mayans arrived at their understanding of the cyclical nature of their existence. Without the encumbrances

of a god who would determine their ultimate demise they were able to focus on the occurrence of catastrophic events due to natural causes. The Mayans considered the end of this current age in 2012 AD inevitable and did not consider it with great trepidation.

The possible reasons for an end of an Age to occur has been focused throughout this writing on natural events all of which we have no control over. In Chapter 6 it has been shown that the Mayans considered a period of 26,000 years as being the duration that it takes the Earth to complete a precession cycle. This long duration they further subdivided into five periods of 5,200 years each which represented the duration of a single Age. This duration for a single civilization offers another possible reason for the end of an Age. There are events for which we do have responsibility for and which we could have control over. Perhaps the Mayans recognized that it takes a civilization between 4,000 and 5,200 years for it to destroy itself.

In his book “Collapse”, Jared Diamond²⁷ provides a description of 12 environmental problems which he believes will severely limit our lifestyle within the next few decades. These are paraphrased as follows:

Environmental Problems Facing Our Current Age

1. Destruction of natural habitats (forests, wetlands, coral reefs, ocean bottom)
2. Loss of wild foods (fish, shellfish)
3. Extermination of wild species (animals, fruit bearing plants, timber)
4. Erosion of farmland soil, salinization, loss of soil fertility
5. Loss of major energy sources (oil, natural gas, coal)
6. Over use/depletion of fresh water
7. Loss of photosynthetic capacity
8. Toxic chemical pollution (insecticides, pesticides, herbicides, heavy metals, plastics, coolants)
9. Introduction of alien species (rabbits, foxes, agricultural weeds, pathogens of trees and crops and livestock, water hyacinth, zebra mussels, rats)
10. Atmospheric pollution by gases (carbon dioxide, methane)
11. Population growth (food shortages, disease)
12. Population impact on the environment (resource consumption, waste production, competition between third world standards of living vs. first world countries)

All 12 problems are interrelated. Solving only one or even a few will not head off the course of non-sustainability of our society. All 12 must be solved or our lifestyle will be substantially limited over the next several decades. This by itself may give credibility to the end of this Age c. 2012 AD.

The existence of a universal consciousness is a concept which is difficult for Man to envision. For the purposes of providing an identity to this concept, mankind has referred to it as God in Man's physical image without truly understanding the role of spirituality.

At the beginning of this text, numerous questions were asked for which I believe answers have been provided; perhaps not the easily understandable one-liners I wished for, or which today are commonly offered by religious groups and accepted by the masses, but answers nonetheless. In Chapter 2, one of the questions posed was: "Should man seek a reason for being or just accept the fact he exists?" Religions assign the reason for being to God. Atheists simply accept the fact they exist. The Genesis Model provides an answer which integrates man's physical being with his spiritual being and through this with All-That-Is/God. Other questions which were asked include: 1) what have we become over the thousands of years of development, 2) where is our civilization going, and 3) are there clues in the ancient mythologies as to our ultimate end?

While many in the academic community hold the belief that we have progressed from a caveman form of existence to various stages of being able to master our environment and our lives, this writing offers another possibility. There is physical evidence that mankind at one point in our history had achieved a level of greatness beyond that which we experience today. This greatness disappeared perhaps due to catastrophic environmental changes, or perhaps at man's own hand as Diamond ^{suggests}, only to re-emerge and evolve to the state we find ourselves in today.

There is ample evidence, as explained in Chapter 8, that universal means exist which could again alter our current life in very dramatic if not cataclysmic ways, not the least of which is the means offered by mankind itself.

The ancient myths describe creation and the rise and fall of civilizations. The Mayan mythologies set the date of 2012 AD as the end of the current Age. There are a number of events which have been described in this writing which seem to culminate with this date. Perhaps this should be viewed as an opportunity to begin a new way of life to achieve a future which we can hardly imagine. Now a

pathway which will allow us to cope with the future is offered. The interpretation of the metaphor imbedded in Chapter 1 of the Book of Genesis provides an understanding of the physical and spiritual interconnection of mankind with the physical and spiritual components of the universe. If we are to continue evolving as a great civilization then our institutions of government and religion must alter their positions of control of the masses and self-promotion and take the role of leadership in understanding the universal threats we face and then provide solutions both real and spiritual. As Diamond ²⁷ writes “societies today are so interconnected that the risk we face is of a worldwide decline”. He further goes on to write that we have two choices which will affect our success or failure and these are: ‘long-term planning and willingness to reconsider core values’.

As with all quests, more questions arise. There is a difference between the questions I initially expressed and the questions I now have. I believe these latter questions can be answered where before I was not sure the questions I posed had answers. Answering a question and employing the results in practice remains the challenge.

Can the presence of mankind be explained?-Yes.
Is there a future for mankind?---Yes.
Can I do anything about it?--Yes.
Can We do anything about it---We must!

Of all the products of creation whether animal, vegetable, or mineral only human beings have the choice of attuning themselves to the Universal Consciousness (God) or not doing so. Although everything in creation is of the same energy, the same spirit, only human beings can claim the quality of truly being spiritual.

CHAPTER 10

AGE OF ENLIGHTENMENT

You are already enlightened;
all you have to do-
is wake up to the fact.

- Zen Buddhist Masters

When we have come full circle,
we expect to find an end.
Instead, we should be looking for a new
beginning.

- Author

From the very beginning, Man has had to cope with his beliefs regarding his purpose for being. Much of the knowledge possessed by ancient man has been passed down to us in the form of myths. I have attempted to show that these myths contain knowledge acquired by these ancient civilizations which describe events which shaped the earth, the universe, and their understanding of life. Much of this knowledge far exceeds what we give them credit for today. I have concluded that the knowledge our ancient ancestors have passed on to us actually comes from a much earlier civilization or civilizations more advanced than those of c. 3500 BC. In summary, advanced civilizations disappeared prior to the end of the last ice age and were replaced by an explosion in civilizations beginning c. 4000 BC. These civilizations eventually evolved into our present day technologically advanced civilization which now faces a major change which like our earliest ancestors faced could include total annihilation.

If we are to survive possible annihilation, can we utilize the information that our ancestors have attempted to enlighten us with? As I have previously stated, catastrophic events are cyclical and therefore predictable. Catastrophic events have been described which were tied to astronomical events such as galactic explosions and asteroid impacts; or earth bound events such as: volcanoes, earthquakes, plate tectonic motion, and climate changes.

Today we conventionally regard ourselves as being the most technologically advanced civilization to inhabit the Earth. With our entire technical prowess we cannot prevent any of the catastrophes described above from occurring. If this is the case then perhaps annihilation might be a self correcting event and may not

matter. Recent theories being offered by the worlds leading physicists predict that multiple spatial dimensions exist so the loss of our three dimensional spatial dimension may be a moot point. As discussed in Chapters 5, 7, and Appendix C, physicists have proposed a theory to explain the workings of the universe which they have termed string-theory. In fact, these physicists have theorized a total of five string-theories, all of which appear valid. In order for what at first appears to be five separate theories to be valid, they must have some commonality. A theory which unifies all five string-theories into a single unified framework has been developed and is termed M-theory.

The Genesis Model looks much like the M-theory model and I propose that the Genesis Model is an analog of the string- and M- theories. The 5 levels of consciousness in the Genesis Model are analogs of the 5 string-theories. The concept represented by 'All That Is' in the Genesis Model is analogous to the factor unifying the 5 string-theories represented by M-theory. The Genesis Model describes consciousness/matter relationships while string-theory describes energy/matter relationships. The terms consciousness and energy are descriptions used to describe complex ideas for which we are unable to visualize in a three-dimensional spatial world.

The beliefs of the Muslim Sufis possibly offer some additional insight into the concept of the Genesis Model. Sufism has a deep Gnostic Christian influence. They may have had access to some early Gnostic information about creation long since forgotten. The Sufis argue that since God is one, reality must also be one. The creator and creation become one. They speak of a 'Divine Unity' or oneness with God. They consider humanity and the cosmos as two separate but intimately connected constructions of the Universal Spirit. The individual (physical reality) is merely an external form where through inward reality (Conscious Reality) conforms to the universe itself. This looks to me to be a description of the Genesis Model, all be it a scaled down version.

In Chapter 1 I asked the question "What then made me alive and intelligent". There are two types of matter: inert matter and alive/intelligent matter. String-theory is meant to describe the properties of the physical or inert world. If a theory is to become a law it must describe all aspects of the topic it is addressing. The concept of String-theory while meant to describe the physical nature of the universe should also apply to the metaphysical nature as well. This is accomplished in the form of the Genesis Model which describes the formation of the alive/intelligent part of the universe.

The 5 theories of how the universe was created and functions are given in the Genesis Model as:

- Universal Consciousness
- Divine Consciousness
- Subconscious Mind
- Subjective Consciousness
- Physical Consciousness

As discussed in Chapter 7, string-theory recognizes the existence of multiple dimensions each exhibiting vibrational characteristics. Everything that exists is interconnected through harmonic interactions. The Genesis Model describes the end result of the Physical Consciousness to be a three-dimensional physical reality (i.e., matter). String –theory suggests that in addition to the dimension of time and the three spatial dimensions we observe in our physical reality, six additional spatial dimensions exist. According to M-theory eight dimensions in addition to our three dimensional physical reality exist. I propose that each of the 5 levels of consciousness represented by the Genesis Model exhibit vibrational characteristics and are multi-dimensional all of which are interconnected through harmonic interactions.

The Genesis Model describes multiple states of consciousness; physical reality being the result of only one state. There appears to be other options to physical reality.

There is another option to total annihilation, that being partial annihilation. This has occurred in the past as described in the many myths of our ancestors. Are we to repeat the past or can we be enlightened from past experience?

Enlightenment means more than being wise, aware, or well balanced; it denotes a clearly defined state of consciousness. An enlightened person no longer needs to derive a sense of self, solely from his interaction with the external world. Unlike other species humans can anticipate the future, make conscious choices, and deliberately change their own destiny. Today, we may be facing the need to make a quantum leap in our state of consciousness. If so, how does one achieve a state of enlightenment/consciousness?

It has been my experience that the path to enlightenment is not found by following the guidance of our so called modern day experts. The ‘answers’ which these experts often profess as divine guidance are often conflicting, often nebulous, and even unbelievable. I have found, however, that there are common

threads of wisdom, truth, history, and teachings presented throughout the wealth of written information available to us today.

It is not clear whether or not the very ancient civilizations believed in a heightened state of consciousness or the concept of enlightenment. Many believed in a rhythm of organic birth, death, and new birth. This concept they acquired from observations of the continuous arising of the heavens which they considered as fundamental to the nature of the universe. They also believed that for life to continue it was necessary to die. Spiritual teachers, mystics, and visionaries have repeatedly affirmed that we are more than just biological organisms bounded by the skin. We are also unbounded, at the deepest level of our being we are the same essence, a part of a greater wholeness, united with the rest of the universe.

Pierre Teilhard de Chardin a French priest and philosopher concluded in the 1930's that humanity was headed toward the unification of the entire species into a single inter-thinking group. Another philosopher with a similar vision was the Indian mystic Sri Aurobindo, a contemporary of Teilhard's. He saw evolution as a "Divine Reality" expressing itself in ever higher forms of existence. Having passed from energy through matter and life to consciousness, evolution was now passing through the transformation from consciousness to what he called 'Supermind', something so far above consciousness as to be beyond our present dream of perfection, the ultimate evolution of 'Spirit'. This new level he saw as coming through the increasing spiritual development of individual consciousness toward a final, complete, all-embracing consciousness which would occur on both the individual and collective levels. This is what the Genesis Model describes as Universal Consciousness. Man has focused on the physical aspects of development and does not understand the spiritual aspects of consciousness. What Teilhard de Chardin and Aurobindo are suggesting is man needs to develop the levels of consciousness described by the left-hand side of the Genesis Model.

At this point it is necessary to introduce the term 'synergy'. Synergy is derived from the Greek syn-ergos, meaning "to work together." An excellent example of a system with high synergy is your own body. You are an assortment of several trillion individual cells, each acting for its own interest, yet each simultaneously supporting the good of the whole. The 'body' is represented by the right-hand portion of the Genesis Model (i.e., physical reality).

Synergy in an organism is the essence of life, and it is intimately related to health. When for some reason synergy drops and the organism as a whole does not receive the full support of its many parts, it becomes ill. When synergy is lost

altogether the organism dies. The individual cells may live on, but the whole, the living organism, no longer exists. This is true of organisms and cells or in other words, physical reality. The Genesis Model defines synergy to include both physical as well as spiritual aspects of an entity. The essence of high synergy is that the goals of the individual's various degrees of consciousness are in harmony with the needs of the system as a whole (i.e., Genesis Model). As a result there is minimal conflict between the various degrees of consciousness, as well as between physical reality and consciousness.

Viewed as a system, human society is an assembly of individual states of consciousness, which today appears to be in a state of comparatively low synergy. The amount of synergy in society is a reflection of the way in which we perceive ourselves in relation to creation and the world around us. In order to increase synergy, then, we will need to change some fundamental assumptions that lie at the core of our thinking and behavior. This will mean evolving inwardly as much as we have done outwardly as shown in Figure 10-1. The spearhead of evolution is now self-reflective consciousness.

Over the past 15-18 billion years stars have been born, died, reborn, in a never ending cycle. Our own sun is thought to be a 4th generation star. As Russell³⁴ states, "One consequence of this recycling and regeneration of matter is that every atom on this planet (with the possible exception of some hydrogen and helium left over from the big bang) has been processed in at least one star. Virtually every atom in your body has at some stage in its long history passed through or been created in one of these giant stellar furnaces. As a corollary, the chemical composition of our planet was fixed at its birth. Any atom that today is part of your body may in its past have been in a volcano, in rocks, in the oceans, in the atmosphere, in vegetation, in other animals, and in other people both past and present."

To change the global situation, far more than a series of social, scientific, and technological paradigm shifts would seem to be called for. To shift from a low- to a high-synergy society will require a profound shift in our basic self-model. Such a change in consciousness has now become an evolutionary imperative.

Much has been said about the ancient's understanding of the universe, the cyclical properties of the environment they observed, relationships between material being and spiritual being, and the history of mankind that got us to where we are today. What does modern science have to say that would shed light on these matters?

While evolutionists believe that a smooth evolution in mans development has occurred over a long period of time, the Sumerians believed man was formed in a series of steps rather than through a continuous process of evolution. Evolution does not occur smoothly; rather, it appears to happen in a series of sudden steps.

Russell goes on to state "The evolution of the many different species of animals was probably also an intermittent process. The classical view of biological evolution, based on Darwin's theories, held that a species evolved slowly through a long series of minor changes. Over millions of years, this process was to have led to the emergence of completely new species. While most of the general principles of Darwinian evolution are accepted by the vast majority of scientists, certain aspects of his theory have been called into question. Rather than finding fossils that represent a smooth progression from one species to another, we find a large number of fossils for one species, plus a large number for the species that it appears to have evolved into, with very little in between. Some evolutionary theorists, such as Stephen Jay Gould at Harvard, proposed that individual species have enjoyed long periods of stability followed by periods of rapid evolution, with these relatively sudden changes probably occurring in response to major environmental changes and appear to happen in a series of sudden steps. Several theorists suggest these steps might have happened over periods of 50,000 years or so, which in evolutionary terms is quick compared with millions of years, and they might, in the right circumstances, have happened in only a thousand years." The Sumerians suggest after the first creation of man some 300,000 years ago a second, third, and fourth, series of creations occurred 270,000 years ago, 250,000 years ago, and approximately 100,000 years ago. This process involved genetic engineering of the different species.

Since the appearance of humanity, evolution has moved from a biological level to a level of consciousness. We are, it is almost certainly true, still evolving as a species, but this physical process, rapid as it may be from an evolutionary perspective, is occurring relatively slowly as far as human time scales are concerned. As far as we can tell, we are physiologically very similar to human beings of ten thousand years ago. What is evolving, and evolving very rapidly, is the human mind and the ways in which we apply it.

Enlightened Consciousness provides man with the ability to direct his own destiny. Humanity is not bound to a long, slow adaptation process through trial and error; rather, we can anticipate the results of our actions and consciously choose those that are most likely to take us where we want to go as individuals and as a species. Collectively applied, human evolution could take a huge leap

forward. We now appear to be in the midst of an unprecedented period of extremely rapid development.

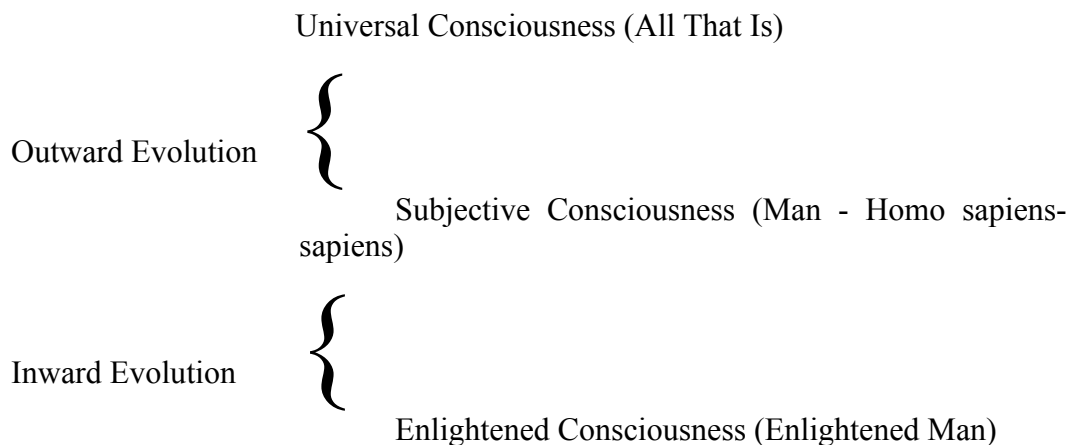
Russell goes on to show that the rates of change in the areas of biology, atomic physics, energy sources, mobility and communications are so fast that their impacts on the evolutionary process may be staggering. He goes on to state "Jumps by so many orders of magnitude, in so many areas, with this unprecedented coincidence of several jumps at the same time, and these unique disturbances of the planet, surely indicate that we are not passing through a smooth cyclical or acceleration process similar to those in the historical past. Anyone who is willing to admit that there have been sudden jumps in evolution or human history must conclude from this evidence that we are passing through another such jump far more concentrated and more intense than these, and of far greater evolutionary importance." If this is so, if the rapid acceleration so characteristic of today is heading us toward an evolutionary leap, what lies beyond? Could we be on the threshold of a leap as significant as the evolution of life from inanimate matter? It would seem likely that in the enlightened state, thinking would be both analytic and holistic, intellectual and intuitive, active and receptive (i.e., with high synergy) as Russell has suggested.

In Figure 3-1, I proposed a creation model based upon the Book of Genesis which described what ancient man may have termed God and which I have termed All That Is. The Book of Genesis described the development of man which culminates in the development of a Subjective Consciousness. This was the first evolutionary leap or the development from non-being (God) to being (Man).

With the explosion of technology occurring today, the number of possibilities for man to pursue is so great and so rapidly changing that mankind must undergo an evolutionary leap or be faced with increasing psychological illness and ultimate destruction. What could be suggested from this is that mankind is on the brink of a second evolutionary leap; that being from a subjective consciousness to what Russell refers to as a self reflective consciousness or in my term an Enlightened Consciousness or possibly in the term of the Muslim Sufis a Perfect Man.

Figure 10-1 below is a depiction of this evolution.

Figure 10-1 Evolution of Consciousness



Russell suggests that the catalyst for the leap, to this state I call ‘Enlightened Consciousness’, is the explosion in information and the need and methods to process this overwhelming amount of data. This he believes can be compared to the development of writing which I believe was the catalyst which caused the leap to Subjective Consciousness.

The Subjective Consciousness is finding it difficult to understand and process the infinite number of possibilities it is facing as a result of the amount of information which is available as a result of the explosion in technology. Technology has made communications between individuals and groups easier to accomplish, yet the understanding of the large volumes of information is nearly impossible with only the use of the Subjective Consciousness for processing. Written language opened the door for easier and widely distributed information for which the Subjective Consciousness was invented.

Today, with the ease and near instantaneous speed by which large volumes of information can be transferred the subjective conscious mind is quickly saturated beyond the limits it can comprehend. Today we are already relying on artificial intelligence in the form of computers to help relieve the data/brain overload. There will be less physical interaction between individuals. The need for spoken

language may eventually give way to a visual or extrasensory form of communications.

This I believe is a stop-gap measure and it is through the Enlightened Consciousness that mankind will experience a more conscious interaction and require less need for a physical interaction with the physical consciousness/world. We must become more inward seeking.

The Buddhist Lama Anagarika Govinda has stated, “The human race has come to the juncture where it must decide whether to be content with the subjugation of the material world, or to strive after the conquest of the spiritual world, by subjugating selfish desires and transcending self-imposed limitations.”

Where the Subjective Consciousness implies an Analog ‘I’, the Enlightened Consciousness may imply a collective ‘Analog We’ or as Alan Watts⁶² described as ‘not I’, for what is outside ‘I’. That is, consciousness will incorporate or be linked to the consciousness of others as a collective consciousness through the Universal Consciousness (i.e., a oneness with Creation).

CHAPTER 11

ROLE OF RELIGION IN THE DEVELOPMENT OF MANKIND

The ability to deceive is one of the hallmarks of consciousness.

- Julian Jaynes

A concept which has been repeatedly mentioned in this book is the belief by the masses that civilization evolved from a cave-man beginning into what we are today. This notion has been greatly influenced primarily by the Judeo-Christian community and the Muslim community in efforts to create a basis for their religious beliefs. It would be blasphemous for them to consider the existence of older more advanced civilizations or that the gods of the Egyptians, Sumerians, Mayans, and others may have indeed existed, not as gods as we envision them today but as individuals from advanced civilizations. Religions, while they have been instrumental in providing direction and control over the masses, have also programmed their thinking into a very narrow channel.

Religion can be defined as a system of belief and conduct or as a belief in a divine or superhuman power. The concept of religion can be traced back to an origin beginning several thousand years ago. The myths and legends throughout the world tell of a time when 'celestials' descended from the stars bringing a Golden Age throughout the world. The earth's inhabitants would possibly have looked upon these celestial beings as superhuman and quite possibly divine. Giants which were to have inhabited the earth at that time supposedly rebelled against these celestial beings and Man sank into a state of barbarism. Survivors of this period of chaos were to have solicited help from these celestial beings as they thought of them as gods. Over time, a system of beliefs could have evolved from this interaction. If a system was developed it would likely have been recorded and likely committed to memory. The only evidence we have today of this early beginning is found in the legends of virtually all nations.

Ice Ages, earthquakes, floods, fires and wars destroyed many of the written records. Memories of these ancient civilizations were passed down through countless generations which eventually became confused into folk-tales which our twentieth-century minds interpret in terms totally foreign to the actual conditions of the far past. Modern-day scholars have created considerable confusion throughout the world of religion by assigning the term 'gods' to many of the

ancient mythological characters which, in fact, were not considered gods at all by the ancient people. By assigning the term god to mythological characters, modern-day religions can justify their belief that the god of today is the true god. If they can show that past cultures worshipped false gods, then their position and their god are strengthened. A listing of various gods throughout history is provided in Table 11-1. The interesting point being made is that all of these cultures had many of the same 'gods' although in many cases their name changed to reflect the language of the particular culture.

The term 'God' has different meanings for different people depending on their religious upbringing. In actuality, ancient cultures such as the Sumerians and Akkadians did not refer to 'Gods'; they referred to 'men from the sky'. The term 'God' came later when the Semitic Tribes (see Table 11-4) and other cultures began following the rule of man-kings and the teachings of the prophets of the time. The Semitic priests, Levites and kings of the Hellenistic world were regularly thought of as incarnations of gods, angels and spirits. Priests used the titles of "Father" and "God". To accept the address "God" meant that the priest was understood to act as an incarnation of God, receiving prayers from people which were addressed to God. According to Herodotus the names of nearly all the gods came to Greece from Egypt. Poseidon, he claimed, came from the Libyans.

Until the nineteenth century, virtually everything our western civilization knew about our origins came from the Bible. The Bible was written by men with secrets to conceal from other competing sects and from the Roman and Jewish authorities. Today it is clear that the Bible is a collection of myths, legends, and parables from various cultures cobbled together with bits of history and philosophy.

The first five books of the Hebrew Bible and the Christian Old Testament, known as the Pentateuch, are attributed to Moses. It is quite possible that these books were prepared by Moses using earlier Sumerian texts known as the Enuma Elish. The Enuma Elish is the earliest writings from Mesopotamia consisting of seven tablets also known as the Epic of Creation. The first six tablets describe the creation of the heavens and the Earth and all upon the earth, paralleling the six days of creation in the Old Testament. The seventh tablet describes the Babylonian god Marduk as he surveys his creation, paralleling the biblical seventh day. The Sumerians, and later the Babylonians & Assyrians followed the god-kings sent to earth from heaven while the Egyptian kings, beginning around the third dynasty, began to take on the role of God.

Religion in Egypt was believed to have developed into a centralized theocracy during the Old Kingdom. The king was considered to be the incarnation of the creator god but not regarded as a deity in his own right. When the king was crowned, he acquired the powers of the god Horus. The Old Kingdom Egyptians believed in a one and only absolute god and that all existence was derived from a single original source and that the occasion of creation transformed the oneness of the creator into multiple life forms.

Egyptians, from the beginning of the Old Kingdom in Egypt, were found to have anticipated by two thousand years the idea of creation by the power of the Word which appears in the Book of Genesis. The Memphite Theology explains creation began as a divine concept and was given reality by expression through the spoken word. The creator god first perceived the world as a concept and then brought it into being through his spoken word. Like the Genesis Model described in Chapter 3, the Memphite Theology is concerned with the creative functions of thought (consciousness), the spoken word and the ultimate creation of reality from concept. The Egyptians made no distinction between mind (a spiritual state of being) and matter; both were understood as aspects of a single scheme. They believed there were only different levels of consciousness in which all is one and the absolute one is all. While the Egyptians recognized the concept of a creation model, it is not evident they understood its details. One conclusion is that the creation stories of the Sumerians, Egyptians, and Hebrews were prepared by a much earlier civilization that did understand the true meaning of creation and were able to encode this meaning in the writings we find today in the Book of Genesis.

In early Egypt, worship of the gods was limited to the participation by a very few elite individuals. There is no evidence that the general population participated in daily services or in many of the festivals. The Pharaoh, his clergy, and a few great officials carried on a personal relationship with the gods restricting the populace to observing the deity when moved outside of the temple during a procession. The Pharonic priesthood maintained various cults honoring the gods which included Ptah, Horus, Amun, Amun-Re, and Osiris. Clement of Alexandria is to have said, "The Egyptians neither entrusted their mysteries to every one nor degraded their secrets of divine matters by disclosing them to the profane; reserving them for the heir apparent to the throne, and to such priests who excelled in virtue and wisdom."

As mentioned earlier the Vedic writings, which form the basis of Brahmanism and later Hinduism, are perhaps the earliest writings on earth. Over time the old Vedic

religion underwent several changes. These chiefly concerned the deities that were worshipped, and the forms of the ritual. The older Vedic gods which were considered universal were replaced by the new Puranic gods which were considered personal and individual.

One of the most notable changes to Hinduism was instigated by Siddhartha Gautama (563-483 BC) who later took on the name Buddha. Brought up as a Hindu prince he became disillusioned with the religious practices and formed a following to practice his form of beliefs. After Buddha died his followers essentially disappeared for the next several hundred years. A king named Ashoka (291-232 BC) revived Buddha's beliefs and is considered to be the real founder of modern-day Buddhism. The only written history of Buddhism is from 3 AD. Today there are over 600 different sects where some followers believe Buddha is a god while others believe he was only a prophet.

Throughout the ages, stories and myths, reflecting the beliefs of the time, were passed down from man to man; tribe to tribe; and nation to nation. Occasionally, sages/mythological figures such as Viracocha; Quetzalcoatl; Moses; Christ; Buddha; Confucius; and Muhammad came forth. These individuals gave hope to the masses who were able to identify with their teachings and who accepted these teachings as pathways to find answers to their miseries. With the coming of these sages, ancient cultures thrived and most of the great religions of the world were born with the advertised purpose of providing spiritual development, and providing a safe haven for the people of that time. Modern main-stream religions sprang up throughout the world beginning circa 800 BC coinciding with the writings of the Hebrew Amos and culminating with the advent of Islam as taught by Muhammad. Early religions, beginning c. 800 BC, evolved within small local sects and then borrowing from each other they ultimately coalesced into a unique group in a much expanded territory. An exception to this time period could come from the Mormons who believe that Joseph Smith was also a prophet, c. 1830 AD.

In all cases, the original teachings and stories of the lives of these teachers were passed down from person to person by word of mouth. This occurred at least to the time of the Muslims when the stories and anecdotes of the Prophet Muhammad and his followers known as the 'hadith' were finally put together in a collection called the 'Sunna'. The Quran, spoken by Muhammad and meaning recitation, was not written until c. 650 AD or 18 years after his death. With the advent of writing, c. 3500 BC, many stories were written down by others, several years after the death of the teacher, to suit the writers' purposes and the status of their societies at that time. These purposes certainly included maintaining power

and control over individuals for personal gain. As an example, Muslim historians writing about 7th Century Arabia were actually representing societies in 9th Century Damascus and 11th Century Baghdad.

As individuals became more literate the kings and rulers found they were able to control people's lives through the use of power, but were finding they could not control their minds. The rulers realized that the teachings of the sages provided a spiritual release for the masses which reduced the focus of injustice on their selves. The rulers therefore had to accept and share these teachings in order to retain their position of power.

The religious writings which we are most familiar with today instruct us that Man took his lead from God. After all, what is more natural than to assign an invisible dimension in order to justify the visible one? Today's understanding of philosophy teaches us that Man began by walking and talking with the gods, then he moved on to communicating through intermediaries, such as prophets and oracles, and then gradually he lost his personal contact with God and finally reached a point where he lost his god-identity and accepted control over his life by other men. At this point he found it necessary to record his beliefs.

Today there are dozens of different religions in the world and many times that number of sects. Having studied many of these religious writings I have concluded that a common basis applies to all religions and that is; Man's desire for oneness with Creation. Even though there appears to be a common basis to all religions, Man, down through the ages has secularized his religious beliefs and has come to accept the fact that his personal sect and beliefs are the only true means to happiness and salvation. Some believe that happiness is a state of mind and can be found in everyday life. Others believe that happiness can only be found through salvation in some afterlife while others believe there is no salvation for those who do not live a just life on this earth. Each philosophy has its own distinctive teachings. On the surface these religions appear to be different, yet under close scrutiny they teach the same basics, and that is, to provide mankind with a path which will lead to a oneness with Creation. While the religions teach the same basics, understanding is lost in practice.

Modern western religions teach a doctrine based upon good and evil, love your fellow man and praise God who is the source of all religious beliefs and the reason for their being, whereas for example, Yoga, as related in the Upanishads, teaches the psychological linking of the mind to the supernatural principle, "by which the mind knows". In yoga what is linked is the self to itself, consciousness to consciousness; whereas in western religions what is linked are God and man,

which on the surface does not appear to be the same. Under close scrutiny they are not so different. The chief difference among the four leading religions of Christianity, Brahmanism/Hinduism, Buddhism and Islam is between the doctrines of Resurrection and Reincarnation. While Christianity and Islam teach of a single existence ending with death the Brahmanists/Hindus and Buddhists teach that death is an initiation into another form of life.

Yoga is derived from the Sanskrit verbal root 'yuj', "to link, join or unite". The term "religion" comes from the Latin "religio", to link back, or bind. In sense, these two terms are analogous. Religion refers to a linking historically, conditioned by ways of a covenant, sacrament, or Quran. Religion, in fact, is a man-made institution formed in relatively recent times in order to provide a historical as well as a spiritual linkage to what we have termed God, Allah, Buddha, etc.

Ancient man was a believer in some form of spirituality which actually formed the original basis from which modern day religions derive their teachings. How then does spirituality differ from religion and what has been the impact on mankind as a result of adopting his religions? I believe that spirituality was understood and accepted by ancient civilizations. It has only been recently (i.e., last 3,000 years) that religions have lost the ancient peoples understanding of spirituality and have replaced it with religious dogma which promotes an acceptance of spirituality on the basis of faith and fear. In modern day religions, spirit has taken the form of man in an ethereal sense. I propose that the ancients understood the concept of spirit as states of consciousness. Unfortunately there is little written evidence that discusses the concept of spirituality or relates Man's involvement or understanding of the term 'religion'.

Today there are sentiments that God is dead. There are movements using clichés, such as, "you must be born again"; people go on pilgrimages to seek masters who can provide the true meaning of life; and there are those who use meditation to seek their inward peace, harmony and happiness. Are these diverse approaches a result of a society with too many choices and no direction, or are they different forms which are representative of a "new age" in the making? If so, what will this new age contribute to the evolution of mankind and is it necessary at this time in history?

In Chapter 3, I introduced the term "Genesis-man" to describe mankind during his step-change from a bicameral thinker to a conscious thinker. Could we be at such a point today with a new form evolving which we could term "Enlightened-man"?

Man may again be faced with the need for another step-change in development, or run the risk of self-destruction for both himself and the planet we all share.

As the Genesis Model suggests, man through his Divine Consciousness had the ability to communicate with the Universal Consciousness which in effect would provide him with a means to influence his earthly reality. Could we be reacquiring this understanding of the concept of enlightenment once practiced by ancient civilizations and then forgotten c. 1500 BC?

In his book, "The Meaning of the Dead Sea Scrolls¹⁶", Davis discusses the effects of the scrolls on Christian Origins. Davis makes the point that mankind has been misled down through the ages by the actions of a few individuals. I propose this would include individuals and groups such as Usher, Buffoon, and the Catholic Church Council of Nicea, just to mention a few. What they have all done is to take the basic premise of mans oneness with Creation and use it to their own ends for control of the masses. There is just enough truth in modern religious teachings, and just enough fear instilled in those who might question these teachings, that without conscious criticism of what is being taught the whole body of teaching is accepted.

The past actions of modern day churches could fall into descriptive categories such as: the good, the bad, and the ugly. Churches have strayed from what the ancients understood as the ultimate source of 'All That Is/Universal Consciousness' to an oversimplification of a man-like God. This concept may be easier for man to comprehend; however, his understanding of his spirituality has been compromised and misdirected.

It is easier to assign responsibility for our lives to something greater than ourselves and then wait faithfully until some point in time that this greater something corrects all the miseries we have brought upon ourselves. The churches of western civilizations, in particular, have performed a great disservice to mankind by teaching that God is responsible for all that is, man has screwed it up, and Christ will return in His stead to make it all right.

The church must get away from the notion of God as a being (i.e., Man-like) and that Christ (also a man) will return to establish a kingdom on earth which will be a physical paradise. If we are to survive, then the role of the church must change to reflect a oneness with Creation (Universal Consciousness) for all, and not just for their select followers.

THE GOOD

Churches have a great number of “good” teachings which are consistent with and support the development of consciousness. Teaching of what is ‘good’ supports the development of a synergistic society. With a positive reinforcement by an Enlightened Consciousness mankind might achieve what the churches have promised.

The use of prayer is the means by which mans Subjective Consciousness seeks guidance from a higher consciousness. In reality, all experiences are the reaction of the subconscious mind to the thoughts of the Subjective Consciousness. We consciously formulate thoughts and let our subconscious work them out. This we refer to as, prayer. A man with a Subjective Consciousness does not have to wait for the subconscious to give a revelation, as did bicameral man, he can direct it to do what he desires and the subconscious will make it happen. If the church taught the concept of consciousness rather than God/Christ as a man-like entity, people would not try to set blame or seek understanding from outside themselves. Rather, they would look within to the Universal Consciousness and find understanding.

As can be seen from this writing the concept of consciousness goes back to creation. It was recognized by our ancestors and referred to in our most accepted texts. In the Gnostic Gospel according to Thomas¹², it is written: “The kingdom is inside you and it is outside you.” The version written in the Book of Isha in the Upanishads⁷ states: “It is within all and it is without all”. They recognized that God was not a separate entity to which one praised, worshipped and feared; but an integral part of all consciousness.

THE BAD

In the founding of Christianity, there is just enough historical truth mixed with ethical teachings and the desire of the masses for a oneness with Creation, that the Roman Church was able to invent a religion and sell it to the masses. A decision, that "Christ" was the Savior God, was formalized by the Roman Church with a majority vote at the Council of Nicea in 325 AD.

With the destruction of Jerusalem by the Romans in 70 AD, almost all documentary evidence of early Christianity was destroyed. The earliest post-

destruction Jewish writing called the Mishnah dates from 200 AD. Only Paul's letters and perhaps the gospel of Mark were written before the destruction. Much of the early understanding of the beginning of Christianity comes to us today from decisions made by the Roman Church during the Council of Nicea. Since there was no other written evidence to the contrary the teachings of the church became Gospel. In other words, there are no writings of early Christianity that have not been filtered through the bias of later church leaders until the discovery of the texts at Qumran.

While many of the texts found at Qumran are identical to the books placed in the Bible, more than half the texts provide new information as they were unknown to modern biblical and Jewish scholars. As an example: the difference of opinion between the followers of Paul and the followers of James has been lost until the discovery of the Qumran texts. The Roman Church took on the opinions of Paul and ignored those of James who intended for their sect to remain Jewish. Christian writings have been purged of this opposing view.

The traditional view of the founding of Christianity, taken by the typical Christian layman, is that Jesus preached his gospel; died as Messiah and Redeemer; arose from the dead and provided the basis for the founding of the Christian Church which spread throughout the world, beginning with the work of the apostles. The layman assumes Christian doctrine to have originated with, or at the time of Christ. In reality, much of it existed previously and is indebted to sources that do not appear in the Bible. What the layman does not know, and the scholar does, is that there were many individuals during the time of Jesus and afterwards for whom quite similar claims were made and in whose names were preached quite similar doctrines. The view eventually taken of Jesus as a Redeemer was not a Judaic concept; nor was it held by the first Christians in Palestine.

At the time of Jesus Christ all of the mystery cults of the Eastern Mediterranean were cults of death and resurrection. The Messiah, that the Jews and the Judaic Christians expected, was not the Son of God but a messenger of God. The Judaic Christians were not thinking of a salvation that admitted them to heaven, but of a salvation which would establish a new order on Earth.

It was when Christianity spread out into what was termed at that time the Pagan world, the idea of Jesus as a Savior God emerged. This idea was patterned on mythologies already existing, especially upon Mithras. It was the birthday of Mithras, the 25th of December, which was taken over by the Pagan Christians to be the birthday of Jesus. By 386 AD, church leaders established the celebration of "Christ Mass" (Christ's Coming), so that Christians could join in the Roman

festival celebrating Mithras without bending to paganism. Many of the Christian sacraments, such as the Last Supper, came from Mithras cults. Not only ethical teachings but cultist concepts too were absorbed from the cults which entered Christianity.

The extent of the indebtedness of Christianity to early religious beliefs is so great that very little need have been supplied by Palestinian Christians. It must be remembered that after the earliest days little was said of Jesus the teacher. It was Christ the Savior who was Lord of the Christians. And whether it had been he or Mithras would have made very little difference in the redemptionist doctrines, the sacraments, and the observances of the church.

A number of the teachings of the church are detrimental to the development of consciousness. The excuse used to cover what the church can not explain is termed "Faith". Faith is, in a sense, accepting as truth what your senses and reason deny. By requiring that people accept through Faith what they do not understand removes the need to explore the unknown, therefore, people never reach a point of true understanding. This understanding is a must if mankind is to truly develop and achieve an enlightened state of consciousness (i.e., oneness with Creation).

Another teaching uses the excuse to cover the act of death which is termed "Heaven". Heaven, as the church would have you believe, is a place where souls in recognizable bodily form congregate to celebrate and praise God. Since mans greatest fear is that of death, the churches have sought fit to assure mankind that man transcends death. This is yet another form of control. Heaven is rather a divine state of consciousness within. The understanding and acceptance that there is a divine consciousness within when melded with the subjective consciousness of man will yield an enlightened man which could be Mans answer to his desire for everlasting existence. This is a state of consciousness which must be sought out, not something which comes automatically as a result of dying and having lived a good life.

Much has been written regarding the fall of the Roman Empire and its significance as to the history and future of the Christian religion. The Catholic Church has used this event in order to set its importance in history by claiming the fall of the pagan Romans was due in large part by the presence of Gods chosen people, the Christians. The Roman Empire did not fall as the result of good (Christians) over evil (Romans) but, in fact, was moved from its seat in Rome to a new seat of power in Constantinople in 331 AD. At this time the Western Roman Empire was in ruins and the Eastern Empire in Constantinople was trying to

transition to Christianity as a de facto state religion. The new Roman Empire or what became the Byzantine Empire lasted through the death of Justinian in 565 AD and for another thousand years.

There are a few modern day theologians/writers who have attempted to develop a scenario which ties the biblical figures Saul and David to the timeframe of the Egyptian pharaohs Amenhotep III and Akhnaton of the 18th Dynasty. It is known that these pharaohs were the rulers of Egypt during what has been called the Amarna Period so named because of the 350 tablets found at el Amarna the site of the remains of the ancient city of Akhnaton built by Akhnaton. The theologians/writers base the relationships of these individuals in part on the information on the tablets written by the ruler Labayu of Shechem. There are also a number of tablets from rulers of surrounding areas which complain to Pharaoh of Labayu's troublesome activities towards them. Other tablets written by Labayu deny the stories offered by the other kings and try to justify his own behavior. The theologians writing today cite the similarities of the biblical stories of Saul and the activities of Labayu, the fighting with the Philistines, and the mention of the Khabiru people as part of the justification for tying the two names together.

On tablet EA 288 the Jebusite King of Jerusalem, Abdi Heba, tells Pharaoh that his city and all the cities around him have been plundered and seized. The theologians/writers cite this as the seizure of Jerusalem by King David. They further use the records which document the occurrence of a solar eclipse to set the date for the Amarna Period at 1012 BC in order to correlate the Egyptian Pharaohs with the biblical figures.

If their theory is to be correct, the reigns of Amenhotep III and Akhnaton would have had to have occurred 350 years later than the dates offered by the conventional chronology (Table B-6). What makes this difficult is the dates of the Egyptian Pharaohs are tied to their contemporaries in Assyria and Babylon as shown in Table B-3. If the Egyptian dates are to be moved then the Assyrian and Babylonian dates would also have to be reduced. Since many of these dates are firm, what the Theologians/writers are suggesting becomes impossible.

Another way to look at the Amarna tablets is to consider what is written in the Old Testament Book of Judges. This book covers a period of approximately 335 years prior to the time of Saul and is coincident with the time of Amenhotep III and Akhnaton according to conventional chronology. The Book of Judges describes the Hebrews as disobedient and idolatrous people who carry on wars throughout the region just as described by the Amarna tablets. Also described in the Book of Judges is the rule of Jerusalem by Jebusites and makes mention of their

coexistence with the sons of Benjamin who are already in Jerusalem. Abdi Heba's letter could be referring to any number of people plundering his city over this tumultuous period.

Setting a date for the Amarna Period at 1012 BC using a solar eclipse is risky business. Since total eclipses of the Sun occur at the same place, on average, every 360 years, another date c. 1372 BC can also be arrived at. This date is during the reign of Akhnaton (1377-1356 BC) according to conventional chronology. Therefore there is no need to align the Egyptian dates with those of Saul and David.

The Muslim religion, not unlike the other major religions, has undergone a tumultuous history. The term 'Muslim', meaning "those who submit" to God, was likely not coined until after the death of the Prophet Muhammad in 632 AD. Today there are over 1 billion Muslims worldwide comprising of the mainstream Sunnis, an orthodox movement; two major sectarian movements, called Shi'ism and Sufism; and several sects. This is a major change from the time the Prophet and his followers envisioned their movement in Medina.

Because Muhammad did not specify any heir, the Ummah/followers fell into disarray. A schism in leadership between the Quraysh Tribe and the ahl al-bayt (People of the House of the Prophet) and bickering between other tribes and their clans ensued. The main point of contention was the Prophethood and the Caliphate should not reside within the same clan. The title Caliph was settled upon to represent the sectarian leadership. The Caliphate's primary responsibility was to maintain unity and stability of the Ummah. It was to be a civil institution and not a religious one. Some tribes openly rebelled and refused to pay allegiance or taxes to the tribe of Muhammad. They were brought back in line through open warfare. Ali, Muhammad's cousin and brother-in-law became the fourth leader, taking the title Amir rather than Caliph, after Muhammad's death. This was an attempt to restore leadership to the family of the Prophet. Ali's followers who would ultimately become the Shi'ites wanted the tribal system established by Muhammad to remain in tact as a divinely inspired community. Ali was shortly assassinated by members of the Khazraj Tribe who insisted on a literal following of Muhammad and the words of the Quran. Anyone who did not subscribe to their wishes was not to be considered a Muslim.

Ali was replaced by Mu'awiyah who had ambitions to expand the tribal Ummah into an empire. He moved the Caliphate from Kufa to Damascus establishing the Umayyad Dynasty. A series of dynasties followed. Persian converts to Islam greatly outnumbered the Arabs. As a result they moved the seat of power to

Baghdad establishing the Abassid Dynasty and massacring all the Umayya they could find. Other rivalries followed including the Buyids of Iran, the Fatimids of Egypt, the remaining Umayya of Spain, and the Ottomans of Turkey. The Caliphate came to an end after WW I.

While Muslim dynasties, Kings, and Parliaments have fought and failed over the 1400 year history, the Ulama have managed to retrain their position of power in controlling the religious, political, legal, and social foundations of the religion. The Ulama, formed from the time of Caliph Abu Bakr in 632 AD, have been responsible for some of the biggest problems leading to the misunderstanding of Islam. In their self-appointed role as the guardians of Islam they stifled independent thought and scientific progress throughout the Muslim world. The Ulama exert direct legal and political control over the populations and schools (Madrassas) in Iran, Saudi Arabia and Nigeria. They are responsible for the oppressive totalitarian regimes like the Taliban in Afghanistan, the Wahhabists in Saudi Arabia, and the Faqih in Iran. Muhammad's original concept of protecting his followers, preservation of the family, unity, and acceptance of plural religions has been perhaps fatally changed through the actions of the Ulama/Clerics.

I believe what the modern day theologians/writers are attempting to accomplish is to rewrite history in a manner which would give more credibility to their beliefs, much like their predecessors did at the Council of Nicea, c. 325 AD and the Council at Chalcedon in 451 AD.

THE UGLY

Unfortunately, the teachings which are categorized as "ugly" far outweigh those of the "good". In fact, modern churches have been responsible for the majority of mankind's incalculable misery over the past 2,000 years. Throughout history they have been the greatest impediment to the development of an enlightened consciousness and as such may today be one of the greatest reasons for its coming.

The failures of religions to support the understanding of consciousness go back at least as far as the time when the Egyptians worshipped their man-kings. This form of worshipping, in effect, directed the focus of the individual away from his consciousness within to a focus on his physical self. More recently, religions/churches have expanded this posture. As an example, the Catholic Church, at the Council of Nicea (325 AD), put a twist on the worshipping of man-kings. They worshipped the man Christ; and by a majority vote gave him godly

attributes as the Savior God. The Roman emperor Constantine, in an attempt to counter Arianism, convened the Council of Nicea in 325 AD. Arianism taught that God created everything including Jesus and therefore, Jesus was not himself God, but rather a messiah. Later in 451 AD the Council held at Chalcedon declared that God was a Trinity consisting of Father, son, and spirit. This was a term coined by one of the church fathers, Tertullian of Carthage, but which was not widely adopted by early Christian communities. Anyone, including Gnostics and Arians, who disputed this in any way was declared a heretic or heathen. Through this action the papal authorities deliberately obscured the history of the church in order to secure their own power and prominence. The actions of the Church in the persecution of the Cathars, the assassination of the Merovingian King Dagobert, and the suppression of the Knights Templars were efforts to eradicate Jesus' bloodline which would have constituted a rival church with a more direct link to Jesus than the Vatican could ever claim. This church, in the name of Christ, began the most ungodly trek through history that mankind has ever experienced. The church supported and carried out numerous religious wars, known as the crusades, which sent Christian against Jew, Christian against Muslim, and Christian against Christian. This culminated in western man being plummeted into the Dark Ages where the Catholic Church in 1229 AD forbid reading of the Bible by laymen and carried out book burning (1501 AD), torture during the churches' Reign of Terror (1252 AD) and persecutions of any who would question its authority. With this authority came great wealth from extortion of the masses. With wealth came power, and the church facilitated chaos through its support or withdrawal of support of kings and governments. The Roman Church exercised its authority until approximately 1500 AD when the Reformation presented an open Bible to the people. This could be considered a Holy War within the Christian faith.

Again, in the name of Christ, the Catholic Church supported conquest of the Americas and in 1519 AD under the leadership of Cortez; they completely destroyed the Aztec civilization. Again in 1532 AD under the leadership of Pizarro, the Spanish conquered the Incas of Peru also completely destroying their civilization. The Catholic Bishops destroyed some of the greatest scientific creations that the human mind has ever achieved as well as the destruction of the records containing hundreds of years of astronomical research. Anything counter to church doctrine was trashed, destroyed, and eliminated from history.

Until 1493 AD the Catholic Church considered the American Indians as not being human. It took the Papal Bull of Pope Alexander VI in 1493 AD to proclaim that the Indians were "people well disposed to embrace the Christian faith." Today we know that the origins of the American Indians go as far back as 10-20000 BC and

perhaps much earlier. They may just be one of the oldest races on Earth. The destruction of the various Indian nations in North America is the result of the colonist's greed for profit and their feelings of religious superiority over the native Indians. This was true, in part, because of the church's position that the Indians did not possess a soul. The colonists also saw fit to grab the Indian lands whenever they wanted to expand their farms. In several of these land-grab cases the Indians rebelled, resulting in the killing of several of the colonists. Killing was not a one-sided affair. Responding to a Powhatan attack on the colonists, the English mounted a raid on a Powhatan village in Virginia, totally exterminating the inhabitants. Men, women and children were slain without quarter.

The Anglican Puritans of the Massachusetts Bay Colony, in an unprovoked attack, massacred a village of the Pequots. The Colonial settlements of Connecticut and Plymouth joined in the ensuing war, attacking a Pequot village of 600 inhabitants. They burned the village then slaughtered and burned the inhabitants. It has been reported that the colonists rejoiced and gave praise to God for their success. In other raids the Indian men were killed, their boys sold into slavery in the West Indies, and their women became slaves of the colonists.

With the exception of a few of the colonist clergy, nothing was done by the Old World church leaderships to intercede in the brutal slaughter of these indigenous people, nor did they offer support when during 1616 - 1619 the Indians were dying by the thousands from diseases introduced by the colonists. In fact, one story relates that the churchly colonists exulted over the epidemic which cleared the savages from the path of the Chosen People (i.e., Puritans).

Two of the great leaders of the Catholic Church independently decided that they needed to develop a date for the creation of the Earth which would be in accordance with the teachings of the Bible. The first was Archbishop Ussher whose premise was that Genesis was a historical accounting of creation. The second leader was Comte Buffon whose legacy to mankind was to strengthen Ussher's analysis. His different estimate of the age of the earth was a personal goal to satisfy his ego, yet the impact on mankind was such that it did not improve our situation. By placing a date on Creation in the name of the Church, they inadvertently placed a misleading proposition on the people who fervently adhered to the premise. It has only been during the last two centuries, over a great deal of argument, that this has been dismissed.

The Catholic Church supported a group called the Knights Templars which was sanctioned by the pope in 1128 AD. They sanctioned this group to operate in Jerusalem and obtain information and objects that the Church thought were

secreted under the Temple Mount. When the Templars became too powerful, the church turned on them and they were destroyed. King Philip of France, in cahoots with Pope Clement V issued Bull (*Pastoralis praeeminentiae*), November 22, 1307 AD which ordered the arrest of the Templars throughout the Christian world. Once they had served their purpose, the Church destroyed them.

The beginning of Islam is generally defined as the time Muhammad moved to the area of Yathrib which is now the city of Medina, meaning "The City of the Prophet", c. 619 AD. Muhammad preached that all people were created equal and that there was only one god who spoke through Muhammad. Muhammad preached that God was to be worshipped, not Muhammad. The Islam religion was written down in the Quran c. 600 AD to ensure it would not be corrupted and to provide ethical and social guidance. The Quran was to add scripture to support both the Old and New Testaments. Muhammad's message was an attempt to reform the existing religious beliefs and cultural practices of pre-Islamic Arabia by bringing the God of the Jews and Christians to the Arab people.

Islam grew spreading from the Saudi Arabian Peninsula in all directions. This early growth is what the Muslims call the "First" great Jihad. The "Second great Jihad" came with the Ottoman Turks. This empire succeeded in bringing about the downfall of Constantinople as a Christian stronghold and an end to the Roman Empire. By 1683 the Ottomans had suffered a series of defeats and Islam shrunk into various sheikhdoms and roving tribes. This set the stage for a new revival known as Wahhabism. The Wahhabi extremists, in the name of Allah, have carried out to this day atrocities against anyone not belonging to their sect. Many individuals of the illiterate Muslim populace are being fed false interpretations of the Quran by their extremist religious leaders. These leaders undoubtedly believe what they are preaching, however, if they are ignorant as I suspect, then they are incapable of providing correct religious guidance to their followers. The general populace may not have their own copies of the Quran to verify the teachings for themselves or they are illiterate and can't read it if they had copies. What is going on in the Muslim world is not unlike what went on in the Christian world during the period that led to the Dark Ages and Reign of Terror. During the period comprising the Dark Ages, the kings

and leaders of the European countries of England, Scandinavia, Switzerland and Germany sided with the religious extremists of the Roman Church. Together they maintained power over their constituents.

By maintaining a level of hate and discontent the churches have been able to maintain their power and restrict the development of enlightenment which, by the way, they all profess to be championing.

Today the Catholic Church, Islamic Fundamentalists and thousands of other sects and religions still wield great control over the masses through the use of fear and power. By convincing people that their religion has the power to absolve sin they are able to exert control over the masses. Modern religions have been the greatest proponent of bigotry the world has ever seen. Many churches condemn people because of the color of their skin, sex, sexual preference, sect and church membership. There is clearly no understanding by the church leadership of the meaning of synergy or the state of Enlightened Consciousness.

Today's religions must actively change what they teach and they must practice in reality what they preach in theory. Acceptance of, or just understanding, the Genesis Model may be a step in the right direction.

TABLE 11-1 – GODS THROUGHOUT THE AGES

ATTRIBUTES OF GODS	Pre-Dynastic (32,000-3,500BC) EGYPTIAN CIRCA 3200-1100 BC	SUMERIAN CIRCA 4000- 3000 BC	AKKADIAN (2400BC) BABYLONIAN (1900- 500 BC) ASSYRIAN (1200 BC)	CANAAN, UGARITIC	JUDEAN CIRCA 1300-1200 BC	GREEKS CIRCA 1000 BC	ARAB & MUSLIMS CIRCA 637 BC
ORIGIN	Sirius system	Nibiru	Nibiru		Yahweh		
FORM	Amphibious (Oannes)	Amphibious (Enki)	Amphibious (Nommo, Oannes, Dagon)		Man (Jehovah, Yahweh)	Amphibious (Demeter)	Man (Allah)
CHIEF GODS	Ra, Isis, Amon Osiris, Ptah, Anpu (Dog)	Antu (1/2 sister), Anu /Enlil	Ea/Enki, Marduk, Ashur	El, Baal	Yahweh	Jupiter, Athena, Zeus	Allah
WISDOM	Re, Ra, Troth	Enki	Ea, Oannes		Dagon	Athena	
HEAVEN	Nu, Nut, An	An	Anu, Ishtar/Irnini			Cronos	
EARTH	Geb, Isis	Ki/Enki Gulu- Earthmother	Ea, Kisher			Geia	
SUN	Ra, Atum-Re, Aton	Utu/Shamash	Shamash Marduk, Ashur	Shapash		Helios, Apollo	
SUN (Power to revolve)	Horus/Heru						
MOON	Khonsu, Troth	Nanna	Sin	Yarikh		Phoebe	Hubal
SKY/STARS	Nut, Horus	Enlil	Anshur			Zeus, Uranus	Allah
AIR/ORGANIC UNIVERSE	Shu	Enlil/Tammuz			Rimmon	Venus	

TABLE 11-1 (Continued)**GODS THROUGHOUT THE AGES**

ATTRIBUTES OF GODS	Pre-Dynastic (32,000-3,500BC) EGYPTIAN CIRCA 3200-1100 BC	SUMERIAN CIRCA 4000- 3000 BC	AKKADIAN (2400BC) BABYLONIAN (1900-500 BC) ASSYRIAN (1200 BC)	CANAAN, UGARITIC	JUDEAN CIRCA 1300-1200 BC	GREEKS CIRCA 1000 BC	ARAB & MUSLIMS CIRCA 637 BC
PLANET MARS		Ninurta	Nergal		Nereghal		
PLANET MERCURY		Adad/Ishkur					
PLANET VENUS		Inanna	Ishtar		Tamar	Aphrodite	
OCEANS (MOTHER OF GODS,HEAVEN & EARTH)	Nun	Nammu,Gulu	Enki, Ea, Tiamat (Female)	Yam-Nahar, Asherah		Neptune	
FRESH WATER	Tefnut		Ea, Apsu (Male)			Saturn	
HUNTING, WEAVING	Tutu						
SHEPHARD/ CATTLE		Dumuzi, Lahar				Demeter	
LOVE & WAR	Isis, Hathor	Ishtar	Ishtar	Yatpan		Aphrodite, Ares, Athena	al-Uzza, Isaf & Na'ila
MEDICINE	Ptah			Shataqat		Hephaestus, Asclepius	
LAW GIVING						Demeter, Isis	

TABLE 11-1 (Continued)

GODS THROUGHOUT THE AGES

ATTRIBUTES OF GODS	Pre-Dynastic (32,000-3,500BC) EGYPTIAN CIRCA 3200-1100BC	SUMERIAN CIRCA 4000- 3000 BC	AKKADIAN (2400BC) BABYLONIAN (1900-500 BC) ASSYRIAN (1200 BC)	CANAAN, UGARITIC	JUDEAN CIRCA 1300-1200 BC	GREEKS CIRCA 1000 BC	MUSLIMS CIRCA 637 BC
BIRTH/ Fertility	Horus, Min	Ninmah, Nintu, Ninhursag		Baal		Hera	
DEATH	Osiris			Mot		Hecate	
CEMETARIES	Sokar						
NETHERWORLD	Osiris, Troth	Neti	Nergal		Satan		
SCIENCES STAR SIRIUS A (Dog Star also Bow star)	Troth Isis, Ast, Sothis Anubis, Anpu	Ningishzida Anu, Bau		Kothar (craftsman)		Hermes Cyon	
STAR SIRIUS B (White Dwarf) (2-watery planets)	Anukis, Osiris Nephthys						
STAR SIRIUS C	Satis						
TIME/CIRCLE	Anubis						
CONSTELLATION OF ORION	Osiris, Asar, An (pre 2800BC)	Ninurta					

TABLE 11-1 (Continued)
GODS THROUGHOUT THE AGES

ATTRIBUTES OF GODS	Pre-Dynastic (32,000-3,500BC) EGYPTIAN CIRCA 3200-1100BC	SUMERIAN CIRCA 4000- 3000 BC	AKKADIAN (2400BC) BABYLONIAN (1900-500 BC) ASSYRIAN (1200 BC)	CANAAN, UGARITIC	JUDEAN CIRCA 1300-1200 BC	GREEKS CIRCA 1000 BC	ARAB & MUSLIMS CIRCA 637 BC
GODS ASSOCIATED WITH SPECIFIC CITIES	Ptah –Memphis, Amon-Re – Thebes	Enlil-Nippur, Enlil-Sumer Anu-Erech	Nanna/Sin-Ur, Marduk-Babylon Anu-Erech Ea-Eridu				Allat/Ta'if, al-Uzza/Nakhlah Manat/Qudayd,
OTHER GODS	Typhon (heat) Osiris (humidity) Tefnut (fire) Seth (destruction)	Ereshkigal-sister to Inanna, Ninshubur-viser to Inanna, Ninlil/Ishtar Ashnan,or Asaru- grain goddess	Papsukkal-viser to Gods, Tammuz- Istars brother/lover, Ashur, Adapa	Hadad-lightning and thunder, Baal – fertility		Bacus (wine) Adonis (fruits)	al-Kutba-writing Allat, Manat-fate
HEROS OF THE DELUGE		Ziusudra (King)	Utnapishtim, Atrahisis Sargon 2400 BC		Noah	Deukalion	
CONTEMPORARY MEN	Menes -3000 BC, Imhotep-2600BC, Seti I-1303- 1290BC, Ramses II-1301- 1234 BC, Ramses IV – 1158-1152BC		Abraham- 1996 BC Hammurabi 1792-1750, Gilgamesh, Shalmaneser I, Ashurbanipal		King Saul 1043 -1010 BC	Herodotus-5 th Cent BC, Pindar – (518-438BC) Pythagoras-580- 500 BC	

TABLE 11-2 List of Catholic Popes

1. St. Peter (32 – 67)	43. St. Celestine I (422 – 432)
2. St. Linus (67 – 76)	44. St. Sixtus III (432 – 440)
3. St. Anacletus (Cletus) (76 – 88)	45. St. Leo I (the Great) (440 – 461)
4. St. Clement I (88 – 97)	46. St. Hilarius (461 – 468)
5. St. Evaristus (97 – 105)	47. St. Simplicius (468 – 483)
6. St. Alexander I (105 -115)	48. St. Felix III (II) (483 – 492)
7. St. Sixtus I (115 – 125)	49. St. Gelasius I (492-496)
8. St. Telesphorus (125 – 136)	50. Anastasius II (496-498)
9. St. Hyginus (136 – 140)	51. St. Symmachus (498-514)
10. St. Pius I (140 – 155)	52. St. Hormisdas (514-523)
11. St. Anicetus (155 – 166)	53. St. John I (523-526)
12. St. Soter (166 – 175)	54. St. Felix IV (III) (526 – 530)
13. St. Eleutherius (175 – 189)	55. Boniface II (530-532)
14. St. Victor I (189 – 199)	56. John II (533-535)
15. St. Zephyrinus (199 – 217)	57. St. Agapetus I (535-536) – also called Agapitus I
16. St. Callistus I (217 – 222)	58. St. Silverius (536-537)
17. St. Urban I (222 – 230)	59. Vigilius (537-555)
18. St. Pontain (230 – 235)	60. Pelagius I (556-561)
19. St. Anterus (235 – 236)	61. John III (561-574)
20. St. Fabian (236 – 250)	62. Benedict I (575-579)
21. St. Cornelius (251 – 253)	63. Pelagius II (579-590)
22. St. Lucius I (253 – 254)	64. St. Gregory I (the Great) (590-604)
23. St. Stephen I (254 – 257)	65. Sabinian (604-606)
24. St. Sixtus II (257 – 258)	66. Boniface III (607)
25. St. Dionysius (260 – 268)	67. St. Boniface IV (608-615)
26. St. Felix I (269-274)	68. St. Deusdedit (Adeodatus I) (615-618)
27. St. Eutychian (275-283)	69. Boniface V (619-625)
28. St. Caius (283-296) – also called Gaius	70. Honorius I (625-638)
29. St. Marcellinus (296-304)	71. Severinus (640)
30. St. Marcellus I (308-309)	72. John IV (640-642)
31. St. Eusebius (309 or 310)	73. Theodore I (642 – 649)
32. St. Miltiades (311-314)	74. St. Martin I (649 – 655)
33. St. Sylvester I (314-335)	75. St. Eugene I (655 – 657)
34. St. Marcus (336)	76. St. Vitalian (657 – 672)
35. St. Julius I (337-352)	77. Adeodatus (II) (672 – 676)
36. Liberius (352-366)	78. Donus (676 – 678)
37. St. Damasus I (366 – 383)	79. St. Agatho (678 – 681)
38. St. Siricius (384 – 399)	
39. St. Anastasius I (399 – 401)	
40. St. Innocent I (401 – 417)	
41. St. Zosimus (417 – 418)	
42. St. Boniface I (418 – 422)	

TABLE 11-2 List of Catholic Popes (Continued)

80. St. Leo II (682-683)	123. John X (914-928)
81. St. Benedict II (684-685)	124. Leo VI (928)
82. John V (685-686)	125. Stephen VIII (929-931)
83. Conon (686-687)	126. John XI (931-935)
84. St. Sergius I (687-701)	127. Leo VII (936-939)
85. John VI (701-705)	128. Stephen IX (939-942)
86. John VII (705-707)	129. Marinus II (942-946)
87. Sisinnius (708)	130. Agapetus II (946-955)
88. Constantine (708-715)	131. John XII (955-963)
89. St. Gregory II (715-731)	132. Leo VIII (963-964)
90. St. Gregory III (731-741)	133. Benedict V (964)
91. St. Zachary (741-752)	134. John XIII (965-972)
92. Stephen II (752) – Because he died before being consecrated, some lists (including the Vatican's official list) omit him.	135. Benedict VI (973-974)
93. Stephen III (752-757)	136. Benedict VII (974-983)
94. St. Paul I (757-767)	137. John XIV (983-984)
95. Stephen IV (767-772)	138. John XV (985-996)
96. Adrian I (772-795)	139. Gregory V (996-999)
97. St. Leo III (795-816)	140. Sylvester II (999-1003)
98. Stephen V (816-817)	141. John XVII (1003)
99. St. Paschal I (817-824)	142. John XVIII (1003-1009)
100. Eugene II (824-827)	143. Sergius IV (1009-1012)
101. Valentine (827)	144. Benedict VIII (1012-1024)
102. Gregory IV (827 – 844)	145. John XIX (1024-1032)
103. Sergius II (844 – 847)	146. Benedict IX (1032-1045)
104. St. Leo IV (847 – 855)	147. Sylvester III (1045) – Considered by some to be an antipope
105. Benedict III (855 – 858)	148. Benedict IX (1045)
106. St. Nicholas I (the Great) (858 – 867)	149. Gregory VI (1045-1046)
107. Adrian II (867 – 872)	150. Clement II (1046-1047)
108. John VIII (872 – 882)	151. Benedict IX (1047-1048)
109. Marinus I (882-884)	152. Damasus II (1048)
110. St. Adrian III (884 – 885)	153. St. Leo IX (1049 – 1054)
111. Stephen VI (885 – 891)	154. Victor II (1055 – 1057)
112. Formosus (891-896)	155. Stephen X (1057 – 1058)
113. Boniface VI (896)	156. Nicholas II (1058 – 1061)
114. Stephen VII (896-897)	157. Alexander II (1061 – 1073)
115. Romanus (897)	158. St. Gregory VII (1073 – 1085)
116. Theodore II (897)	159. Blessed Victor III (1086-1087)
117. John IX (898-900)	
118. Benedict IV (900-903)	
119. Leo V (903)	
120. Sergius III (904-911)	
121. Anastasius III (911-913)	
122. Lando (913-914)	

TABLE 11-2 List of Catholic Popes (Continued)

160. Blessed Urban II (1088 – 1099)	190. Martin IV (1281-1285)
161. Paschal II (1099 – 1118)	191. Honorius IV (1285-1287)
162. Gelasius II (1118 – 1119)	192. Nicholas IV (1288-1292)
163. Callistus II (1119-1124)	193. St. Celestine V (1294)
164. Honorius II (1124-1130)	194. Boniface VIII (1294-1303)
165. Innocent II (1130-1143)	195. Blessed Benedict XI (1303-1304)
166. Celestine II (1143-1144)	196. Clement V (1305-1314)
167. Lucius II (1144-1145)	197. John XXII (1316-1334)
168. Blessed Eugene III (1145-1153)	198. Benedict XII (1334-1342)
169. Anastasius IV (1153-1154)	199. Clement VI (1342 – 1352)
170. Adrian IV (1154-1159)	200. Innocent VI (1352 – 1362)
171. Alexander III (1159-1181)	201. Blessed Urban V (1362 -1370)
172. Lucius III (1181-1185)	202. Gregory XI (1370 – 1378)
173. Urban III (1185-1187)	203. Urban VI (1378 – 1389)
174. Gregory VIII (1187)	204. Boniface IX (1389 – 1404)
175. Clement III (1187-1191)	205. Innocent VII (1404 – 1406)
176. Celestine III (1191-1198)	206. Gregory XII (1406 – 1415)
177. Innocent III (1198-1216)	207. Martin V (1417 – 1431)
178. Honorius III (1216-1227)	208. Eugene IV (1431 – 1447)
179. Gregory IX (1227-1241)	209. Nicholas V (1447 – 1455)
180. Celestine IV (1241)	210. Callistus III (1455 – 1458)
181. Innocent IV (1243-1254)	211. Pius II (1458-1464)
182. Alexander IV (1254-1261)	212. Paul II (1464-1471)
183. Urban IV (1261-1264)	213. Sixtus IV (1471-1484)
184. Clement IV (1265-1268)	214. Innocent VIII (1484-1492)
185. Blessed Gregory X (1271-1276)	215. Alexander VI (1492-1503)
186. Blessed Innocent V (1276)	216. Pius III (1503)
187. Adrian V (1276)	217. Julius II (1503-1513)
188. John XXI (1276-1277)	218. Leo X (1513-1521)
189. Nicholas III (1277-1280)	219. Adrian VI (1522-1523)

TABLE 11-2 Table of Catholic Popes (Continued)

220. Clement VII (1523-1534)	248. Benedict XIV (1740 – 1758)
221. Paul III (1534-1549)	249. Clement XIII (1758 – 1769)
222. Julius III (1550-1555)	250. Clement XIV (1769 – 1774)
223. Marcellus II (1555)	251. Pius VI (1775 – 1799)
224. Paul IV (1555-1559)	252. Pius VII (1800 – 1823)
225. Pius IV (1559-1565)	253. Leo XII (1823-1829)
226. St. Pius V (1566-1572)	254. Pius VIII (1829-1830)
227. Gregory XIII (1572-1585)	255. Gregory XVI (1831-1846)
228. Sixtus V (1585-1590)	256. Blessed Pius IX (1846-1878)
229. Urban VII (1590)	257. Leo XIII (1878-1903)
230. Gregory XIV (1590-1591)	258. St. Pius X (1903-1914)
231. Innocent IX (1591)	259. Benedict XV (1914-1922)
232. Clement VIII (1592-1605)	260. Pius XI (1922-1939)
233. Leo XI (1605)	261. Pius XII (1939-1958)
234. Paul V (1605-1621)	262. Blessed John XXIII (1958-1963)
235. Gregory XV (1621 – 1623)	263. Paul VI (1963-1978)
236. Urban VIII (1623 – 1644)	264. John Paul I (1978)
237. Innocent X (1644 – 1655)	265. John Paul II (1978-2005)
238. Alexander VII (1655 – 1667)	266. Benedict XVI (2005—)
239. Clement IX (1667 – 1669)	
240. Clement X (1670 – 1676)	
241. Blessed Innocent XI (1676 -1689)	
242. Alexander VIII (1689 – 1691)	
243. Innocent XII (1691 – 1700)	
244. Clement XI (1700 – 1721)	
245. Innocent XIII (1721 – 1724)	
246. Benedict XIII (1724 – 1730)	
247. Clement XII (1730 – 1740)	

TABLE 11-3 RISE OF ISLAM

<u>TRIBE</u>	<u>RELIGION</u>	<u>CLAN</u>	<u>INDIVIDUAL</u>	<u>EVENT</u>	<u>LOCATION</u>	<u>DATES</u>
Amir					Yemen	2 nd Century BC
	Jews				Arabian Peninsula	c. 586 BC
	Christians				Yemen Najran (city) Sana (city)	6 th Century AD
Ghassanids	Christian				Arab/Byzantine Empire border	
Lakhmids					Arab/Sassanian Empire (Iran) border	
Hanif	Hanifism		Zayd bin Amr Waraqa bin Nawfreturn Uthman bin Huwairith Ubayd Allah bin Jahsh	Made pact to return to the religion of Abraham	Hijaz (western Arabia), Ta'if (city), Yathrib (oasis), Mecca	
Quraysh		Abd Shams Abd Manaf			Hijaz, Mecca	2 nd Century AD
Quraysh		Banu Hashim	Muhammad	Born	Mecca	c. 570 AD
Quraysh		Makhzum			Mecca	
Banu Thalabah	Christian				Yathrib	c. 600 AD
Banu Hadl	Christian				Yathrib	c. 600 AD
BanuNadir	Jews				Yathrib	c. 600 AD
Banu Qugnuqa	Jews				Yathrib	c. 600 AD
Banu Qurayza	Jews				Yathrib	c. 600 AD
			Muhammad	Revelation	Mt. Hira	c. 610 AD
Aws	Arab	Ansr			Yathrib	
Khazraj	Arab	Ansr			Yathrib, Medina	c.622 AD
		Emigrants	Muhammad	Migration	Yathrib	c. 622 AD
		Ummah	Muhammad		Yathrib/Medina	c. 625 AD

TABLE 11-3 RISE OF ISLAM (Continued)

<u>TRIBE</u>	<u>RELIGION</u>	<u>CLAN</u>	<u>INDIVIDUAL</u>	<u>EVENT</u>	<u>LOCATION</u>	<u>DATES (AD)</u>
		Ummah	Muhammad	Enters Mecca & Destroys idols in Ka'ba	Mecca	c. 630
			Muhammad	Dies	Medina	c. 632
			Caliph Abu Bakr	1 st Caliph, Beginning of Ulama (scholars)	Medina	c. 632 – 634
			Caliph Umar	2 nd Caliph, Subdues Iran, Egypt, Libya, Jerusalem	Medina	c. 634 – 644
Quraysh			Caliph Uthman	3 rd Caliph,	Medina	c. 644 – 656
			Caliph Uthman	Quran written & canonized		c. 650
	Shi'ah	Banu Hashim	Caliph Ali, Cousin of Muhammad	Takes title of Amir rather than Caliph, 1 st Imam of Shi'ism	Medina	c. 656 – 661
			Aisha (wife of Muhammad) & Ali (cousin & son-in-law of Muhammad)	Islam's 1 st civil war over religious vs. political leadership	Mecca vs. Medina	
			Shi'atu Mu'awiyah	Moves leadership to Damascus, 1 st King, Establishes Empire	Damascus, Syria	c. 661 – 680
			Shi'atu Mu'awiyah	Becomes Caliph of Jerusalem		c. 660
		Banu Umayya		Umayyad Dynasty	Damascus	c. 661 -750
		Banu Hashim	Husayn ibn Ali,	Ali – 3 rd Imam, Grandson of Prophet	Medina	c. 669 – 680
			Umayyad Caliph Yazid I	Destroys Ali & followers, Burns Ka'ba, destroys Mecca/ Medina	Karbala Mecca, Medina	c. 680

TABLE 11-3 RISE OF ISLAM (Continued)

TRIBE	RELIGION	CLAN	INDIVIDUAL	EVENT	LOCATION	DATES (AD)
				Muslims take Iran		c. 682
		Kharijites		1 st Muslim extremists	Iran, Arabian Peninsula	
	Shi'ites		Kufa Penitents (tawwabun)	Restore leadership to Prophets' family	Karbala, Kufa	684
Banu Hashim			Ibn as-Zibayr	Revolts against Caliph	Medina	c. 685
			Caliph Abd al-Malik	Defeats Zibayr, restores Caliphate to Damascus	Mecca	c. 690
	Shi'ite		Ali Zayn al-Abadin	4 th Imam	Karbala, Damascus, Medina	680 – 712
	Shi'ite		Muhammad al-Baqir	5 th Imam	Medina	712 - ?
				Muslims take NW India, N Africa, Byzantine Empire		c. 732
	Shi'ite		Ja'far as-Sadiq	6 th Imam, Establishes Shi'ism School of Law	Medina	c. 732 – 757
				Abassid Dynasty, Massacre of Umayyads	Bagdad	750 – 850
	Shi'ite Seveners		Ismail	7 th & final Imam, followers called "Seveners"		c. 757
			Musa al-Kazim	Also 7 th Imam, followers called "Twelvers"		c. 757
			Caliph Abd al-Rahman III	Muslims take Spain, S France		c. 756

TABLE 11-3 RISE OF ISLAM (Continued)

TRIBE	RELIGION	CLAN	INDIVIDUAL	EVENT	LOCATION	DATES (AD)
				12 th Imam		c. 874
	Shi'ites		Aristocratic Iranians	Buyids control Abassids	Baghdad	932 – 1062
	Shi'ites			Fatimid Dynasty	Egypt, N Africa, Syria	969 – 1171
	Sunni			Ghaznavid Dynasty	NE Iran, N India Afghanistan	977 – 1186
			Pope Urban II	Begins Crusades		1095
				Mamluk Dynasty	Egypt, Syria	1250 – 1547
	Orthodox Sunni			Turks establish Sunni Dynasty, Ottoman Empire	Istanbul	1281 – 1924
	Twelver Shi'ism		Ismail	1 st Shah/King of Iran, Proclaimed self as “Mahdi”	Iran	1501
	Twelver Shi'ism		Ismail	Safavid Empire	Iran	1501 – 1725
				Mughal Dynasty	India	1526 – 1859
	Wahhabism		Shaykh Muhammad bin Saud	Beginning of Saudi Dynasty	Arabia	- 1765
	Wahhabism		Muhammad bin al Wahhab, Abdul Aziz bin Muhammad bin Saud (1765 -1803)	Founder of radical Islam. Destroyed Mecca, Medina, tombs of Prophet & followers	Arabia	1703 – 1792
	Wahhabism			Massacred Shi'ies & sacked Karbala	Karbala	1802
	Wahhabism		Abdulla bin Saud (1814 – 1818)	Ottomans regain Karbala & Wahhabis return to Eastern Arabia		1814
	Twelver Shi'ism			Qajar Dynasty		19 th Century

TABLE 11-3 RISE OF ISLAM (Continued)

<u>TRIBE</u>	<u>RELIGION</u>	<u>CLAN</u>	<u>INDIVIDUAL</u>	<u>EVENT</u>	<u>LOCATION</u>	<u>DATES (AD)</u>
	Wahhabism		Abd al-Aziz bin Saud 1880 – 1953	Saud retakes Mecca, Medina		c. 1915
	Sufi		Muhammad Abdu		Egypt	1845 – 1950
	Sufi		Hasan al-Banna	Founded Muslim Brotherhood	Egypt	1928
			Sayyid Qutb	Father of Islamic radicalism	Egypt	1906 – 1966
	Wahhabism		Abd al-Aziz bin Saud (1880 – 1953)	Kingdom of Saudi Arabia established	Saudi Arabia	1932
			Muhammad Reza Pahlavi	Pahlave Dynasty	Iran	1925 – 1979
	Shi'ite		Ayatollah Khomeini	Proclaimed himself Iran's 1 st Faqih; supreme temporal & religious authority	Iran	1902 – 1989
				Islamic Republic of Iran		1979
	Shi'ite		Shaykh Ibrahim al-Amin	Hizbullah founded	Lebanon, Iran	c. 1985
	Wahhabism			Muslim World League	Saudi Arabia	1962
			Abdullah Yusuf Azzam	Mentor to Osama bin Laden	Saudi Arabia	1941 – 1989
	Sunni Muslim Brotherhood		Sheikh Ahmed Yassin	Hamas founded	Palestine	1987
	Wahhabism		Osama bin Laden	Al-Qaeda founded	Saudi Arabia	1991

TABLE 11-4 SEMITIC TRIBES

<u>TRIBE</u>	<u>LOCATION</u>	<u>DATE</u>
Akkadians - Sargon	Northern Mesopotamia	2500 – 2350 BC
Amoritic Babylonians - Hammurabi	Sumer & Akkad	1850 BC 1700 BC
Amorites	Jericho	1450 BC
Canaanites	Syria & Palestine	
Phoenicians	Western Palestine	
Hebrews - David	Israel	1500 BC 1041 BC
Assyrians - Ashurbanipal	Babylon Southwest Asia	1100 BC 668 – 626 BC
Chaldaeans		625 – 550 BC
Aramaeans	Sinai to Syria	
Arabs -Muhammad (Islam)	Arabia	2 nd Century BC 622 AD

CHAPTER 12

PREDICTIONS

In the year 580 more or less,
There shall be a strange age,
In the year 703,
Many kingdoms, one to five shall be changed.

-Nostradamus
Century VI, Quatrain 2

To predict is to tell of a future event or events. It is in our nature to want to know what the future holds for us. There are those who believe that the outcome of a prediction/prophecy is inevitable and there are those who believe the outcome can be modified while there are others who don't believe in predictions/prophecy at all.

The source of prediction is attributed to the functions of the human consciousness and has typically been manifested in the forms of prophecy, dreams, hallucinations, and information received by psychics while in a trance-like state. For those who don't believe in prediction/prophecy they reason that what is being stated arose through the process of deductive reasoning by observing actual events and then drawing a correct conclusion. The idea that a given outcome only occurs because of prior events is called determinism.

If predictions were based on observation of actual events, then a means to observe worldwide phenomena or events which triggered this phenomena, by the ancient civilizations, would have been necessary. Our modern-day scholars indicate that this was not possible during these ancient times. This then leaves open the possibility of the existence of previous advanced technology civilizations that possessed this information and passed it on to succeeding generations. If ancient civilizations had witnessed and recorded events such as cataclysms and had the knowledge to understand their cause, they could possibly predict the next cataclysm.

Another possibility is that humans have a process involving the subconscious mind connected to a source of knowledge found in what has been described in Chapter 3 as the Divine Consciousness. Alternatively, it may be possible that a few select humans have remnants of the bicameral thought process and are able to hallucinate directly from the Universal Consciousness as is suggested in Chapter 3 for the bicameral thinker.

As Jaynes points out, prediction began to wane c. 1500 BC and virtually disappeared c. 300 BC. Herodotus describes the use of oracles and dreams by the Greeks, Assyrians, Babylonians and Persians throughout their histories down to at least 400 - 300 BC. While there are many skeptics as to the validity of precognition, the results of para-psychological experiments of human precognition indicate with fair certainty that psychic prediction is an existing human capacity.

The act of prophecy seems to be as old as civilization itself and has been found in writings from places around the world including:

<u>LOCATION</u>	<u>PROPHET TERM</u>
China	?
Tibet	Kuten
Egypt	Khahins
Arabia	Shamans
Syria	Nabi
Ancient Israel	Nabi
Greece	Oracles (Sibyls)
Peru	?
Norway	Voluspa
United States	Prophets

There are stories of hundreds if not thousands of profits and oracles throughout the world throughout recorded history. A Jewish tradition suggests there were 600,000 male and 600,000 female profits and the Talmud recognizes seven women profits. There are 25 profits recognized in the Muslim Qur'an, however, other writings mention that there were 124,000 profits throughout history beginning with Adam and ending with Muhammad.

The word oracle is derived from the Latin verb orare, to speak. The word prophet comes to us from a translation of "Prophetes" found in the Greek Septuagint. Pro means on behalf of and Phetes means speaking. Therefore, a prophet or prophetess is one who speaks on behalf of someone or something. In religious terms prophet is someone who acts as an intermediary between man and the divine. Prediction is to speak of some event which is to occur in the future as relayed from something (spiritual/unseen) through the prophet/speaker.

Classical Jewish texts teach that most forms of prophecy ended shortly after the destruction of the First Temple in 586 BC. The works in the Midrash and the Talmud state that lesser forms of prophecy still exist today. Some Christians believe that prophecy ended with Jesus while some believe it ended about 400 years earlier with the prophets in the Old Testament. As mentioned above the Muslims believe prophecy ended with Muhammad c. 632 AD. Within the modern-day Church of Jesus Christ of Latter-day Saints (Mormon), Joseph Smith is recognized as a prophet and in the Seventh-day Adventist Church Ellen White, a cofounder of the church, is also recognized as a modern-day prophet.

The writings of the ancients from around the world are replete with predictions of coming catastrophes. The mythologies of the ancient Mayan civilization describe five ages of creation each ending in the destruction of civilization. Modern-day scholars who study the Mayan civilization have calculated that the end of the fifth age will occur in our future during December 2012 AD. In the quatrain of Nostradamus cited above, the year 703 is the year 2028 AD assuming he was referring to the year 325 (Council of Nicea) as his zero reference.

What evidence exists to support the possibility that a catastrophic event will occur in our lifetime? The scientific discoveries pertaining to the alignments of our galaxy and the solar system, astronomical sightings of space debris by the Hubble telescope, and the timing of the previous catastrophes described by the Mayans in the Codex Vaticanus provide some credibility as to the possible occurrence of this destruction actually occurring. Given the potential source for an explosion within the galactic center as a trigger, the space debris located in the Kuiper Belt and Oort cloud, and the alignment of the plane of our solar system with that of the galactic plane during December 2012 provides incentive for us to consider the possibility of this future event. Further, the Earth passes through the Taurid stream/Encke comet debris field each year during the months of September through December thereby adding to the amount of debris which could potentially impact the earth and the sun during the month of December 2012. The solar flare maximum, which occurs approximately every 11 years, is also going to occur around December 2011-2012. This increases the potential for the debris drifting between the earth and the sun to take the form of a plasma-like substance when it comes in contact with the sun. This fire like plasma could then be transported by the solar winds to the earth resulting in destruction of catastrophic proportions. Stories of fire destroying mankind in the past are common to the mythologies of most civilizations. The Maya believed the Ages were cyclic in nature and took them seriously, as their attention to their calendars and special numbers will attest. Perhaps we should do the same!

Today, we are witnessing climate changes which could possibly be setting the stage for a cataclysmic event. The breakup of large portions of Antarctica, the severe melting of the Arctic ice mass, the occurrence of severe and frequent hurricanes, and the occurrence of record breaking rains and snowfalls are all precursors for an ice age. The impact of a comet along with these climactic conditions could certainly become the triggering event for an ice age to occur.

There is always the possibility that stories of cataclysms could have originated out of superstition. Their superstitions forced the Mesoamerican civilizations to focus on the motion of the heavenly bodies to help them predict the coming of the next great catastrophe which would end their Age. They possessed sophisticated calendars, as described in Appendix A, which they consulted regularly. There is no evidence or any claim by the Mesoamerican civilizations that they created these calendars. They lived according to a 52 year cycle because they thought

that at the end of one of these 52 year periods, time would stop and their world would end with a catastrophe. Had they had the knowledge as to the origin of this cycle, the 52 year period in which the world would end would not have been uncertain. They invented elaborate ceremonies to ward off this end date. This suggests the possible existence of an earlier civilization that would have been responsible for creating a reason for having such a cycle.

The Aztecs followed the ceremonies of their predecessors, but introduced their superstitious practices involving human sacrifice into their day-to-day life. While human sacrifice existed from ancient times, the Aztec brought the practice to new and fanatical heights. The paramount activity of these ceremonies was the killing, dismemberment and eating of hundreds or thousands of captives. This is not indicative of a civilization which possessed an understanding of the events they reported in their mythology. It is indicative of a civilization driven by fear, a lack of understanding of the world around them, and superstition. If their mythologies are based on superstition then the durations and sequences have no real meaning and the myths are simply an interesting story. The idea that these myths were created by a culture attempting to justify their superstitions is highly improbable. The original developers of these myths had a better understanding of the reasons they existed than the superstitious Mesoamericans possessed. I believe that by 3000 BC - 1000 AD the Mesoamerican civilizations were mimicking the practices of a much older, more sophisticated civilization.

The question still exists as to what is likely to occur in the year 2012 AD! The most significant data we have to consider is:

1. We are currently experiencing an increase in global temperature.
2. The polar ice caps are melting and breaking up increasing the source of fresh water resulting in reduced salinity of the oceans.
3. The Earth will experience greater temperatures, short term, as a result of increasing solar output. Increased sunspot activity beginning in 2000 AD will peak c. 2011 AD.
4. Alignment of the solar and galactic axes will place the Earth in the path of potentially greater cosmic influx which could enter the Earth's atmosphere or enter the region between the Earth and the Sun resulting in less solar energy impacting the surface of the Earth.
5. The Earth is expected to pass through debris from the Encke Comet which is expected to peak during this period.

If one is to predict a catastrophic end to this/our Age in 2012 AD, as the Mayan myths suggest, then I would expect we will experience the beginning of the next ice age.

The impacts of global warming could cause the flow of the Gulf Stream to alter or to cease altogether and the presence of cosmic debris within the solar system and Earth's atmosphere would further reduce the temperature of our planet. A wild card which would only exacerbate this scenario is the possibility of a large scale

volcanic eruption such as occurred in the past with Mt Toba and as postulated to occur with an eruption of the Yellowstone basin.

Ice core evidence from Antarctica and Greenland have shown that past ice ages have taken as little as 1- to 15 years to take full effect. If so, we can expect the end of civilization as we now know it to end c. 2024 AD. The data from the ice cores further indicates the Earth is overdue the next ice age cycle

The end times of past civilizations have always been the beginning of future civilizations. If the Mayans were correct in predicting the end of the current age, then we must ask what is a new-age to look like? What resources do we have available to us, at the end of this age, to build upon? It will be necessary to overcome past impediments to discovery, including: political and religious interference, scientific arrogance involving personal reputations, and the reluctance by scholars to rewrite history. The emphasis over our present age has been to overcome the effects of physical adversities such as climate, food supply, disease, and human incompatibility. We have made great strides in these areas except over human compatibility. This is perhaps because we have emphasized our physical well being. As I started out in this writing I wrote that mankind's development is dependent upon both physical as well as spiritual growth. Perhaps the next age is to be one of spiritual enlightenment. What tools do we possess to accomplish this? As I have previously discussed and expanded upon in Chapter 11, religions have failed to achieve what I propose can be achieved by each individual resulting in a collective achievement worldwide. I believe the Genesis Model formulates the ground work and provides the model to achieve 'A Oneness of Purpose'.

I believe that one of the cataclysmic events mentioned above is likely and perhaps necessary. Necessary because this may be what is required to get our attention as to the condition of the world we have created. By understanding the implications brought to light by the Genesis Model we collectively can either change the outcome of possible future cataclysms or recover from what eventually happens.

GLOSSARY

Meanings of various words and phrases of the Bible ⁽²²⁾

Abner - father of light or enlightenment

after their kind - copying or mimicking.

allegory - the veiled presentation, in a figurative story, of a meaning metaphorically implied but not expressly stated.

Allegory is prolonged metaphor, in which typically a series of actions are symbolic of other actions.

animals - thoughts relating to physical strength.

appear/see – discern, comprehend the Truth, understand.

battles - all between states of consciousness.

beasts - sensuous or material thoughts.

birds - liberated thoughts- ideas not tied to the Enlightened Consciousness (not requiring reasoning); free thoughts
Latin), called A-ves because they do not follow straight roads (visas).

blessed - happy, increasing in many ways, to protect from harm.

called - brought forth, conceived in spirit.

cattle - thoughts based on sensation or animal strength.

Children of Israel - spiritual thoughts

clothes - divine thoughts.

conscious mind - consists of enlightened and physical consciousness.

Consciousness - awareness

creatures - thoughts of various kinds, the nature of the thought implied by the kind of creature.

creeping things - subtle thoughts that tempt.

darkness - invisible

day - a degree of unfoldment in consciousness; illuminated consciousness; divine illumination, enlightened consciousness.

deep - consciousness of All That Is; that which is unknown.

desert - arid consciousness

dry/arid - ignorance, void of thought or ideas.

GLOSSARY (Continued)

earth - the outer manifestation, physical reality, physical consciousness.

Ennead - a group of nine: when 1 is divided by 7 the result = 0.
142857142857142857, that is, the sequence of 9
numbers 142857 are repeated indefinitely and this
sequence is used to form the enneagram.

Esau - physical consciousness

esoteric – inner; designed for, and understood by the specially initiated alone.

expanse - great breadth.

feminine – feeling, Eve.

fill - to supply the things needed, to make complete.

firmament - to make firm, to make solid, a foundation. Firm, unwavering place
in consciousness.

fish - ideas drawn out of the deep.

five - subconscious and conscious thought

flocks – thoughts, groups of thoughts

fowl - conscious thoughts

fly - to move forward.

food - the spiritual thought by which we are fed.

four - perfect balance: understanding. (North, South, East, West - perfect
perspective)

fruitful - productive.

Garden of Eden - state of consciousness.

Genealogies - unfoldment of ideas.

Genesis - the beginning.

God - the name or nature of God: the word that refers to All That the Infinite
Is; Life; Truth; Love; Intelligence; Powers; Omnipresent, Omnipotent,
Omniscient.

God/Elohim - great ones, the prominent ones, the majesties, the judges, the mighty ones (voices-visions of the bicameral mind).

good/goodness - a term used to designate God.

heaven - the divine consciousness within; the realm of divine ideas;

conscious awareness of God.

GLOSSARY (Continued)

House - consciousness of whatever is being discussed.

Israel - spiritual awareness.

Jacob - Enlightened Consciousness.

Jordan - race consciousness

Joshua - higher states of consciousness.

Judah - consciousness of praise.

Kings - ruling thoughts

land - consciousness unfolding at different levels: various stages of awareness within the individual.

light - a synonym for God denoting divine illumination-- spiritual illumination-- wisdom and understanding.

living - existence, life, natural force.

Living water - consciousness of truth.

Mahanaim - two camps, two hosts (duality)

male/man - the conscious or directive mind within each person; the part of the mind that reasons and analyzes.

morning - the light (illumination) that comes after a long period of darkness: new fresh inspiration.

mountain - high spiritual consciousness.

multiply - in many ways, increase.

night - a dark period in mans consciousness; ignorance- a period when one seeks the light of understanding.

one - the number that stands for unity; wholeness; undivided; indivisible;
all encompassing; unique consciousness.

Places (proper) - states of consciousness.

GLOSSARY (Continued)

sea - the vast undifferentiated substance of mind; Universal Mind: the deep universal subconscious mind.

see - to comprehend the Truth; discern; understand.

seed - ideas; thoughts springing from a parent thought.

serpent - false belief, false thinking; temptation; the thought that tempts us to judge by false appearances.

servants - thoughts that serve, thoughts subject to someone's dominion.

seven - something that is finished- complete: perfection; release.

Seven sons - perfect masculine or conscious thoughts.

six - a period of labor- completion of creation; reality.

sky- - spirit.

Soul - Universal consciousness.

spirit - God; the breath of life.

Star/sun - spiritual illumination.

swarm - to be filled, abound.

teem - produce.

tent - temporary state of consciousness.

three - three in one; trinity; Spirit, Soul and Body; the threefold nature of Being or God acting through mind to produce manifestation.

three daughters - unified subconscious mind.

tree - the connecting link between earth and heaven; thinking that is rooted on earth but reaches toward heaven.

Twelve – spiritual fulfillment or completion

two - divided mind.

Vegetation - growth.

water - the fluid Mind; movement in consciousness. "face of the deep" indicates universal consciousness. inspiration.

GLOSSARY (Continued)

watered - inspired.

waters below the heavens - physical reality.

woman/female- the subjective or receptive side of life-- the feeling side.

APPENDIX A

CALENDARS

The earliest known calendars appear to have been based upon lunar and seasonal cycles. What could be the oldest lunar calendar has been found on the walls of the prehistoric caves at Lascaux, France which are believed to have been drawn by Cro-Magnon man approximately 15,000 years ago. It is believed that the lunar calendars were primarily for agricultural purposes by being able to determine the timing of the spring and fall equinoxes and the summer and winter solstices. Some of the most rudimentary calendars were based on observing the movement of light shafts and/or shadows as the sun makes its yearly journey from south to north and back to south in a series of never-ending cycles. Another technique was to observe the position of the rising or setting sun relative to irregularities of the horizon, such as mountain peaks from an observation point near their residence. This is referred to as the horizon calendar. These non-abstract techniques provided a gross measure of time (i.e., solstice to solstice or equinox to equinox). Initially, nobody bothered counting 'years'.

The Egyptians were probably the first to adopt a 365-day calendar. This was based on the rising of the star Sirius in Canus Major which the Egyptians named Sothis. This was important to the Egyptians because the seasonal morning rising of Sirius ahead of the Sun signaled the coming flooding of the Nile. The seasonal rising of Sirius corresponds closely to the true solar year, being only 12 minutes shorter. The Egyptian 365-day calendar established the unit of time we term 'year'. The only unit of time that was larger than a year was the reign of a ruler. The usual custom of dating by reign was: "year 1, 2, 3, etc. of ruler So-and-So". With each new ruler the counting reverted back to year 1.

The term 'year' is an abstract concept which requires the existence of another concept, namely writing, in order to make any sense. Once people began to write in terms of history, it became necessary to establish the concept of dates. The lunar/seasonal calendar is based on thinking in terms of cycles whereas the solar calendar is based on thinking in linear terms or sequential/historical terms. Before the advent of writing there simply was no reason to think in terms of a sequential history.

Ancient writings from 5,000 years ago, and perhaps a much earlier time, indicate that people were aware of earthly and heavenly cycles which affected their daily lives. These people recorded these cyclic events in order to predict when they would reoccur in the future. Initially, the timing of these events was documented by recording the positions of the stars at the time the event was recorded. These records ultimately took meaning with the advent of the written calendar. Calendars were a natural outcome of mans interest in astronomy. While different calendars emerged from around the world over an extended period of time, they have striking similarities.

All societies which possessed written forms of a calendar selected a "year zero" as a frame of reference for their calendar. I have used the terms BC and AD in order to provide a reference. Obviously the ancient cultures had no concept of these terms. An interesting point is that several of the ancient calendars referred to a starting point between 3760 BC and 3114 BC. The mystery is - why did mankind select "year zero" at virtually the same point in time? The Sumerians and Akkadians chose 3760 BC which was later accepted by the Hebrews, the Egyptians chose 3200 BC, and the Mayans chose 3114 BC. "Year zero" most likely symbolized or honored an important date in each societies history. As an example, the commencement of a new Arab chronology was referred to as "The Year of the Elephant" when the Christian Abyssinian ruler of Yemen unsuccessfully attacked Mecca with a herd of Elephants in an attempt to destroy the Ka'ba in 570 AD.

Scholars have suggested that the present-day Jewish calendar is derived from the original Nippurian calendar. The Jewish calendar counts the years from a beginning in 3760 BC. Some believe that this is a count "from the beginning of the world"; but a statement by Jewish sages reports that this was the number of years that had passed "since counting of years began".

Several calendars are listed below with their 'year zero'.

- Egypt, Sothic (4236 BC)
- Egypt, Civil (3200 BC)
- Nippur, Sumeria (3760 BC)
- Hebraic (3760 BC)
- Maya Long Count (3114 BC)
- Chinese (2698 or 2637 BC)
- Maya and Inca Zodiacal Calendars (?)
- Arabia, Year of the Elephant (570 AD)

Of particular interest to this writing are the calendars of the Maya in that their writings describe past cataclysmic events as well as predicting an event which is to occur in our future (i.e. end of the 5th Age in 2012 AD).

The calendars of the Mayans of southern Mexico and Central America are based on the use of sophisticated mathematics and astronomical observations. Two of their calendars are the Tzolkin, a sacred calendar of 260 days, and the Haab, a solar calendar of 365 days. While the ancients used 365 days as the length of the year they realized the actual duration was approximately 365.25 days. This they could easily have determined by observing the length of shadows and the time it took between either the two shortest or two longest shadows of the year. It wasn't until 1582 AD that the length of the year was redefined as 365.242199 days by the Jesuit astronomer Christopher Clavius and made official by Pope Gregory XIII, thus the name Gregorian calendar which is in use today.

The original Mayan documents which exist today relate a story of a population with an obsession with time and its duration, as evidenced in part by their various calendars. While these calendars are quite complex and accurate, it is not obvious, as to whether or not this civilization had any understanding of the mechanics of the motions of the solar system required to formulate them. Their writings appear to be more of observation and of reporting results rather than an understanding of the technology involved.

There is no evidence or any claim by the Mesoamerican civilizations that these people created their calendars nor is there evidence of any technology being available to these civilizations which would have been required to determine precession cycles or planet orbits. Where and how did they come by the information necessary to formulate sophisticated calendars? The technology that we have ascertained as being available to the Mayans stems from the ruins we believe to be astronomical observatories. These seem to be limited to visual/unaided observations of planetary motion and sun positions regarding the equinoxes. I propose that these civilizations did not have the where with-all to develop this sophisticated system. Where then did this technology come from? One answer is the technology for developing sophisticated calendars came from a more advanced civilization which taught them how to prepare and use the calendars.

Indications that the Maya, Inca, and Aztec civilizations inherited their calendars and their knowledge of astronomical events can be derived from their behavior. Their obsession of a coming catastrophe that would end their current age although based upon the motion of the heavenly bodies was driven by superstition. The Mesoamerican tales of cyclic destruction, both past and future, were the cause of their superstitions and the cause of their fear of a coming catastrophe. They lived

according to a 52 year cycle because they thought that at the end of one of these 52 year periods, time would stop and their world would end with a catastrophe. They invented elaborate ceremonies to ward off this end date. The paramount activity of these ceremonies was the killing, dismemberment and eating of hundreds or thousands of captives. This is not indicative of a civilization which possessed an understanding of the events they reported in their mythology. It is indicative of a civilization driven by fear, a lack of understanding of the world around them, and superstition

The Tzolkin calendar was a fundamental tool used throughout ancient Mesoamerica for ritual matters. The calendar was constructed using two continuous sequences, one of 13 numbers and the other of 20 day signs. In Table A-1, the 260 days of the calendar are arranged in 13 columns and 20 rows. The calendar in this form should be read from top to bottom and from left to right through 260 days. The various attributes of the 260-day calendar come to us today as found in the Codex Borgia currently located in the Apostolic Library of the Vatican. It is believed that the Codex was prepared during the fifteenth or sixteenth century before the arrival of the Spanish in Mesoamerica. The 260-day calendar is described in the Mayan text 'The Birth of the Uinal'⁵¹.

Another description of how the Tzolkin calendar was to be constructed comes to us from the Mayan text 'The Book of Chilam Balam of Chumayel' prepared in 1559 AD by a Mayan priest for the Christian missionaries. Table A-2 shows a version of the Tzolkin calendar based on the methodology for the construction provided in the myth 'The Birth of the Uinal'. The myth begins with a description of creation on the day 1 Chuen (1 Monkey) and continues downward through 19 days ending with 6 Muluc. Interestingly enough the day '7 Dog' listed in the Codex Borgia text is missing in this description. However, the Uinal text goes on to state "Thirteen heaps and seven heaps make one". It can be observed from Table A-2 that by moving to the right from 6 Muluc through the next three columns that the next three days are 13, 7, and 1 Muluc. The Uinal text next describes 20 sequential day names beginning with 8 Muluc (the next column to the right from 1 Muluc) and continues with the order in which they should be counted down through 19 days to 1 Lamat. An interesting observation to be made, when comparing the two versions of the calendar, is the version found in the Birth of the Uinal myth describes a calendar which is exactly 130 days out of synchronization with the generally accepted version found in the Codex Borgia. It is possible that the Mayan priest was trying to misdirect the Spanish missionaries by retaining the function of the calendar while causing the Spanish to calculate the wrong date. It can also be observed that the Year Names (Reed, Flint, House, and Rabbit) are the same for both calendars but are in different orders.

The Uinal text further describes what are termed 'four burners' which may represent four periods of 65 days each or a total of 260 days which is the length of the calendar or possibly the four directions North, South, East, and West.

While the Uinal and Codex Borgia describe the construction of the Tzolkin calendar an Aztec myth called "Quetzalcoatl's Hero Journey" provides the guidance to understand and use the Tzolkin Calendar. It provides the methodology to identify the relationship between the Day names and the year within the 52 year cycle of the calendar round. According to this analysis the four day names which begin a solar year are: House, Rabbit, Reed, and Flint. A discussion of this methodology is presented as follows:

QUETZALCOATL'S HERO JOURNEY

The following quotations are paraphrased from Quetzalcoatl's Hero Journey and can be found in their entirety in Markman⁵². Refer to Table A-1 to follow the description given below.

"1 Reed: It is recounted, it is said, in this year was born Quetzalcoatl, the one called Our Honored Prince High Priest One Reed Quetzalcoatl: and it is said his mother's name was Chimalman." This defines the start of the calendar. Year 1 begins at the end of Year 52 (1 Reed) with the end of Year 1 being 2 Flint.

"[Years] 2 Flint, 3 House, 4 Rabbit, 5 Reed, 6 Flint, 7 House, 8 Rabbit, 9 Reed. In this year Quetzalcoatl searched for his father." This defines the next 8 years (Years beginning with Year 2 and ending at the end of Year 8, the beginning of Year 9).

"[Years] 10 Flint, 11 House, 12 Rabbit, 13 Reed, 1 Flint, 2 House, 3 Rabbit, 4 Reed, 5 Flint, 6 House, 7 Rabbit, 8 Reed, 9 Flint, 10 House. In this year died in honor the Lord Speaker of Cuauhtitlan, Huactli, who had ruled for sixty-two years." This defines the next 14 years (Year 9-22).

"[Year] 11 Rabbit. The lady Xiuhtlacuiloxochitzin was installed as Speaker." This defines Year 23.

"[Years] 12 Reed, 13 Flint, 1 House, 2 Rabbit: this year Quetzalcoatl arrived there in Tollantzinco" This defines the next 4 years (Years 24-27).

"[Years] 3 Reed, 4 Flint, 5 House: In this year the Toltecs took Quetzalcoatl and installed him on the throne there in Tollan..." This defines the next 3 years (Years 28-30).

"[Years] 6 Rabbit, 7 Reed: Lady Xiuhtlacuiloxochitzin died; she had ruled twelve years in Cuauhtitlan." This defines the next 2 years (Years 31-32).

"[Year] 8 Flint: In this year Ayaauhcoyotzin was installed as Lord Speaker of Cuauhtitlan...." This defines year 33.

"[Years] 9 House, 10 Rabbit, 11 Reed, 12 Flint, 13 House, 1 Rabbit, 2 Reed (It is the word of Tetzaco that in this year died Quetzalcoatl, Our Lord of Tollan Colhuacan.)" This defines the next 7 years (Years 34-40).

“**[Years]** 3 Flint, 4 House, 5 Rabbit, 6 Reed, 7 Flint, 8 House, 9 Rabbit, 10 Reed, 11 Flint, 12 House, 13 Rabbit, 1 Reed: In this **year** Quetzalcoatl died.” This defines the next 12 years for a total of 52 years (Years 41-52).

It can be determined, from the 260 day calendar as shown in Table A-1, that the number of days between the Mayan Day names, provided in the Quetzalcoatl's Hero account, is exactly 105 days. Starting with One Reed as the beginning of Year 1 (end of Year 52), the remaining year names and sequence can be determined by adding 105 days to the previous name. As an example, the time between 1 Reed and 2 Flint is exactly 105 days. This added to the 260 day calendar duration is equal to 365 days, or one year. This repeats between: 2 Flint and 3 House, 3 House and 4 Rabbit, 4 Rabbit and 5 Reed, and continues in like manner until 13 Rabbit and 1 Reed which is equivalent to year 52, or one calendar round. This provides the sequence of names for a 52 year calendar round as seen in Table A-1. The year sequence is shown as the superscript to the numbers displayed in bold type.

The Mayan year number and name repeat every 52 years (e.g., 1519 AD = 1 Reed, 1571 AD = 1 Reed, 1623 AD = 1 Reed). In order to determine the exact Gregorian year from the Mayan, it is necessary to know additional information which would tie the description of the Mayan event with known historical facts. As an example, Aztec records indicate that Cortez arrived in Mesoamerica in the year, 1 Reed. Historically we know that Cortez arrived March 4 in the year 1519 AD. This information ties the two dating methods together.

As an example: given the year 1519 AD is equivalent to 1 Reed, what is the Mayan date for the year 1402 AD?

$$1519 - 1402 = 117 \text{ years}$$

$$117/52 = 2.25 \text{ calendar rounds}$$

2 calendar rounds from the year 1 Reed brings you back to 1 Reed

$$0.25 \text{ calendar rounds} = 13 \text{ years beyond 1 Reed } (0.25 \times 52 = 13 \text{ years})$$

From Table A-1 the superscript for 1 Reed is 52, or the 52nd year of the calendar round. Since the year 1402 comes before 1519 subtract 13 from 52 = 39

Find the superscript 39 in Table A-1 which is 1 Rabbit. This is the Mayan equivalent to the date 1402 AD.

Table A-1: YEAR & DAY SEQUENCES FOR THE 260-DAY TZOLKIN CALENDAR.⁵³

Day	MAYAN	QUICHE'	ENGLISH	1	2	3	4	5	6	7	8	9	10	11	12
1	IMIX	IMOX	Alligator	1	8	2	9	3	10	4	11	5	12	6	13
2	IK	IQ'	Wind	2	9	3	10	4	11	5	12	6	13	7	1
3	AKBAL	AQ'AB'AL	House	3 ²	10 ²²	4 ⁴²	11 ¹⁰	5 ³⁰	12 ⁵⁰	6 ¹⁸	13 ³⁸	7 ⁶	1 ²⁶	8 ⁴⁶	2 ¹⁴
4	KAN	K'AT	Lizard	4	11	5	12	6	13	7	1	8	2	9	3
5	CHICCHAN	KAN	Serpent	5	12	6	13	7	1	8	2	9	3	10	4
6	CIME	KAM'E	Death	6	13	7	1	8	2	9	3	10	4	11	5
7	MANIK	KEJ	Deer	7	1	8	2	9	3	10	4	11	5	12	6
8	LAMAT	Q'ANIL	Rabbit	8 ⁷	2 ²⁷	9 ⁴⁷	3 ¹⁵	10 ³⁵	4 ³	11 ²³	5 ⁴³	12 ¹¹	6 ³¹	13 ⁵¹	7 ¹⁹
9	MULUC	TOJ	Water	9	3	10	4	11	5	12	6	13	7	1	8
10	OC	TZ'I	Dog	10	4	11	5	12	6	13	7	1	8	2	9
11	CHUEN	B'ATZ'	Monkey	11	5	12	6	13	7	1	8	2	9	3	10
12	EB	E	Grass	12	6	13	7	1	8	2	9	3	10	4	11
13	BEM	AJ	Reed	13 ¹²	7 ³²	1 ⁵²	8 ²⁰	2 ⁴⁰	9 ⁸	3 ²⁸	10 ⁴⁸	4 ¹⁶	11 ³⁶	5 ⁴	12 ²⁴
14	IX	IX	Jaguar	1	8	2	9	3	10	4	11	5	12	6	13
15	MEN	TZ'IKIN	Eagle	2	9	3	10	4	11	5	12	6	13	7	1
16	CIB	AJMAK	Vulture	3	10	4	11	5	12	6	13	7	1	8	2
17	CABAN	NO'J	Movement	4	11	5	12	6	13	7	1	8	2	9	3
18	EZNAB	TIJAX	Flint	5 ¹⁷	12 ³⁷	6 ⁵	13 ²⁵	7 ⁴⁵	1 ¹³	8 ³³	2 ¹	9 ²¹	3 ⁴¹	10 ⁹	4 ²⁹
19	CAUAC	KAWUG	Rain	6	13	7	1	8	2	9	3	10	4	11	5
20	AHAU	JUAJPU	Flower	7	1	8	2	9	3	10	4	11	5	12	6

Year names = House, Rabbit, Reed, and Flint.

Superscripts refer to a sequence of 52 years beginning with 2 Flint as the end of year 1 and ending with 1 Reed as the end of year 52. The cycle

repeats indefinitely (e.g., year 2=3 House, year 3=4 Rabbit, year 5= 6 Flint).

Table A-2: YEAR & DAY SEQUENCES FOR THE 260-DAY TZOLKIN CALENDAR. (The Birth of the Uinal) ⁵²

Day	MAYAN	ENGLISH	1	2	3	4	5	6	7	8	9	10	11	12	13	1
1	CHUEN	Monkey	1	8	2	9	3	10	4	11	5	12	6	13	7	1
2	EB	Grass	2	9	3	10	4	1	5	12	6	13	7	1	8	2
3	BEM	Reed	3 ²	10 ²²	4 ⁴²	11 ¹⁰	5 ³⁰	12 ⁵⁰	6 ¹⁸	13 ³⁸	7 ⁶	1 ²⁶	8 ⁴⁶	2 ¹⁴	9 ³⁴	3 ²
4	IX	Jaguar	4	11	5	12	6	3	7	1	8	2	9	3	10	4
5	MEN	Eagle	5	12	6	13	7		8	2	9	3	10	4	11	5
6	CIB	Vulture	6	13	7	1	8	2	9	3	10	4	11	5	12	6
7	CABAN	Movement	7	1	8	2	9	3	10	4	11	5	12	6	13	7
8	EZNAB	Flint	8 ⁷	2 ²⁷	9 ⁴⁷	3 ¹⁵	10 ³⁵	4 ³	11 ²³	5 ⁴³	12 ¹¹	6 ³¹	13 ⁵¹	7 ¹⁹	1 ³⁹	8 ⁷
9	CAUAC	Rain	9	3	10	4	11	5	12	6	13	7	1	8	2	9
10	AHAU	Flower	10	4	11	5	12	6	13	7	1	8	2	9	3	10
11	IMIX	Alligator	11	5	12	6	13	7	1	8	2	9	3	10	4	11
12	IK	Wind	12	6	13	7	1	8	2	9	3	10	4	11	5	12
13	AKBAL	House	13 ¹²	7 ³²	1 ⁵²	8 ²⁰	2 ⁴⁰	9 ⁸	3 ²⁸	10 ⁴⁸	4 ¹⁶	11 ³⁶	5 ⁴	12 ²⁴	6 ⁴⁴	13 ¹²
14	KAN	Lizard	1	8	2	9	3	10	4	11	5	12	6	13	7	1
15	CHICCHAN	Serpent	2	9	3	10	4	1	5	12	6	13	7	1	8	2
16	CIME	Death	3	10	4	11	5	2	6	13	7	1	8	2	9	3
17	MANIK	Deer	4	11	5	12	6	3	7	1	8	2	9	3	10	4
18	LAMAT	Rabbit	5 ¹⁷	12 ³⁷	6 ⁵	13 ²⁵	7 ⁴⁵	1 ¹³	8 ³³	2 ¹	9 ²¹	3 ⁴¹	10 ⁹	4 ²⁹	11 ⁴⁹	5 ¹⁷
19	MULUC	Water	6	13	7	1	8	2	9	3	10	4	11	5	12	6
20	OC	Dog	7	1	8	2	9	3	10	4	11	5	12	6	13	7

Year names = House, Rabbit, Reed, and Flint.

Superscripts refer to a sequence of 52 years beginning with 2 Rabbit as the end of year 1 and ending with 1 House as the end of year 52. The

cycle repeats indefinitely (e.g., year 2=3 House,
year 3= 4 Rabbit, year 5= 6 Flint).

Understanding the Mayan calendars is necessary in order to determine modern-day dates which correspond to the dates found in Mayan literature. The literature of the Aztecs, as translated by their Spanish conquerors, provides some examples of equivalent Mayan-Gregorian dates as described below.

<u>Document</u>	<u>Mayan Date</u>	<u>Gregorian Date</u>	<u>Event</u>
The Aztecs ⁶³	1 Reed	1519 AD	Cortez arrives in Mexico
Aztec Sun stone ⁶³	13 Reed	1427 AD	Itzcoatl rose to power

From this information it is possible to calculate the Mayan year number and name for any Gregorian date as shown in Table A-3.

TABLE A-3 COLLATIONS OF MAYAN AND GREGORIAN DATES

GREGORIAN DATE	MAYAN YEAR	MAYAN MONTH & DAY	CALENDAR ROUND	SIGNIFICANCE
18917 BC	1 Reed			
18488 BC	1 Flint			
13363 BC	4 House			
13288 BC	1 Flint			
10602 BC	9 Rabbit	8 Cumhu 4 Ahu		
10468 BC	13 Flint			
8238 BC	7 Rabbit			
5600 BC	6 Flint			
3149 BC	13 Reed			
Aug13, 3114 BC	9 Rabbit	8 Cumhu 4 Ahu	0	Aztec Sun Stone Mayan day 0, Begin 5 th Age/Sun
3113 BC	10 Reed			
2594 BC	9 Rabbit	8 Cumhu 4 Ahu	10	
2074 BC	9 Rabbit	8 Cumhu 4 Ahu	20	
1554 BC	9 Rabbit	8 Cumhu 4 Ahu	30	
1450 BC	9 Rabbit	8 Cumhu 4 Ahu	32	
1432 BC	1 Flint			
1400 BC	7 Flint	2 Dog		Olmecs possibly built Teotihuacan
1034 BC	9 Rabbit	8 Cumhu 4 Ahu	40	
959 BC	4 House			
955 BC	10 House	5 Eagle		
951 BC	1 House			
699 BC	4 House			
687 BC	5 House	13 Eagle		
514 BC	9 Rabbit	8 Cumhu 4 Ahu	50	
475 BC	9 House			
300 BC				Mt Etna erupts Rise of Maya
1 BC	2 Reed			
1 AD	4 House			
6 AD	9 Rabbit	8 Cumhu 4 Ahu	60	
79 AD	4 Reed			
400 AD	13 Flint			Vesuvius erupts (Pompei) Mt Xitle erupts
526 AD	9 Rabbit	8 Cumhu 4 Ahu	70	
535 AD	9 Rabbit			
573 AD	4 House			Super volcano, SE Asia
627 AD	6 Reed			
750 AD	12 Rabbit			Founding of Tula/Tollan
950 AD	4 Rabbit			Rise of Toltecs
986 AD	1 Rabbit			
1046 AD	9 Rabbit	8 Cumhu 4 Ahu	80	
1064 AD	1 Flint			
1168 - 1220 AD	1 Flint **			Aztec journey to Tenochtitlan
1170 AD	3 Rabbit			Fall of Toltecs
1258 AD	13 Rabbit **			Destruction of Tula/Tollan Mexica occupy Chipoltepec (40 yrs) **
1285 AD	1 House			
1286 AD	2 Rabbit			
1295 AD	11 Reed			

TABLE A-3 COLLATIONS OF MAYAN AND GREGORIAN DATES -Continued

GREGORIAN DATE	MAYAN YEAR	MAYAN MONTH & DAY	CALENDAR ROUND	SIGNIFICANCE
1298 AD	1 Rabbit			Mexica become enslaved (28 yrs)
1325 AD	2 House			Rise of Aztecs, Tenochtitlan (Mexico City founded), farmers-50 years **
(1326 AD)	3 Rabbit			Acamapichtli , speaker (21 yrs) **
1376 AD	1 Flint **			Mexica Conquest of Colhuacan & Tenayocan
1377 AD	2 House **			Huitzilihuitl - speaker (21 yrs) **
1397 AD	9 House **			Heavens came to a stop
1402 AD	1 Rabbit			Chimalpopocatzin -speaker (10 yrs) **
1418 AD	4 Rabbit **			Sun Stone, Itzcoatl rose to power
1427 AD	13 Reed			Itzcohuatzin - speaker (13 yrs) **
1428 AD	1 Flint **			Ilhuicaminatzin
1441 AD	1 House **			Moteuccomatzin the elder - speaker (29 yrs) **
1450 AD	10 Rabbit			Heavens came to a stop
1454 AD	1 Rabbit			Axayacatzin - speaker (12 yrs) **
1470 AD	4 Rabbit			Montezuma II
1504 AD				Column of fire appears at night, lasts four years
1511 AD				Cortez arrives in Mexico
4 March, 1519	1 Reed *	6Yax		
AD *				
1532 AD *				Pizarro arrives in Peru
1539 AD		13 Ahu 8 Xul		Chronicle of Oxcutzcab
1544 AD		11 Chuen 18 Zac		Chilam Balam (February 15)
1558 AD	1 Rabbit			Leyenda de los Soles Transcribed
1566 AD	9 Rabbit	8 Cumhu 4 Ahu	90	
1582 AD	12 Reed			Correct Gregorian Calendar
1982 AD	9 Rabbit	8 Cumhu 4 Ahu	98	
2000 AD	1 Flint			
2012 AD	13 Flint			End Fifth Age/Sun
2034 AD	9 Rabbit	8 Cumhu 4 Ahu	99	
2086 AD	9 Rabbit	8 Cumhu 4 Ahu	100	

NOTES: * Historical dates** Leyenda de los Soles (paragraph XI) ⁵²

Table A-4 MAYA LONG COUNT VS GREGORIAN DATES

GREGORIAN DATE*	LONG COUNT	ELAPSED KIN	% ELAPSED KIN	SUN/AGE
Jul 12, 18490 BC	13.0.0.0.0	1,872,000 (-3)	-300	Begin 1 st Sun
Nov 21, 13365 BC	13.0.0.0.0	1,872,000 (-2)	-200	End 1 st Sun
Apr 2, 8239 BC	13.0.0.0.0	1,872,000 (-1)	-100	End 2 nd Sun
Aug 11, 3114 BC	0.0.0.0.0	0	0	End 4 th Sun
Aug 13, 3114 BC	0.0.0.0.2	2		
Feb 23, 2601 BC	1.6.0.0.0		10	
Sep 7, 2089 BC	2.12.0.0.0		20	
Mar 21, 1576 BC	3.18.0.0.0		30	
Oct 3, 1064 BC	5.4.0.0.0		40	
Apr 17, 551 BC	6.10.0.0.0		50	
Oct 30, 39 BC	7.16.0.0.0		60	
May 13, 475 AD	9.2.0.0.0		70	
Feb 15, 629 AD	9.9.16.0.0		73	1,366,560 days
Nov 25, 987 AD	10.8.0.0.0		80	
Jun 9, 1500 AD	11.14.0.0.0		90	
Dec 21, 2012 AD	13.0.0.0.0	1,872,000 (+1)	100	End 5 th Sun
	0.0.0.0.0			a.k.a. 4Ahu8Cumhu

- These dates seem to be off by 2 days (e.g., Aug 11 should be Aug 13; Feb 23 should be Feb 25, etc.).

FIGURE A-5: DAY/ MONTH SEQUENCE FOR THE 365-DAY CALENDAR.

DAY	POP	UO	ZIP	ZOTZ	TZEC	XUL	YAVKI	MOL	CHEN	YAX	ZAC	CEH	MAC	KANKI
1	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT	SEAT
2	Aua	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Sept	2	2	Oct	2	2	2	2	2	Feb	2	2	2	2
4	3	3	3	Nov 1	3	3	Dec	3	3	Mar 1	3	3	Apr	3
5	4	4	4	4	4	4	Ian 1	4	4	4	4	4	Mav 1	4
6	5	5	5	5	5	5	5	5	5	5	5	5	5	5
7	6	6	6	6	6	6	6	6	6	6	6	6	6	6
8	7	7	7	7	7	7	7	7	7	7	7	7	7	7
9	8	8	8	8	8	8	8	8	8	8	8	8	8	8
10	9	9	9	9	9	9	9	9	9	9	9	9	9	9
11	10	10	10	10	10	10	10	10	10	10	10	10	10	10
12	11	Sep	11	11	11	11	11	11	11	11	11	11	11	11
13	12	Oct 1	12	12	Nov	12	12	12	12	12	12	12	12	12
14	13	13	13	13	Dec 1	13	13	13	13	13	Mar	13	13	13
15	14	14	14	14	14	14	14	Ian 31	14	14	Apr 1	14	14	Mav
16	15	15	15	15	15	15	15	Feb 1	15	15	15	15	15	Iun 1
17	16	16	16	16	16	16	16	16	16	16	16	16	16	16
18	17	17	17	17	17	17	17	17	17	17	17	17	17	17
19	18	18	18	18	18	18	18	18	18	18	18	18	18	18
20	19	19	19	19	19	19	19	19	19	19	19	19	19	19

APPENDIX B

HISTORICAL TIMETABLES

As mentioned in Chapter 2 modern day historians base the history of modern day humans at a time frame beginning at the end of the Pleistocene Ice Age c. 12000 BC since this is the period that most of the archaeological evidence supports. If the premise of a much earlier beginning and the existence of earlier advanced civilizations, as suggested in Chapter 2, are to be believed then what evidence can be derived from historical time tables as we piece them together today? Further, the historical timetable provides evidence of several catastrophic events having occurred throughout history. It can be seen from Table 8-4 that the end of Age 2 and Age 3 of the Mayan chronology occur in the time frame of eruptions from Mt Vesuvius. The Mayan account says the Ages were destroyed by Hurricane Winds and Fire respectively. These descriptions are consistent with volcano eruptions. The end of Age 1 is inconclusive although climate may have been a factor as large scale migrations occurred between Asia and the Americas at that time. The Mayan account says the cause of the destruction of Age 1 was due to a flood which is consistent with climate change. According to the Chronicle of Akakor a global destruction was predicted to occur at the time corresponding to the end of Age 4 without stating the reason. The Mayan account says the reason for destruction was due to starvation as a result of a rain of blood and fire. This could be the asteroid impact in Mesopotamia.

The mythologies from around the world span a time frame beginning at the creation of the world and continue up through our present age. Needless to say, many of the dates reported in the literature are based on theories, speculation, questionable dating techniques, opinions of many scholars, and errors introduced through recorded history. To conclude that the dates in Figure 6-1 can be accurately correlated to the date of historical events would be highly speculative. Further, to conclude that the date of 2012 AD can be supported based on the inaccuracy of the events occurring near the time of the previous end dates for the other 4 Ages is impossible. The discussions which follow pertaining to the Assyrian, Babylonian, Egyptian, and Persian accounts show just how uncertain historical dates can be relied upon even for these more recent dates than those derived for the Mayan account.

A review of the histories of the Egyptians, Hebrews, Incas, Babylonians, and Assyrians show that the dates for historical rulers and the dates for the rise and fall of their civilizations and dynasties are subject to great uncertainty. The dates in all cases are provided long after they actually occurred by writers such as:

Syncellus c. 800 BC, Herodotus c. 450 BC, Diodorus Siculus c. 59 BC, Flavius Josephus c. 60 AD, Eusebius c.340 AD, De Gamboa c. 1570 AD, and Montesinos c. 1642 AD. It is difficult to positively state that the catastrophic events referred to in their writings are referring to the same events. However, the mythologies of these civilizations do point to a common acceptance of the occurrence of cataclysmic events in each of their histories with expectations that more cataclysmic events would occur in their futures.

By attempting to understand the thinking of these civilizations which emerged as a result of these cataclysmic events it is possible to speculate that they attempted to warn future generations of coming events through their writings, thus, the date of 2012 AD for the next catastrophe may have some validity.

A compilation of historical events beginning with the first life forms believed to have evolved in the regions around Chad and Ethiopia in Africa is presented in Table B-1. The timeline for mankind from the earliest hominids up through *Homo sapiens-sapiens* (present day species) is shown and is based upon Sumerian mythology supported by the findings of modern-day paleoanthropologists and DNA testing.

The end of the Pleistocene Ice Age c. 12000 BC has been marked by historians as a turning point in the development of modern man. It also has been used as a boundary which separates what is thought to be modern times, supported by geological and archaeological evidence, from the ancient past. Caution must be exercised in relying on this data since much of it is based on speculation developed from ancient myths for which there either are no records prior to c. 3500 BC or questionable records, such as reported to exist in India. The period at the end of the Pleistocene Ice Age is thought to be significant by modern day paleoanthropologists and archaeologists in that it is believed to represent a period of migrations of man, the disappearance of the mega-fauna which man relied upon for food, and the change from a nomadic lifestyle to a farming lifestyle. The popular opinion has been that the Americas were first populated by hunter-gatherers who migrated across the Beringia Land Bridge between Asia and Alaska. The use of this area as a land bridge required a period of glaciation in the northern hemisphere. It is believed that at least one migration occurred between 12000 BC and the end of the Younger Dryas period c. 8000 BC. Severe flooding of coastal regions would have occurred following this period as a result of melting ice which would have precluded the use of this land bridge as a migration route. Other evidence supported by DNA testing points to sea migrations as another means by which the Americas were populated possibly from Africa, Australia, China and Japan. The genetic signatures of Siberians show that a change to the Y

chromosomes took place between 15,000 and 18,000 years ago. These genetic signatures were compared with the genetic signatures of the American Indian. The results indicate that migrations to the Americas from Siberia probably occurred no earlier than 18,000 years ago.

Recent evidence of man's presence in the Americas prior to the Beringia migration has been uncovered from the South American regions of Brazil, Argentina, and Chile. The findings from the Monte Verde site in Chile show human occupation in the region at a date at least 1,000 years before the accepted benchmark for initially populating the Americas via the most recent Beringia migration.

The rise and fall of several civilizations are presented in Table B-1. These events were examined and compared in an attempt to pinpoint dates for catastrophic events described by the mythologies. What complicates these comparisons is the fact that dates established using the different dating techniques are inaccurate, as described in Chapter 8. Additionally, experts/scholars feel bound to stand by their original findings or find themselves ridiculed by their peers and mentors.

The historical timetable shows what appears to be fully developed civilizations throughout Sumeria, Syria, Turkey, Egypt, and Mesoamerica c. 4500 - 3000 BC. There is little or no historical evidence from the period preceding the Pleistocene Ice Age or for the period between the end of the Pleistocene Ice Age and the appearance of these advanced civilizations. Archaeological evidence of well developed societies has been shown by the existence of irrigation systems c. 6000 BC, the fashioning of metal c. 5500 BC, the knowledge of mathematics c. 5000 BC, and the practice of astronomical observations c. 5000 BC.

Tables B-2 through B-10 present lists of leaders which are believed to have ruled during the times described by the various mythologies. These lists are derived from a number of unknown ancient writers from Sumeria, Akkad, Egypt, and Assyria as well as from more recent writers including: Syncellus c. 800 BC, Herodotus c. 450 BC, Berossus c. 290 BC, Manetho c. 280 BC, Julius Africanus c. 220 BC, Diodorus Siculus c. 59 BC, Flavius Josephus c. 60 AD, Eusebius c. 340 AD, De Gamboa c. 1570 AD, and Montesinos c. 1642 AD. Many of these leaders have been referred to as gods by writers beginning with Syncellus and Herodotus up to present day writers. We today tend to think of these gods in terms we ascribe to our present understanding of how we worship God today. This may not be what was meant by ancient writers and storytellers. Rather they may have been describing individuals of great intellect which possessed technology the masses of the emerging ancient world c. 5000 BC did not understand as opposed to being supernatural.

The framework for much of our history is derived ultimately from Manetho an Egyptian priest and historian. At the same time that Manetho was preparing a history of the Egyptians, the Babylonian Berossus was compiling a history of the Mesopotamian cultures. This timeframe occurred during the period in which the Greeks were exerting their influence throughout the Egyptian, Assyrian, and Persian regions. It has been speculated by some that Manetho and Berossus were trying to impress their Greek masters by proclaiming the greatness of their respective cultures by providing lists of rulers of exaggerated antiquity.

Manetho's list was formed from lists from the Egyptian cities of Thinis/Abydos, Thebes, and Elephantine in Upper (Southern) Egypt; and the cities of Heracleopolis, It-towy, Xoïs, Bubastis, Avaris, and Memphis in Lower (Northern) Egypt. Locations of these centers in Lower Egypt are shown in Figure B-1. It is speculated that Manetho attempted to achieve great antiquity by attaching the dynasties of the seven cities end-to-end forming 30 sequential dynasties which in effect made Egypt appear to be the oldest nation on earth. While this is not totally accepted by modern day Egyptologists there is archaeological evidence that several of these dynasties may indeed have overlapped or occurred in parallel in different parts of Egypt. What has been termed The First Intermediate Period consisting of Dynasties 7-11 is a case in point. This was a period of perhaps over 200 years in which the centralized government of the Old Kingdom collapsed at Memphis and was followed by a period of anarchy and civil war. Separate dynasties evolved at Memphis, Heracleopolis and Thebes during this period. Another similar period termed The Second Intermediate Period developed at the time of the 13th Dynasty when Egypt fell to the rule of foreign leaders which according to Josephus were called the Hyksos. According to Josephus this period lasted 511 years through the 17th Dynasty. It is generally accepted that the 14th Dynasty overlaps the later portion of the 13th Dynasty and Dynasty 16 probably overlaps both the end of Dynasty 15 and the beginning of Dynasty 17. During the Third Intermediate Period it is believed that Dynasties 23 and 24 are overlapped by Dynasty 22.



Figure B- 1 **Lower Egypt**

Figure B-2 shows the relationship of Egypt to surrounding locations and the locations of the dynastic centers in Upper Egypt.

The New Kingdom in Egypt began with the 18th Dynasty when King Ahmose I was to have expelled the Hyksos from Egypt. They are believed to have migrated from the delta region to the regions of Palestine, Phoenicia and Syria. At this time a new kingdom called Mitanni established itself in the area of Mesopotamia. These people were called the Hurrians and became a major threat to Egypt. Tuthmosis I was the first Egyptian King to invade Syria. Eventually peace was established between the two warring nations when Egyptian Kings married Mitanni princesses. During the later portion of the 18th Dynasty and during the 19th Dynasty the Hittites overthrew Mitanni and became Egypt's neighboring enemy. This was resolved when Ramses II married a Hittite princess.

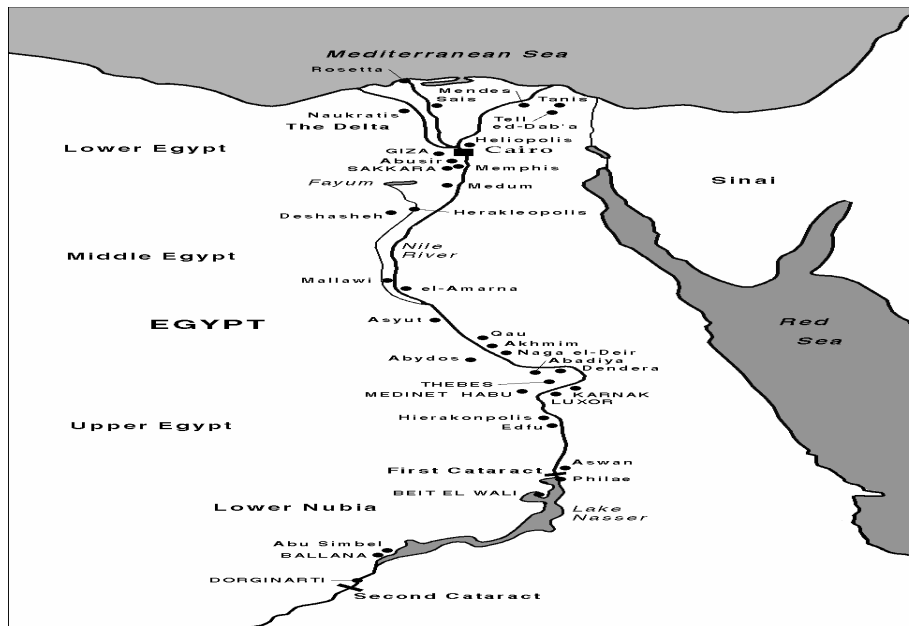


Figure B-2 Upper & Lower Egypt

Table B-2 is a comparison of the so called post-flood Mesopotamian dynasties of Kish, Uruk, Ur, Lagash, Umma, Larsa, and Isin. The location of these cities is shown in Figure B-3. This comparison covers the period beginning after a Deluge up to the timeframe just prior to the rise of Hammurabi in Babylon. The reign of Gilgamesh has been estimated by some historians as between 2585 BC and 2540 BC. His reign interfaced with the reign of Agga I of Kish and Mesannepadda of Ur according to ancient accounts which describe a war between Gilgamesh of Uruk and King Agga of Kish. On the ninth tablet of the Gilgamesh Epic, the flood survivor Utnapishtim tells his descendant Gilgamesh the story of the flood in order to explain to Gilgamesh why he (Utnapishtim) became immortal and to show Gilgamesh that he could not become immortal in the same way. This story places Gilgamesh some time after the flood. The dates calculated for the timing of the flood based on the account described by Josephus places the flood no earlier than 2543 BC (Table B-8). As can be seen, given the errors in determining the dates of the ancient rulers, there is relative closeness between the Biblical timeframe for the Deluge and the timing for a flood derived from the Sumerian Kings List. If a flood actually occurred during this timeframe then there should be some evidence in the continuity of kingship. As can be seen from Table B-2, there is a disruption c. 2370 BC when the southern Mesopotamian cities of Kish, Uruk, Ur, Lagash, and Umma all relocate their rule to the more northern city of Agade under the rule of Sargon. There is evidence of a meteor impact in a

shallow sea that was in the area of present day southern Iraq during this timeframe. As discussed earlier in Chapter 6, this event would likely have caused widespread destruction throughout Mesopotamia. This type of impact would also likely have caused destruction of coastal areas, possibly worldwide, due to resultant tsunamis.



Figure B-3 Mesopotamia

History cannot be determined solely on the basis of archaeological findings. Written documents are also required. Fortunately documents have been found in Egypt and are known as the El-Amarna letters. These letters are correspondence between Dynasty 18 pharaohs Amenhotep III & Akhnaton and kings such as Burnaburiash III, Kadashman Enlil I, and Kurigalzu II of Babylon and Assyrian kings such as Eriba-Adad I and Ashur-urnballit I. The letters written by King Burnaburiash place the Assyrian King Hammurabi c. 1769 BC at the time of the 13th Dynasty of Egypt. A revised timeline which shows contemporary Assyrian, Babylonian, Hebrew, and Egyptian rulers is provided in Table B-3. These dates are based on the works of Trevor Rice⁶⁴ as reported in his paper "Eastern Mediterranean Late Bronze Age Chronology".

Table B4 is a timeline for the Median, Persian, and Babylonian empires based on the writings of Herodotus called "The Histories".

Table B-5 is a list of Phoenician rulers based on the writing of Josephus.

Table B-6 has been titled 'Rulers of Egypt' and is based on the writing of Eusebius, who was to have referenced the writings of Manetho; Siculus; and the

Turin Papyrus which has been dated to 1400 BC. This table is rather interesting in that it includes the names of the Egyptian gods which are also found referenced in Egyptian mythology. Herodotus was to have been told by Egyptian priests that no god has been on earth since the end of the "reign of gods". According to the calculations shown in Table B-6 this would be the time period between 14000 and 12000 BC depending on whether or not the priests were including the Demigod Dynasty in the 'reign'. This is also the timeframe assumed for the end of the Pleistocene Ice Age and the timeframe attributed by the Mayans, Naacals, and Sumerians for the occurrence of a worldwide Deluge.

Table B-7 is a list of the man-kings and Pharaohs of Egypt also based on Manetho, and unlike Table B-6 would more likely have the support of modern-day Egyptologists. The dates for Dynasties 18 thru 21 have been adjusted based on the works of Trevor Rice. Table B-6 also lists pre-dynastic periods which archaeologists have named Tasian, Badarian, Naqada I, Naqada II, and Naqada III after the modern villages where cemeteries have been found in Upper Egypt. It is possible that these pre-dynastic rulers were the Kings and Heros or the 10 kings who were to have ruled during the 350 years of chaos described by Manetho and listed in Table B-6. It is believed that the capitals of the pre-dynastic kingdoms were located at Buto in the delta and at Herakonpolis near Edfu.

The dates that the kings and pharaohs ruled, as shown in Table B-7, are believed to be representative as they are taken from different lists which vary as to the exact dates. Until recently it was thought that the first rulers of dynastic Egypt began with Menes c.3000 BC. A recent discovery of a tomb near Naqada in Upper Egypt has led Egyptologists to reconsider their thinking to a somewhat earlier period, c. 3250 BC. This king has been named Scorpion because of markings of a scorpion found at this site. This discovery along with the finding of the Narmer Plate and descriptions provided by Manetho, Herodotus, and others point to an earlier civilization and perhaps several even earlier civilizations long ago lost to the desert sands.

One of the most recognized historical timetables in the western world today is that derived from the Old Testament account of the Jewish people from the time of the Deluge to the time of the destruction of the Temple in Jerusalem by Nebuchadnessar II in 586 BC. The most recent writing of this chronology was prepared by Josephus between 75 and 100 AD. Josephus, writing to satisfy his Roman masters, presented a history of the Jews based upon his recollections and apparently based upon other documents which are no longer available, at least to the general religious researcher. Using the durations provided by Josephus and those found in the books of the Old Testament, namely Genesis, Exodus, I Kings

and 2 Kings, a date for the Biblical Deluge can be arrived at. A chronology of the Jews, working back in time from the destruction of the Temple in 586 BC to the time of the Deluge, is presented in Table B-8 based on the writings of Josephus. Table B-9 is a similar chronology based on the writings of the Old Testament. The account given by Josephus and the account given in the Old Testament are reasonably consistent to a point from the destruction of the Temple in 586 BC to the time of David as would be expected since they stem from the same source. The Old Testament account of the time between the death of Solomon and the start of the reign of kings does however differ from the account given by Josephus by 49 years. The error could stem from the duration of 477 years given by Josephus for the time between the death of David and the destruction of the Temple, or the length of reign of the kings from Solomon's death is in error in the Bible. I would suggest that the recollection by Josephus is in error. Also, Josephus states that Solomon's kingship lasted for 80 years whereas the biblical account gives 40 years.

Where the two accounts begin to significantly differ is when Josephus attempts to tie the history of the Jews to the history of Egypt. He rightfully identified Menes as the ruler who united Upper and Lower Egypt and founded the First Dynasty described by Manetho. Josephus likely had access to Manetho's dynastic list while preparing his account. The Jews tie their beginning to the Deluge which according to the biblical account would have occurred c. 2400 BC or according to the calculation in Table B-8 based on Josephus would have occurred c. 2543 BC. If Menes was the ruler of the First Dynasty after the flood, then he would have ruled according to the biblical account shortly following 2400 BC. According to Manetho, Menes ruled c.3000 BC or approximately 600 years earlier than the flood as recorded in the Old Testament or approximately 460 years earlier than the flood as determined from Josephus. Josephus addressed this by simply stating "more than 1,300 years had occurred between the time of Solomon and the time of King Menes of Egypt". Unfortunately, the 'time' of these kings does not specify birth, death or time of rule. This early part of biblical history does not correlate with other historical facts. The timing of the Deluge to the beginning of the First Dynasty by Menes and perhaps to the timing of Abraham appears to have been fabricated in order to legitimize the early history of the Jews.

Following are the basic points used to develop Tables B-8 and B-9.

- In Josephus' Antiquities, book VIII, chapter VI: 2, it is stated that "more than **1,300** years" had occurred between the time of Solomon (birth?) and time of King Menes of Egypt. This sets a minimum date for the beginning of the 14 Dynasty around 2414 BC. According to the Palermo Stone, the duration of the First Dynasty was 261 years followed by the 2nd Dynasty with duration of 256 years resulting with the end of the 2nd Dynasty c. 1891 BC. This compares with 2463 BC from Manetho's account in Table B-7 for a difference of 566 years.
- The Turin Papyrus contains the following entry after Dynasty VI: "Kings since Menes, their kingdoms and years: 949 years: kingless years: 6 for a total of 955 years." This would place the end of Menes rule c. 3107 BC. According to Table B-7, the duration between Menes and the end of the 6th Dynasty is between 850 and 788 years placing the beginning of Menes rule c. 3002 BC for a difference of 105 years. Clearly something is wrong.
- Josephus states in 'Book 1, paragraph 14 of Antiquity of the Jews, Flavius Josephus Against Apion' that the Hyksos were in Egypt for the duration of 511 years which ended when Ahmose I of Dynasty 18 ran them out of Egypt c. 1595 BC. This would place the entry of the various Hyksos peoples c. 2100 BC or at the beginning of the First Intermediate Period when the Old Kingdom collapsed. This is coincident with a period of severe drought throughout the Mediterranean region and would explain the influx of people into Egypt and in particular to the Delta region. This would include persons such as the Hebrews Joseph, Jacob and Moses. A problem with using the dates provided by Josephus or the Bible is the overall period of dynastic rule is foreshortened to a point there is not enough time for Dynasties 1 thru 6 between the Hyksos c. 2100 BC and Menes c. 2414 BC. This is a duration spanning 314 years but according to Manetho the duration should cover a period of 850 years. If the 511 year duration is correct then the Hyksos would have had to have coexisted with the Middle Kingdom Dynasties 11 and 12. The Hyksos would have had to have exercised their primary influence over Egypt during the 1st and 2nd Intermediate periods while taking a subservient role during the Middle Kingdom.

- The basis for Table B-8 is the date 9th of Av (July) **586 BC** which is the date accepted by most scholars for the destruction of the Temple in Jerusalem by Nebuchadnezzar II. According to Josephus (Antiquities Book 10, Chapter VIII: 5) the Temple was destroyed in the 11th year of King Zedekiah and the 18th year of Nebuchadnezzar II. The dates for these rulers are consistent with the 586 BC date.
- Book X, Chapter VIII: 5 further states that the Temple was destroyed 470 years-6 months-10 days after it was started which would equate to a start date of 1056 BC. The duration of 470 years was later corrected to **466** years by Josephus. If this is used for the time when the Temple was finished to the time it was destroyed in 586 BC a date of 1052 BC is arrived at for the completion of the construction of the Temple. According to 1Kings 6:38 Solomon took seven years to complete the temple which gives a date of 1059 BC for the start of its construction. There is a discrepancy of 3 years (1056 BC vs. 1059 BC).
- Book X, Chapter VIII: 5 further states that the Temple was destroyed **1,062** years from the departure out of Egypt giving a date for the Exodus c.1648 BC. According to Josephus 'Antiquities', Book VIII, Chapter 2:1 the duration between the time Solomon began to build the temple and the Exodus was 592 years thus also dating the Exodus at 1648 BC if the date of 1056 BC is used as the start date. It would appear that 1056 BC is the correct date and not 1059 BC. If the traditional date of 967 BC is used for the start of the temple as suggested in the Bible then the Exodus would have occurred 1559 BC for a difference of 89 years from the date c. 1648 BC derived from the account of Josephus.
- Book X, Chapter VIII: 5 further states that the Temple was destroyed **1,957** years after the Deluge giving a date for the Deluge c. 2543 BC. If the time of the Deluge is determined using the duration of **1440** years, between the Deluge and the start of the Temple in 1056, provided by Josephus, Book VIII 3:1 of The Antiquities of the Jews then the time of the Deluge is 2496 BC. This is a difference of 47 years if the 1957 figure is used from the time of the Deluge to the time of the destruction of the Temple. If the traditional date of 967 BC is used for the start of the temple and 1440 years from this date back in time, gives the timing of the Deluge as 2407 BC for a difference of 136 years from the account of Josephus. These accounts all point to a time c. 2500-2400 BC for the biblical deluge. From Table B-1 this is also the time of a possible asteroid impact in Mesopotamia and Table 8-2 shows 2350 BC as a period of high cosmic influx.

- According to 1Kings 6: 1 Solomon began the Temple in the 4th year of his reign, or his reign began in 1060 BC. According to the book of 1Kings 11:42 Solomon's rule was for 40 years therefore his reign ended in 1020 BC. According to Josephus 'Antiquities', Book VIII, Chapter VII: 8 Solomon lived to be 94 years old which would make his birth during 1114 BC.
- The duration of 477 years given by Josephus for the period from King David's death to the destruction of the Temple by Nebuchadnezzar II establishes the date of David's death and the beginning of Solomon's rule as 1063 BC. Here again is a 3 year discrepancy. David was 70 years old at his death resulting in the date of 1133 BC or 1130 BC for his birth.
- According to the books 1Kings and 2 Kings, the Kings of Judah and Israel ruled from the time of the death of Solomon to the destruction of the Temple by Nebuchadnezzar in 586 BC for a period of 345 years. Using this duration and working back from 586 BC brings the death of Solomon to the commonly accepted date of 931 BC instead of 980 BC. A difference of 49 years exists between the Bible's rendition and that of Josephus assuming the duration of Solomon's rule given by Josephus is 80 years and not the 40 years as reported in the Bible.
- The time that Abraham left Ur for Canaan in 2076 BC was determined using the duration of **1,020** years as provided by Josephus, Book VIII, 3:1 of The Antiquities of the Jews. This is the duration between the time Abraham left Ur and the time Solomon began the Temple in the 4th year of his reign.
- Abraham's birth c. 2201 BC is determined from the duration provided in Genesis 11: 10-26 which gives the duration from the time of the Deluge c. 2543 BC to his birth as **342** years assuming Nahor was 79 years old when Terah was born and not 29 as given in some accounts, (2154 BC if 2496 BC is used for the Deluge).
- The births and deaths of Terah, Isaac and Jacob can also be determined from Abraham's birth and their life spans as recorded in the Bible. Terah was 70 years old when Abraham was born. Isaac was born when Abraham was 99 years old and lived to be 180 and Jacob was born when Isaac was 60 years old and lived to be 147. Further, according to Genesis 47:28 Jacob lived in Egypt for 17 years before he died. According to Genesis 47:9 and 47:13 Joseph presented Jacob to Pharaoh when Jacob was 130 years old at the time the famine was underway. According to Genesis 25: 7 Abraham was 175 years old when he died.
- The birth of Joseph, the son of Jacob, is somewhat of a guess. It is known that he was 17 years old when sold into captivity and was 30 years old when he came before Pharaoh prior to the seven years of plenty. He also

was in Egypt before his father Jacob arrived. According to Genesis 36:24-28, Isaac died prior to Joseph being sold into Egypt.

- The dates for the birth and death of Moses were determined as it is known that he died 40 years after the Exodus and lived for a total of 120 years.
- After King Solomon's death Israel and Judah were ruled by a series of Kings for a period of 345 years (1020-675 BC) or (931-586 BC) depending on which version of the account is used.

In the book Flavius Josephus Against Apion, Josephus writes in Book 1, paragraph 14, that a nation called Hyksos reigned in Egypt for a period of 511 years and was driven out of parts of Egypt by King Alisphragmuthosis. They congregated in the city of Avaris on the delta where King Thummosis the son of Alisphragmuthosis finally expelled them. These Hyksos were also called "Captive Shepherds" by Manetho. He also reported that these Captive Shepherds journeyed through the wilderness to a place called Judea where they built the city of Jerusalem.

In paragraph 15 Josephus goes on to list the kings of Egypt following the expulsion of the Hyksos. In paragraph 16 Josephus goes on to state "that these shepherds, as they are here called, who were no other than our fore-fathers".

The list of kings in paragraph 15 looks very much like those of Manetho's 18th and 19th Dynasties as can be seen in the comparison in Table B-10. This comparison was made by matching the durations of individual kings as derived from Manetho's list (Table B-6) and the durations given by Josephus in paragraph 15. In some cases the names from the two lists are quite similar and were also used to make the matches. While there are some glaring differences, I believe they can be explained.

It is known that three Egyptian kings were involved with expelling the Hyksos-Seqenenre, Kamose and Ahmose I. It is not known for sure if Tethmosis I, named by Josephus, was Ahmose I, however, the length of their reigns is quite similar. This however leaves Chebron with no match which may signify that Tethmosis I is really Kamose of the 17th Dynasty.

The names of Amenhotep I and Amenophis I are quite similar as are the duration of their reigns. The largest discrepancy comes with Kings Thutmose I and II as Josephus gives no similar names or durations in his description. It is possible that Josephus left these two individuals out as they were not from the royal line but

were rather military leaders and spent much of their time waging war with the Hurrians in Syria.

The next ruler listed by Josephus is Queen Amesses who, if you ignore Thutmose I & II, corresponds to Queen Hatshepsut. The actual duration of the reign of Queen Hatshepsut is uncertain, however, the durations shown are not out of line.

Assigning Mephres and Mephr-Amuthosis to Manetho's Thutmose III may be the greatest stretch. Thutmose III was a great military leader so the reign of 54 years may be greater than the total time he ruled in Egypt. If he spent considerable time on military campaigns he would likely have had co-rulers which could be the two rulers Mephres and Mephr-Amuthosis cited by Josephus.

The next five ruler's reigns compare quite favorably as do the names of the first two of the five rulers. Further, if Amenhotep I is Amenophis I then it stands to reason that Amenhotep II is Amenophis II. There is considerable uncertainty in the reigns and durations of Akhnaton, Nefertiti, Semenkhare and Tutankhamun. One theory is that Semenkhare was actually Nefertiti. Another theory is that Semenkhare, Tutankhamun, and even Ay may have reigned simultaneously with Akhnaton, some in Amarna and some in Thebes. The last two rulers of Dynasty 18, Ay and Horemheb are believed to have been co-regents while Acencheres I & II are listed sequentially by Josephus.

The 19th Dynasty comparison relies on the similarity of names and duration of reigns. In order for the comparison to be made as shown it was necessary to move Rameeses forward in the sequence supplied by Josephus. The similarity of names and the short duration of reigns have to be considered as a match. Since Josephus did not provide durations for the last three rulers a direct comparison is impossible, however, the last ruler was a Queen in both cases.

While dates for the expulsion cannot be determined from this comparison it would appear that the expulsion can be tied to the beginning of the 18th Dynasty, c. 1595 BC. The dates calculated for the Exodus in Table B-8, c. 1648 BC and in Table B-9, c. 1559 BC also support this timeframe.

Historical timetables for major geological and astronomical events are reasonably well understood and accepted by modern-day scholars. The ancient histories of Egypt, Mesopotamia and Persia, while being corrected, are also reasonably understood by modern-day scholars. The ancient histories of South and Central American cultures are not nearly as well understood or accepted. Peruvian creation mythologies show an uncanny similarity to the writings of the Sumerians.

Archaeological evidence of early man in Chile and Peru has indicated the presence of early civilizations which perhaps were contemporaneous with and rivaled those of Egypt and Sumeria. However, it is very difficult to reconstruct the history of the Peruvians since it has been believed they had no written language as we define writing today. History was passed on to future generations by a class of wise men called 'Amautas'. Much of what we have today was recorded by Spanish monks assisted by natives. Information/history was passed down from fathers to sons, repeating the stories many times until they were fixed in their memories. They also recorded the most notable things expressed in numbers on cords called quipu. On these cords they made various knots with different colors which convey the meaning of the notable events. It has been suggested by some scholars that the quipu cords may be a form of writing. Much of the confusion we observe today is a result of ignorance, prejudice and fanaticism of the Spanish historians of the time.

During the rule of Pachacuti-Inca-Yupanqui (1438 - 1471 AD) stories of Inca antiquities, origin and historical events were painted on boards and then interpreted by persons trained in understanding their contents. Some scholars believe that the records of previous dynasties were deliberately forgotten by Pachacuti-Inca-Yupanqui. This may have been a common practice and there are many who believe the list of dynasties provided by Montesinos was also altered to suit his Jesuit religious purposes. The list of rulers provided in Table B-10 should be reviewed with a great deal of skepticism particularly for the rulers earlier in time than Pachacuti-Inca-Yupanqui.

Information regarding pre-Inca history (Table B-11) is derived from the writings of the Spaniard by the name of Fernando Montesinos. According to their creation myth, Viracocha Pachayachachi was the creator of all things. Like the Mayan myth, the first to be created was a race of giants. Dissatisfied with this creation he created primitive man who because of their bad behavior, Viracocha Pachayachachi decided to create a deluge, called Unu Pachacuti, destroying mankind. He then created other men in the region of Tiahuanaco who then wandered over the region establishing nations some of which ultimately settled around Cuzco. Another 10 tribes from a hill called Tampu-tocco (possibly Machu Picchu) in the Paccari-tampu region eventually wandered until they met the 6 tribes settled around Cuzco. There they defeated the 6 tribes and named themselves 'Inca' under the leadership of Manco Capac.

The time between the deluge and the rise of the Incas was to have been 3519 years, according to Montesinos, placing the deluge c. 2900 BC. As can be seen

from Chapter 4 this time frame is only close to the dates provided by the Akakor account and the dates calculated by the Christians. Montesinos calculated that the fifth year of the reign of the fortieth monarch of ancient Cuzco was 2,500 years from 'Point Zero'. He assumed 'Point Zero' was the time of the Deluge. Since Montesinos had no basis other than a need to tie Inca dates to Christian beliefs his assumption is unlikely correct. A more reasonable 'Point Zero' is likely tied to an astronomical event since the fortieth monarch was a strong proponent of astronomy and astrology. The Egyptian and Mayan calendars both have their point zero during this same time frame so it is not unreasonable that the Incas chose a similar date. This suggests ties between the ancient Peruvian civilization and the ancient Egyptian and pre-Mayan civilizations c. 3000 BC.

One of the most recent groups to emerge and grow to over a billion followers worldwide is Islam. I use the term group to describe the people that make up Islam since they do not represent a nation with boundaries, an individual civilization, or a religion with a definite leader. The roots of Islam are founded in the tribal setting of the Arabian Peninsula and in particular the western region of the Peninsula and the cities of Mecca and Medina. Mecca is the setting of the Ka'ba which is said to have been rebuilt by Abraham and remains today as one of the holiest settings of modern day Islam. Prior to the birth of the Prophet Muhammad c. 570 AD the Ka'ba was under the control of the Quraysh Tribe of Mecca. Muhammad was born into the Banu Hashim clan, a division of the Quraysh Tribe. Table B-12 is a brief summary of the development of the Muslim Religion from the pre-Islamic tribal times, termed by modern-day Muslims as Jahiliyyah or Time of Ignorance, through modern day Islam. As can be seen from Table B-12 the pre Islamic Arabian Peninsula was the home of many Jewish and Christian sects. Muhammad certainly had access to their teachings and in fact quoted them in the Quran. The Muslims recognize Adam, Noah, Moses, Jacob, Abraham, Isaac, & Ismail as prophets of Islam.

Partially because Muhammad did not designate any heirs to his position of leadership, Islam went through turbulent times in establishing its leaders. Schisms in leadership which began after Muhammad's death in 632 AD are still evident today. These groups have become to be known as the Shi'ites and the Sunnis; the Shi'ites being Rationalists and the Sunnis being Traditionalists/ Orthodox believers.

TABLE B-1 HISTORICAL EVENTS

<u>DATES (BC)</u> <u>REFERENCE</u>	<u>EVENTS</u>	<u>BIBLICAL</u>
6-7 Million	Pre-human, Africa-Chad, Toumai Man	
4.4 Million	Pre-human, Africa-Ethiopia	
4 Million	Lucy, Africa-Ethiopia	
3.5 Million	Early Hominids, Africa	
2 Million	Homo Erectus, Africa, Java	
2.2-1.75 Million	Homo Habilis, Africa-Tanzania	
500,000	Archaic Homo sapiens, Europe	
500 to 260,000	Nebraskan - Gunz Ice Age	
400 to 300,000	Homo sapiens	
300 to 30,000	Neanderthal, Europe, Asia	
250,000	Modern curvature of skull base (speech)	
200,000	Kansan - Mindel Ice Age	
150,000	Origin of Modern Man, Africa	
130 to 100,000	Illinoisan - Riss Ice Age	
120 to 100,000	Homo Sapiens-Sapiens (HSS)	
73000	Near destruction of Human Race Toba-volcano, intense cold	
70 to 50,000	Wisconsin - Wurm Ice Age (Period 1)	
60 to 30,000	Develop fully modern brain (HSS)	
50 to 20,000	Cro-Magnon, Europe	
35 to 10,000	Wisconsin - Wurm Ice Age (Period 2), cooling period followed by a warming period	
38 to 23,000	Inland Sea - Andes (remnant today is Lake Titicaca)	
16 to 15000	Begin warming period, Hunter-gatherers, South-China,	

	Japan and Siberia, Vesuvius erup ts Peak ash fallout (15 -14000)	
12000	End Pleistocene Ice Age, Mediterranean Sea rises, Nile backs up, Second migr ation over Beringia Land Bridge	
11500	Begin present interglacial perio d; Clovis culture-New Mexico; Disappearance of Mega fauna	

TABLE B-1 HISTORICAL EVENTS (Continued)

<u>DATES (BC)</u> <u>REFERENCE</u>	<u>EVENTS</u>	<u>BIBLICAL</u>
11000	Deluge (Based on Sumerian & Naacal Text /Tablets	
10657	Vesuvius erupts	
10602	Mayan date = 8 Cumhu 4 Ahu	
10481	Akakor Day Zero	
10468	Akakor first destruction	
10450	Possible early date for Giza pyramids	
9200 to 8900	Vesuvius erupts (9285), Mass migrations to North & Central Americas	
9000 to 8000	Younger Dryas period, First mini Ice Age, Begin farming worldwide	Early Jericho deserted, Farming in Mesopotamia & Fertile Crescent, Abu Hureyra
8400 to 7350	Region of Jericho developed	
8000 to 6500	Farming & settlements in Anatolia, Greece, Peru coast & highlands, Alaska, Western US	
7000	Drought in Central & South America	
6500 to 5400	Asiklihöyük, Catalhöyük (Anatolia), Mexican step pyramid	
6200 to 5800	Second mini Ice Age; Etna erupts	
6000	Large scale irrigation along Tigris-Euphrates Rivers, Yonaguni structures, Phoenician city of Byblos founded	
5600	Collapse of Bosphorus, Black Sea Deluge	
5500	Beginning of Copper Age, Hacilar people in Asia Minor, Proto-Ubaidians emerge from Black sea area, Halafian settlements in vicinity of	

	Tigris-Euphrates Rivers	
5300 to 3600	Ubaid culture in Mesopotamia	
5000	Holocene Thermal Maximum, Mt Mazama erupts (Crater Lake), Decimal number system used in Egypt	

TABLE B-1 HISTORICAL EVENTS (Continued)**DATES (BC)**
REFERENCE**EVENTS****BIBLICAL**

4500	Beginning of Sumerian culture <ul style="list-style-type: none"> • Eridu c. 5400-4800 • Uruk – c. 4200 • Enoch • Kish – c. 3000 	Biblical equivalents: <ul style="list-style-type: none"> • Eden? • Erech • Cainite City • Kush
4240	Possible early founding of Egypt as a unified Kingdom	
4004		Creation (Early Bible)
3760	Nippur calendar Day 0 (Sumerian)	Day 0 of Hebrew Calendar
3600 to 3250	Pre-Dynastic Egypt	
3500	Sea levels at modern levels, Floods in Egypt, Mesopotamia, and China	
3400 to 3000	Pictographic & written language-hieroglyphics, hieratic, cuneiform; Beginning of Olmec civilization	
3200	Beginning of Egyptian calendar	
3166	Akakor – second destruction	
3114	Day zero of the Mayan Long Count calendar (8 Cumhu 4 Ahu), Begin current Age (Age 5)	
3102	Beginning of Kali Yuga (India)	
3000	Rise of Olmec culture, Babylonians use sexagesimal number system	
3000 to 1225		Hittites (Canaan)
2900	Elamite pictographs; Minoan	Elamites

	culture begins in Indus Valley	
2950 to 2575	Early Dynastic Egypt, First monarchies in Sumeria, Begin Libraries	
2800 to 1900	Harappan writing-Indus Valley	
2800	Stonehenge I (some think 4200)	
2750	Phoenician city of Tyre founded	
2700	King Mebaragesi of Kish defeats Ealamites	
2575	Begin Old Kingdom in Egypt	
2500	Phoenicians dominate trade in Mediterranean	
2470	Founding of Cuzco in Peru	

TABLE B-1 HISTORICAL EVENTS (Continued)

<u>DATES (BC)</u> <u>REFERENCE</u>	<u>EVENTS</u>	<u>BIBLICAL</u>
2350	Akkad Founded – Sargon I, Akkad/Kish (Akkadians)	Nimrod (Kush)
2348 or 2492	Possible meteor impact in Mesopotamia	Deluge (Based on Bible)
2200 to 2000	Semitic influx into Egypt: <ul style="list-style-type: none"> • The Wisdom of Merikare • The Prophecy of Nefertiti 	
2200	Akkadian Empire falls to the Gutis, Severe drought (100 years)	
2180 to 2150	Severe drought in Egypt, Old Kingdom falls	
2166 to 1991		Abram/Abraham
2130	Guti (Sumeria)	
2059	Assyrian Empire founded	
2048		Yahweh instructs Abraham to go to Canaan (possibly 1960)
2004	Ur III falls to Amorites & Elamites	
2000	Hittites in Anatolia, Temple of Karnak-worship of Amon	Amorites & Elamites
1950	Babylonians solve quadratic equation	

1937 to 1760	Second greatest period in Egypt	
1937	Amenemhet I – Middle Kingdom	
2042 to 1895		Jacob (Isreal)
1924	Amenemhet II	Joseph to Egypt
1900	Egyptians use geometry	
1800	Hyksos in Palestine	
1769 to 1737	Hammurabi (Babylon)	Hammurabi (Amorite)
1766 to 1100	Shang Dynasty in China	
1760	Egypt Middle Kingdom falls	
1776 to 1719	Seven year famine in Egypt	Seven year famine in Israel
1724 to 1604		Moses
1700 to 1500	Hurrians (Flood myth), Comet influx	
1644		Exodus from Egypt
1640 to 1540	Egypt ruled by Hyksos (Asians)	Hittites (1650 BC)
1628	Eruption of Santorini	Hittites destroy Babylon
1600 to 1200	Minoan civilization declines	
1600	Beginning of period of invasions	
1550	Destruction of Indus Valley civilization	

TABLE B-1 HISTORICAL EVENTS (Continued)**DATES (BC)
REFERENCE****EVENTS****BIBLICAL**

1500	Egypt-religious emphasis on the Sun, Beginning of subjective writing	
1500 to 500	Olmecs-south coast of Mexico	
1454	Heavens came to a stop-Mexico	
1438	Yupanqui takes name Pachacuti (meaning cataclysm)	
1400	Day of darkness-Andean legend, Destruction & burning of Cnossus-Crete	Day sun didn't set (Joshua 10)
1392 to 1382	Height of Egyptian power & wealth- Tutmose IV	
1350 to 1336	Akhnaton worships Aton (Sun)	
1230	Events in the Iliad	Leviticus

1200	Olmec peak (San Lorenzo), Abydos-Egypt, Earthquakes-Eastern Mediterranean	Canaanites, Beginning of new cultures: Hebrew, Phoenician, Aramaeans, Assyrians
1193	Destruction of Troy	Hittite Empire falls
1180	Sea people destroyed by the Egyptian Ramses III	
1100 to 1000	End Mycenaean culture	Khabiru (Hebrew), Philistines in Gaza & Askalon
1100	Mexican Sun pyramid, Global perturbation of climate- very dry	Assyrians in Babylon
1075	Egypt- New Kingdom falls	
1043	Brahmanism begins in northern India, c. 950 BC	Saul (1043 to 1010) David (1041 to 971) David conquers Jerusalem (1003 BC)
1000	Broad based subjective consciousness, Begin Mayan culture	
971 to 931		Solomon, Temple completed in 960 BC, Israel divided into Israel & Judah in 931 BC
900 to 850	Iliad written down	Beginning of Old Testament writings
900 to 830	El – Amarna letters	
850	Jericho rebuilt	King Ahab (1 Kings 22:6)
835	Nabi (welling up with speech & vision)	Elijah prophet-ascent into heaven (2 Kings 2)
830	City of Carthage founded	

TABLE B-1 HISTORICAL EVENTS (Continued)**DATES (BC)**
REFERENCE**EVENTS****BIBLICAL**

783 to 743		Book of Amos (Bicameral thinker)
781 to 740		King Uzziah
776	First Olympic Games	
775	First record of a solar eclipse-	

	China	
753	Rome build	
740 to 687		Isaiah – prophet
721	Assyrians conquer Israel	Sargon II deports Israelites
704 to 681	Sennacherib	King Hezekia – Judah
687 to 642		King Manasseh worships graven image
668 to 627	King Ashurbanipal rules	
664	Sacking of Thebes & Memphis by Ashurbanipal	
648 to 642		King Amon
640 to 605		King Josiah – Deuteronomy text found
627 to 550	Babylonian Empire, King Nabopolassar	Destruction of Assyrians by the Babylonians
610		Yahweh leaves Earth
606 to 562	Nebuchadnezzar II rules	
600		Old Testament revised
595 to 589	Exodus of Jews and others from Elephantine-Egypt	Babylonians seize Judah in 597 BC
593		Ezekiel–sighting of spaceship
586	Nebuchadnezzar II destroys Temple of Yahweh	Exile of Israel to Babylon
580 to 500	Pythagoras (Greece)	Ezekiel - prophet
563 to 483	Buddha (India)	
559 to 530	King Cyrus of Persia	Cyrus decrees Jews to rebuild temple in Jerusalem-Esdras
551 to 478	Confucius (China)	
539	Persian Xenophanes proposes one deity	Babylon falls to Cyrus
538 to 536	Jews return to Jerusalem	End 70 year exile
525	Persians conquer Egypt	
521 to 486	King Darius I of Persia	
485 to 424	Herodotus (Greek)	Egypt in decline
475	Mt Etna erupts	

TABLE B-1 HISTORICAL EVENTS (Continued)

DATES (BC)
REFERENCE**EVENTS****BIBLICAL**

465 to 424	King Artaxerxes	
450		Book of Chronicles-Ezra
445	Jewish Great Assembly	Old Testament Canonized
470 to 399	Socrates, Parthenon in Athens	
427 to 347	Plato	
422	King Darius II	Second Temple completed by Esdras
420		Book of Malachi
410	Jewish Temple in Elephantine destroyed	
400	Golden Age in Athens	
400 to 300	End of Bicameral prophecy	
384 to 322	Aristotle	
332 to 323	Macedonian Alexander the Great conquers Egypt	
300	Begin Mayan & end Olmec civilizations	Begin Seleucid Dynasty
299	Beginning of India Empires	
290	Berosus (Chaldean)	
285 to 246	Manetho (Egypt)	
286 to 280	Greek Septuagint	Includes Apocrypha
200	Aramaic replaces cuneiform, Rosetta stone engraved, Beginning of Pseudepigrapha Books	Ecclesiastes-written with subjective consciousness, Book of Enoch
197	Philip V of Macedonia defeated by Rome	
168	Begin Roman world domination	
165		Book of Daniel
160	Trigonometry rediscovered	
159	Water clock invented – Rome	
146	Carthage destroyed by Rome	
140	Beginning of Essenes at Qumran	
54	Caesar invades Britain	
45	Julian calendar introduced	
37 to 4	King Herod	Heli (Jacob), Joseph
36	Anthony & Cleopatra marry	
31	Qumran earthquake	Essenes return to Jerusalem

30	Rome conquers Egypt	
11	Agrippa born	
8		John the Baptist born

TABLE B-1 HISTORICAL EVENTS (Continued)

<u>DATES</u>	<u>EVENTS</u>	<u>BIBLICAL REFERENCE</u>
7 BC		Jesus born
DATES AD		
1	Extreme drought in Central & South America	
29		Jesus begins ministry
31		John the Baptist executed
33		Crucifixion of Jesus
43	London founded	
44	Peter becomes leader of Christians, Church moved from Antioch to Rome	Term 'Christian' first used
46	Julian Calendar	
54	Nero becomes Emperor of Rome	
60	New Testament texts written by: <ul style="list-style-type: none"> • John Mark • Peter • Luke • Matthew Annas • John of Zebedee • Luke 	New Testament Books: <ul style="list-style-type: none"> • John ~ 37 AD • Mark • Luke • Matthew • Revelation ~ 50 AD • Acts ~ 60 AD
68	End of Qumran	
70		Destruction of Jerusalem by the Romans
79	Vesuvius erupts-destruction of Pompeii	
85		Pope Ignatius coined the word "Catholic"
93	Antiquities by Josephus published	
100		Old & New Testaments in final form
185 to 254	Origen	

325		Church Council of Nicea
400	Mt Xitle erupts (Mexico)	
451		Council at Chalcedon establishes Trinity
500	Talmud completed - began ~ 200 BC	
535	Super volcano Proto-Krakatau erupts in SE Asia	
566 to 1095	"Dark Ages"	
570 to 632	Muhammad	
608	Euphrates froze	

TABLE B-1 HISTORICAL EVENTS (Continued)**DATES (AD)**
REFERENCE**EVENTS****BIBLICAL**

622	Muslim year 1	
630	Muhammad defeats Bedouins	
650	Quran written and canonized	
660	Shi'ism founded	
600 to 850	Drought in Andes, begin Mayan decline, earthquakes in Andes	
750	Rise of Toltecs	
829	Nile froze	
865	Severe cold in Iceland	
800 to 900	Mayan civilization collapses - dry period	
900	Rise of Anasazi (Chaco Canyon)	
1054	Schism between Catholicism & Orthodoxy, Super Nova visible	
1099	Crusades capture Jerusalem	
1100	Fall of the Anasazi	
1119	Templars take Temple Mount	
1100 to 1300	Cannibalism in SW United States and Mexico	
1100 to 1387	Medieval Maximum (Sunspots)	
1130's	Gothic architecture in France	
1168 to 1220	Fall of Toltecs	
1258	Mexica found Chipoltepec	
1275 to 1300	Anasazi leave Mesa Verde-major drought	
1325	Mexico City founded (Aztecs)	

1349	Earthquake destroys lighthouse in Alexandria Egypt	
1280 to 1350	Medieval Minimum	
1200 to 1534	Volcanic eruptions in Mexico & Peru	
1400 to 1510	Sporer Minimum (Sunspots)	
1455	Gutenberg Bible printed	
1504	Montezuma II becomes Speaker	
1517	Protestant Reformation- Martin Luther	
1519	Cortez arrives, Popocatepetl erupts, Fall of the Aztecs	
1532	Pizzaro conquers Incas	
1546		Council of Trent includes Apocrypha in Old Testament
1582	Gregorian Calendar	

TABLE B-1 HISTORICAL EVENTS (Continued)

<u>DATES (AD)</u> <u>REFERENCE</u>	<u>EVENTS</u>	<u>BIBLICAL</u>
1611		King James version of Bible
1630 to 1720	Little Ice Age in Europe, Maunder Minimum (i.e., lack of sunspots)	
1752	Gregorian Calendar adopted in England	
1815	Mt Tambora erupts, Year without a summer	
1883	Krakatau erupts	
1948	Israel founded	
2012	End Mayan 5 th Age/Sun	Apocalypse – Hebrew Year 5772

TABLE B-2 POST FLOOD KINGS LIST

DATE (BC)	KISH	ERECH/URUK	Ur	Lagash	Umma
5600 Bosporus Flood	23 KINGS	12 KINGS			
	Ga-Ur-1 st Dynasty				
	Gulla-Nidaba-Anna				
	Pala-Kinatim				
	Nangish-Lishma				
	Bahima				
	Buanun				
	Kali-bum				
	Galumum				
	Zukakin				
	Atab				
	Mashda				
	Arpu-Rim				
2750	Etana (Nimrod?)				
	Balih				
	En-Mennuna				
	Melam-Kishi				
	Bargal-Nuna	Meskiaggasher (?)			
	Mes-Simug				
	Tizkar	En-Marker (?)			
	Il-Kum	Lugal- Banda (?)	Meskalamdug		
2615	Il-Tasadum	Dumuzi (?)	Akalamdug	En-Khegal	
2615-2585	En-Mebaragisi	Gilgamesh			
2585	Agga 1	Gilgamesh	Mesannepadda	Lugal-Shagensur	

2585-2555		Ur-Lugal I			
-----------	--	------------	--	--	--

TABLE B-2 POST FLOOD KINGS LIST (CONTINUED)

DATE (BC)	KISH	ERECH/URUK	Ur	Lagash	Umma
2555-2540	Mesalim	Utulkalamma		Ur-Nanshe	
2540-2531	Dadsig	Labasum	Meskiag-Nanna	Akurgal	Ush
2531-2523	Magalgalla	En-Nundara-anna		Eannatum I	En-Akalli
2523-2487	Kalbum	Meshede			
c. 2500 Genesis Flood					
2487-2481	Tug-E	Melam-anna			
2481-2445	Mennunna	Lugal- Kitun			
	Lugalmu	Ur-Lugal II	Elilu	Inannatum II	Urlumma
2457-2425	Ibiera	Arga-Ande-A	Balulu		
		Enshakush-anna		Enetarzi	
2450	En-Bi-Istar	Lugal-Kinishedudu	To Lagash	En-Temena	II To Lagash
c. 2400		Lugal-Kisalsi			
2384-2378	3 rd Dynasty-Ku-Baba			Lugallanda	
2378-2371	4 th Dynasty-Pusur-Sin	Lugal-Tar			
2370	Ur-Zababa-5th Dynasty				
2371-2347		Lugal-Zaggisi - To Akkad	To Akkad	Urukagina To Akkad	Lugal-Zaggisi - To Uruk

	AGADE/AKKAD				
2371-2315	Sargon				
2314-2306	Rimush				
2305-2291	Manishtusu				
2290-2254	Naram-sin				
2253-2230	Shar-Kali-Sharri				
2191-2130	"Gutis"-King Tirigan			Ensi-Gudea	

TABLE B-2 POST FLOOD KINGS LIST (CONTINUED)

DATE (BC)	KISH	ERECH/URUK	Ur	Lagash	Umma
2130-1900	Amorites				
2130-2113		Utuhegal		Gudea	
2113-2095		Ur-Nammu To Ur	3rd Dynasty of Ur King Ur-Nammu		
2095-2047			Shulgi		
2046-2038			Amar-sin		
2037-2029			Shu-sin		
2025-2005				Naplanum	
2028-2004			Ibbi-sin		
2004-1976				Emisum	
2017-1984					Ishbi-Erra
2004-1995			Amorites & Elamites		
1995-1990			Ishbi-Erra of Isin		
1976-1942				Samium	
1953-1935					Ishme-Dagan
1941-1932				Zabaia	
1932-1905				Gungunum	
1934-1924					Lipit-Ishtar
1923-1817					9-Kings
1822-1763				Rimsin I	
1816-1794				To Babylon	Damiq-ilishu

c. 1794					Rimsin of Larsa
---------	--	--	--	--	----------------------------

Notes: 1) En = lord
2) Lugal = king (great man)
3) Ensi = governor of city

TABLE B-3 CORRELATION AMONG ANCIENT CHRONOLOGIES HIGHLIGHTING THE AMARNA PERIOD

DATES (BC)	BABYLON⁽¹⁾	ASSYRIA⁽¹⁾	EGYPT	HEBREW	SOURCE
2254 - 2192	Cush, Nimrod		Khufu (Cheops)		Julius Africanus ⁽²⁾ Joint reign
2192 - 2167	Nimrod				Velleius Paterculus ⁽³⁾ Sole reign
c. 2004	Begin Amorites rule		End 1 st Intermediate Period		
1895 - 1856		Erishum I		Joseph dies c. 1895	Nassouhe & Khorsabad King Lists ⁽⁴⁾
1849 - 1837	Sumuabum				
1836 - 1801	Sumulael				
1855 - ?		Ikunu			
c. 1838		Sharru-kin I			
1800 - 1787	Sabium	Puzur-Ashur II - c. 1820			
1786 - 1769	Apil-Sin	Narim-Sin – c. 1800	Amenemhet III, Amenemhet IV		
? - 1770		Erishum II			
1768 - 1749	Sin-muballit				
1769 - 1737		Shamshi-Adad I			
1748 - 1706	HAMMURABI	Ishme Dagan			
1736 - 1697		Ashur-Dagan I			
1705 - 1669	Samsuiluna				
1696 - 1691		Ashur-Dugal	Neferhotep I		
1668 - 1641	Abieshu				
1690 - 1681		Belu-Bani			
1640 - 1604	Ammiditana		Hyksos, Ini I – Dynasty 13	EXODUS - c. 1648	
1603 - 1583	Ammisaduga				

TABLE B-3 CORRELATION AMONG ANCIENT CHRONOLOGIES HIGHLIGHTING THE AMARNA PERIOD (Continued)

<u>DATES (BC)</u>	<u>BABYLON⁽¹⁾</u>	<u>ASSYRIA⁽¹⁾</u>	<u>EGYPT</u>	<u>HEBREW</u>	<u>SOURCE</u>
c. 1595			End Hyksos – Dynasty 17, Ahmose I – Dynasty 18		
1582 - 1552	Samsuditana				
1565 - 1560		Shamshi Adad II			
1551 - ?	Agum II				
1527 - 1502		Ashur Nirari I			
1501 - 1488		Puzur Ashur III			
1487 - 1475	Burnaburiash I	Enlil-Nasir I			El-Amarna letters ⁽⁵⁾
c. 1433		Ashur Nadin – Ahhe I			El-Amarna Period
1415 - 1377		Ashur Nadin – Ahhe II	Amenhotep III		El-Amarna Period
1392 - 1366	Kurigalzu II	Eriba-Adad I			El-Amarna Period
1382 - 1344	Kadashmin Enlil I				El-Amarna Period
1377 - 1356			Amenhotep IV (Akhnaton)		El-Amarna Period
1375 - 1347	Burnaburiash III				El-Amarna Period
1365 - 1330		Ashur Uballit I			El-Amarna Period
1343 - 1319	Kurigalzu III	Enlil-Nirare			
1307 - 1276		Adad-Nirari I			
1304 - 1237		Arik-den-ili	Ramses II ⁽¹⁾		
1292 - 1275	Kadashmin-Turgu				
1275 - 1246		Shalmaneser I			
1274 - 1260	Khadashmin Enlil II				
1245 - 1209		Tukulti-Ninurta I			
1208 - 1205		Ashur Nadin Apli			

TABLE B-3 CORRELATION AMONG ANCIENT CHRONOLOGIES HIGHLIGHTING THE AMARNA PERIOD (Continued)

<u>DATES (BC)</u>	<u>BABYLON⁽¹⁾</u>	<u>ASSYRIA⁽¹⁾</u>	<u>EGYPT</u>	<u>HEBREW</u>	<u>SOURCE</u>
1250 - 1238	Shagarakti-shuriash				
1221 - 1192	Adad-shuma-usur				
1162 - 1160	Enlil Nadin-ahe- Last KASSITE	Ashur-Dan I			
1127 - 1106	Nebuchadnezzar I	Ashur-resh-ishi I			
1115 - 1077		Tiglath-pileser I			
1105 - 1102	Enlil-nadin-apli				
1101 - 1084	Marduk-nadin-ahhe				
1074 - 1057		Ashur Belkala			
1070 - 1049	Adad-apla-idina				
1050 - 1032		Ashur Nasirpal I			
1043 - 1010				Saul	
1035 - 1028	Nabu-shuma-libur				
1031 - 1020		Shalmaneser II			
1025 - 931				Solomon	
967 - 935		Tiglath-pileser II			
934 - 912		Ashur Dan II	Sheshong I (925)	King Rehoboam, King Jeroboam I	
911 - 891		Adad-Nirari II			Ptolemaic Canon ⁽⁶⁾
885 - 860		Ashur Nasirpal II			
860 - 825		Shalmaneser III			
873 - 848				Ahab-Israel, Asa & Jehoshaphat- Judea	
825 - 808		Shamsi-Adad V			
808 - 783		Adad Nirari III		King Joash, King Jehoahaz	

TABLE B-3 CORRELATION AMONG ANCIENT CHRONOLOGIES HIGHLIGHTING THE AMARNA PERIOD (Continued)

DATES (BC)	BABYLON⁽¹⁾	ASSYRIA⁽¹⁾	EGYPT	HEBREW	SOURCE
783 - 771		Shalmaneser IV		King Amaziah, King Jehoash	
771 - 753		Ashur Dan III			
763 - 754		Hadad Nirari		King Jeroboam II, King Uzziah	
753 - 746		Ashur Nirari V		King Zechariah	
747 - 733	Nabonassar			Jonah in Nineveh	
747 - 727		Tiglath-pileser III		King Pekah	
727 - 722		Shalmaneser V	Sheshong IV	King Hoshea	2 Kings 17:3-4
721 - 705	Marduk-apal-iddin II	Sargon II		Assyrians conquer Israel; King Ahaz	2 Kings 17:5-6
709 - 704	Arkegnos (Sargon II)				
705 - 681		Sennacherib		Hezekiah-14 th year	2 Kings 18:13
690 - 664			King Taharqa- Nubian		
680 - 668	Asaradinos	Esarhaddon			Herodotus ⁽⁷⁾
668 - 626		Ashurbanipal	King Necho II	King Manasseh	Herodotus ⁽⁷⁾
647 - 627	Kandalanu			King Josiah	
626 - 606	Nabopolassar		Psamtik I		Josephus – Against Apion
626 - 621		Ashur-Etil Ilani			
620 - 612		Sin Sharishkun			
611 - 605		Ashur Uballit II			
605 - 562	Nebuchadnessar II			King Jehoaikim	
586	Destruction of Temple in Jerusalem			King Zedekiah	
570 - 526			Amasis		
561 - 560	Amel-Marduk				Josephus – Against Apion

TABLE B-3 CORRELATION AMONG ANCIENT CHRONOLOGIES HIGHLIGHTING THE AMARNA PERIOD (Continued)

DATES (BC)	BABYLON⁽¹⁾	ASSYRIA⁽¹⁾	EGYPT	HEBREW	SOURCE
559 - 556	Neriglissar				Josephus – Against Apion
555 - 536	Nabonidus/ Belshazzar				King Burnaburiash Plaque ⁽⁸⁾
538 - 529	Cyrus II			Releases Jews	

NOTES - Table B-3:

1. Source: Eastern Mediterranean Late Bronze Age Chronology-Trevor Rice, www.geocities.com/trevoraug.
2. Joint reign for 62 years (according to Julius Africanus) of which two years involved the building of the Tower of Babel.
3. A cite from Aemilius Sura, “Roman History”, book 1, section VI. “Between the time that Rome conquered Philip, king of Macedonia and the beginning of the reign of Nimrod king of the Assyrians lies an interval of 1995 years.” Philip was conquered in 197 BC.
4. Two lists of Assyrian kings. The Nassouhe list is believed to be the older of the two lists.
5. Letters to and from Amenhotep III, Akhnaton and various kings from adjoining regions. The El-Amarna Period has been dated c. 900-830 BC setting the time of King Burnaburiash’s letters and therefore the time period for Hammurabi’s rule.
6. Astronomical observations in this document establish 911 BC as a scientifically corroborated date for the accession of the first king mentioned in the document as Adad-nirari II.
7. Esarhaddon re-builds Babylon and conquers Egypt. Ashurbanipal destroys Thebes.
8. Plaque found by King Nabonidus at Larsa on which King Burnaburiash inscribed that he had rebuilt the temple erected seven hundred years before by King Hammurabi.

TABLE B-4 TIMELINE BASED ON HERODOTUS

LYDIA	MEDIAN	PERSIAN	BABYLONIAN	DATE (BC)	REMARKS
LYDUS FAMILY-MAEONIANS					
HERACLIDS					
(505 Years)		Igehalkids		1229-1233	
Heracles		Shutrukid		1133-1116	
Alcaeus		Shutrukid	Nebuchadrezzar I	1127-1106	
Belus		Shutrukid		1115-1077	
Ninus				1074-1057	
Argon of Sardis				783-745	
Myrsus of Sardis		Late Elams		745-727	
Myrsilus/Candaules of Sardis		Medians		726-722	
MERMNADAE		Medians	Marduk-apal-iddina II	721-705	Assyrians conquer Israel
Gyges (38 years)		Medians		716-678	
	Deioces (53 years)	Medians		709-656	
		Medians	Bel-ibni	702-700	
Ardys (49 years)		Medians		678-629	
		Medians		664	Egypt King Necho killed
	Phraortes (22 years)	Medians		656-634	
	Cyaxares (40 years)	Medians		634-594	Attacks Ninveh 616 BC
Sadyattes (12 years)		Medians		629-617	
		Medians	Nabopolassar	626-606	
Alyattes (57 years)		Medians		617-560	
		Medians	Nebuchadnezzar II	605-562	Built hanging gardens, Mediated truce between Alyattes and Astyages

TABLE B-4 TIMELINE BASED ON HERODOTUS (Continued)

LYDIA	MEDIAN	PERSIAN	BABYLONIAN	DATE (BC)	REMARKS
	Astyages (35 years)	Medians		585-550	Eclipse May 28, 585
		Medians		570-526	King Amasis of Egypt
		Medians	Amel-Marduk	562-560	
Croesus		Medians		560-546	Age of 35 in 560 BC
		Cambyeses I		-559	
		Cyrus II	Nabonidus	559-530	
		Cambyeses II		529-522	
				525	Persians conquer Egypt
		Magi Rule		522-521	
		Darius I		521-486	
		Xerxes I		486-465/4	Gold statue of Marduk melted down, Babylonians became known as the Chaldeans
HERODOTUS				485-424	
		Artaxerxes I		465-424	Ezra takes law to Jerusalem
		Darius II		424-404	Temple 2 in Jerusalem completed
		Artaxerxes II		404-359	
		Artaxerxes III		358-338	
		Arses		338-336	
		Darius III		336-332	
		Alexander the great		332-324	Beginning of the Hellenistic era

TABLE B-5 PHOENICIAN RULERS ACCORDING TO JOSEPHUS

<u>YEAR BC</u>	<u>RULER</u>	<u>DURATION OF REIGN</u> <u>(Yr –Mo)</u>
1020 -980	Abibalus/Abibal	
980 - 946	Hirom	34
946 - 939	Beleazarus	7
939 - 930	Abdastartus	9
930 - 918	Usurper	12
918 - 906	Astartus	12
906 - 897	Aserymus	9
897 - 896	Pheles	0-8
896 - 864	Ithobalus	32
864 - 858	Badezorus	6
858 - 849	Matgenus	9
849 - 802	Pygmalion	47
	TOTAL FROM END OF HIROM's REIGN	143-8
842 - 824	Sister of Pygmalion flees	Builds Carthage

Josephus states:

1. Temple at Jerusalem built by Solomon 143 years-8 months before Tyrians built Carthage.
2. Time from the beginning of the reign of Hirom until the building of Carthage = 155 yr - 8 mo or c. 824 BC.
3. From the 12th year of the reign of Hirom to the building of Carthage = 143 yr - 8 mo.
4. From the table above the time of the beginning of Carthage to the end of the reign of Hirom is 103 yr – 8 mo which is 19 years different than statement 3.
5. Pygmalion's sister flees during the 7th year of his reign, c. 842 BC.
6. If the temple in Jerusalem was started c. 967 BC, the Carthage was built c. 824 BC.

TABLE B-6 RULERS OF EGYPT

TITLE	MANETHO/ EUSEBIUS	DIODORUS	TURIN PAPYRUS	BEGINNING DATE (BC)	HOUSE OF THE ZODIAC
GOD DYNASTY	(years)	(years)	(years)		
Ptah	9,000			26425	Aries
Ra	1,000			17425	
Shu	700			16425	
Geb, Seb	500			15725	
Osiris	450			15225	
Seth	350			14775	
Horus	300			14425	
Subtotal	12,300				
DEMIGOD DYNASTY	1,255			14125	Libra
9 Other Demigods					
Troth					
Mch, Ma					
Horus II					
DEMIGOD & GOD (Subtotal)	13,555		23,000		
KINGS & HEROS (Subtotal)	3,607			12870	Virgo
Kings/Heroes	1,817				
30 Kings	1,790	<18,000		11053	
YEARS OF CHAOS (10 Rulers)	350			9263	Leo
SPIRITS OF THE DEAD	5,813	<5,000		8913	Leo
DYNASTY OF PHARAOHS	2,575			3100 to 343	Taurus
TOTAL YEARS FROM GODS TO END OF 30th DYNASTY	13,782		13,420		
TOTAL EGYPTIAN HISTORY	26,082	NA	36,420		Aries

**TABLE B-7 MAN-KING RULERS OF EGYPT BASED ON MANETHO
AND THEIR BURIALS**

<u>KING/PHARAOH</u>	<u>DYNASTY</u>	<u>PERIOD</u>	<u>DATE (BC)</u>	<u>PYRAMID/TOMB</u>
Ka, Zeser, Sma	0	Pre Dynastic		
Scorpion	0	Pre Dynastic	c. 3250	Naqada
King Narmer	0	Pre Dynastic		Abydos
Menes/ King Hor-Aha	1	Early Dynastic	3000-2940	Abydos
Djer	1	Early Dynastic	2940-2883	Abydos
Djet	1	Early Dynastic		Abydos
Den	1	Early Dynastic		Abydos
Anedjib	1	Early Dynastic		Abydos
Samerkhjet	1	Early Dynastic		Abydos
Qa'a	1	Early Dynastic		Abydos
Hotepsekhemwy	2	Early Dynastic		Abydos
Reneb	2	Early Dynastic		Abydos
Nynetjer	2	Early Dynastic		Abydos
Peribsen	2	Early Dynastic		Abydos
Sekhemib	2	Early Dynastic	c. 2700	Abydos
Khasekhemwy	2	Early Dynastic		Abydos
Djoser (Zoser)	3	Early Dynastic	2630-2611	6 Step- Saqqara
Nebka I	3	Early Dynastic		
Khaba	3	Early Dynastic		
Huni	3	Early Dynastic		
Snefru	4	Old Kingdom	c. 2575	8 Step-Maidum
		Old Kingdom		Bent Pyramid -
				Dahshur
		Old Kingdom		Red Pyramid -
				Dahshur
Khufu	4	Old Kingdom	c. 2550	Great Pyramid-Giza
Redjedef	4	Old Kingdom		
Khafre	4	Old Kingdom		Second Pyramid -Giza
Nebka II	4	Old Kingdom		
Menkaure	4	Old Kingdom	20 yrs	Small Pyramid -Giza
Shepseskaf	4	Old Kingdom		
Userkaf	5	Old Kingdom		Abusir
Sahure	5	Old Kingdom		
Neferirkare	5	Old Kingdom	c. 2400	
Shepseskare	5	Old Kingdom		
Neferefre	5	Old Kingdom	2448-2445	Abusir
Neuserre	5	Old Kingdom		Mud-brick Mortuary temple
Menkauhor	5	Old Kingdom		
Djedkare	5	Old Kingdom		

**TABLE B-7 MAN-KING RULERS OF EGYPT BASED ON MANETHO
AND THEIR BURIALS**

KING/PHARAOH	DYNASTY	PERIOD	DATE (BC)	PYRAMID/TOMB
Unas	5	Old Kingdom	2375-2345	Rubble Core Pyramid-Saqqara
Teti	6	Old Kingdom	2323-2291	
Pepi I	6	Old Kingdom	2289-2255	now low mound - Saqqara
Merenre I	6	Old Kingdom		
Pepi II	6	Old Kingdom	2278-2244	
Merenre II	6	Old Kingdom		
Qakare	7&8	Old Kingdom		
Neferkaure	7&8	Old Kingdom		
Neferkauhor	7&8	Old Kingdom		
Neferirkare II	7&8	Old Kingdom	-2150	
Meryibre	9&10	First Intermediate	2125-	
Khety	9&10	First Intermediate		
Merikare	9&10	First Intermediate		
Ity	9&10	First Intermediate		
Mentuhotep I	11	First Intermediate		
Inyotef I	11	First Intermediate	Post 2080	
Inyotef II	11	First Intermediate		
Inyotef III	11	First Intermediate	-1975	
Mentuhotep II	11	Middle Kingdom	1975-1925	Mortuary Temple near Thebes
Mentuhotep III	11	Middle Kingdom	1948-1938	
Mentuhotep IV	11	Middle Kingdom		
Amenemhet I	12	Middle Kingdom	1938-	Pyramid near Lisht
Senusret I	12	Middle Kingdom	1918-1873	Pyramid near Lisht
Amenemhet II	12	Middle Kingdom	1876-1842	Pyramid at Kahun
Senusret II	12	Middle Kingdom	-1837	Pyramid at Dahshur
Senusret III	12	Middle Kingdom	1836-1818	
Amenemhet III	12	Middle Kingdom	1818-1770	Mud Brick - Hawara
Amenemhet IV	12	Middle Kingdom		
Queen Sobek-nefru	12	Middle Kingdom		
Wegaf	13	Middle Kingdom	-1640	
Amenemhet V	13	Middle Kingdom		
Harnedjheriotef	13	Middle Kingdom		
Amenyqemau	13	Middle Kingdom		
Sebekhotep I	13	Middle Kingdom		
Hor	13	Middle Kingdom	c. 1720	
Amenemhet VII	13	Middle Kingdom		
Sebekhotep II	13	Middle Kingdom		
Khendjer	13	Middle Kingdom		

**TABLE B-7 MAN-KING RULERS OF EGYPT BASED ON MANETHO
AND THEIR BURIALS**

KING/PHARAOH	DYNASTY	PERIOD	DATE (BC)	PYRAMID/TOMB
Sebekhotep III	13	Middle Kingdom		
Neferhotep I	13	Middle Kingdom		
Sebekhotep IV (Khenephres)	13	Middle Kingdom		
Sebekhotep V	13	Middle Kingdom		
Aye	13	Middle Kingdom		
Mentuemzaf	13	Middle Kingdom		
Dedumose II	13	Middle Kingdom		
Neferhotep III	13	Middle Kingdom		
Nehese	14	Second Intermediate	1630-	
Sheshi -Asian warlord	15&16	Second Intermediate		
Khyan	Hyksos	Second Intermediate		
Apepi	Hyksos	Second Intermediate	c. 1570	
Khamudi	Hyksos	Second Intermediate	c. 1570	
Inyotef V	17	Second Intermediate		
Sebekemzaf I	17	Second Intermediate		
Nebireyeraw	17	Second Intermediate		
Sebekamzaf II	17	Second Intermediate		
Ta'o I	17	Second Intermediate		
Ta'o II	17	Second Intermediate	c. 1543	Deir el Bahri
Kamose	17	Second Intermediate	1523-1520	
Ahmose	18	New Kingdom	1539-	
AmenhotepI	18	New Kingdom		
Thutmose I	18	New Kingdom	1493-1485	
Thutmose II	18	New Kingdom	1485-1473	
Queen Hatshepsut	18	New Kingdom	1473-1458	Deir el-Bahri
Thutmose III	18	New Kingdom	1458-1426	
Amenhotep II	18	New Kingdom	1426-1400	
Thutmose IV	18	New Kingdom	1400-1390	
Amenhotep III	18	New Kingdom	1390-1353	Valley of the Kings
Akhnaton	18	New Kingdom	1353-1336	
(Amenhotep IV)				
Smenkhare	18	New Kingdom		
Queen Ankhetkheprure	18	New Kingdom		
Tutankhamun	18	New Kingdom	20 yrs	Valley of the Kings

**TABLE B-7 MAN-KING RULERS OF EGYPT BASED ON MANETHO
AND THEIR BURIALS**

KING/PHARAOH	DYNASTY	PERIOD	DATE (BC)	PYRAMID/TOMB
Aye	18	New Kingdom	1319-1292	
Horemheb	18	New Kingdom	1319-1289	
Ramses I	19	New Kingdom	1289-1290	
Seti I	19	New Kingdom	1290-1279	Valley of the Kings
Ramses II	19	New Kingdom	1279-1213	
Merneptah	19	New Kingdom	1213-1204	Valley of the Kings
Seti II/Amenmesse	19	New Kingdom		
Siptah	19	New Kingdom		
Queen Tawosret	19	New Kingdom		
Sethnakhte	20	New Kingdom		
Ramses III	20	New Kingdom	1187-1156	Valley of the Kings
Ramses IV	20	New Kingdom		Valley of the Kings
Ramses V	20	New Kingdom		Valley of the Kings
Ramses VI	20	New Kingdom	1145-	Valley of the Kings
Ramses VII	20	New Kingdom		Valley of the Kings
Ramses VIII	20	New Kingdom		Valley of the Kings
Ramses IX	20	New Kingdom	1126-	Valley of the Kings
Ramses X	20	New Kingdom		Valley of the Kings
Ramses XI	20	New Kingdom	1104-1075	Valley of the Kings
7 Kings- Tanis	21	3 rd Intermediate	1075 - 945	
8 High Priests - Thebs	21	3 rd Intermediate		
11 Kings - Libyan	22	3 rd Intermediate	945 -	
8 Kings - Libyan	23	3 rd Intermediate		
Tefnakhte	24	3 rd Intermediate		
Bakenrenef	24	3 rd Intermediate		
6 Kings - Nubian	25	Late Period	730 -657	
Pasamtek I	26	Late Period		
Necho II	26	Late Period	665 - 664	
PsamtekII	26	Late Period	664 - 614	
Apries	26	Late Period		
Amasis	26	Late Period	c. 570	
PsamtekIII	26	Late Period	c. 526	
5 Kings - Persian	27	Late Period		
Amyrtaeus	28	Late Period		
Nepherites I	29	Late Period		
Psammuthis	29	Late Period		
Hakor	29	Late Period		
Nepherites II	29	Late Period		
Nectanebo I	30	Late Period		

**TABLE B-7 MAN-KING RULERS OF EGYPT BASED ON MANETHO
AND THEIR BURIALS**

KING/PHARAOH	DYNASTY	PERIOD	DATE (BC)	PYRAMID/TOMB
Djedhor	30	Late Period		
Nectanebo II	30	Late Period		
Artaxerxes III -Persian	31	Late Period	525	
Arses - Persian	31	Late Period		
Darius III - Persian	31	Late Period		
Alexander the Great	Macedonian	Greco-Roman	332 -323BC	
Cleopatra VII	Ptolemaic	Greco-Roman	- 30 BC	
Roman Emperors		Greco-Roman	30 BC - 395 AD	

DURATIONS (YEARS) - TOTAL = 3345 YEARS

EARLY DYNASTIC	OLD KINGDOM	1 ST INTER	MIDDLE KINGDOM	2 ND INTER	NEW KINGDOM	3 RD INTER	LATE PERIOD	GRECO- ROMAN
375	425	150	335	110	469	360	383	727

TABLE B – 8 CHRONOLOGY OF THE BIBLE BASED ON JOSEPHUS

EVENT	BIBLE	Number of Years				
DELUGE	2543	1				
		9	3			
Menes	2414	5	4			>
Terah born	2271	7	2			1
Abraham born	2201					3
Isaac born	2102					0
Abraham from Ur to Canaan/Haran	2076				1	0
Jacob born	2042				0	
Abraham/Abram dies at age 175	2026				2	
Isaac dies at age 180	1922				0	
Jacob enters Egypt	1912					
Begin 7 year famine	1911					
Jacob dies in Egypt at age 147	1895					
Joseph dies at age 110	1838					
Moses born	1728					
Moses leaves Egypt at age 40	1688					
Moses/Aaron return to Egypt	1648					
Begin EXODUS	1648					
Moses dies at age 120	1608					
King David born	1130					
Solomon born	1114					
King David dies	1060					
Begin Solomon's reign = 80 years	1060					
Solomon begins Temple	1056					
Solomon finishes Temple	1049					
End Solomon's reign	980			4	4	
Begin Kings of Judah and Israel	931			7	6	
Destruction of Temple-by Babylon	586			7	6	

TABLE B – 9 CHRONOLOGY OF THE BIBLE BASED ON THE BOOKS OF 1 KINGS & 2 KINGS

EVENT	BIBLE	Number of Years			
DELUGE (Based on Josephus)	2496 or 2543			1	
DELUGE (Based on the Bible)	2407	1	3	9	
Menes	2400	4	4	5	>
Terah born	2135	4	2	7	1
Abraham born	2065	0			3
Abraham from Ur to Canaan/Haran	1987				0
Isaac born	1966				0
Jacob born	1906				
Abraham/Abram dies at age 175	1890				
Joseph to Egypt	1788				
Isaac dies at age 180	1786				
Jacob enters Egypt	1776				
Begin 7 year famine	1775				
Jacob dies in Egypt at age 147	1759				
Joseph dies at age 110	1702				
Moses born	1639				
Moses leaves Egypt at age 40	1599				
Moses/Aaron returns to Egypt	1559				
Begin EXODUS	1559				
Moses dies at age 120	1519				
King David born	1041				
Solomon born	1025				
King David dies	971				
Begin Solomon's reign = 40 years	971				
Solomon begins Temple	967				
Solomon finishes Temple	960				
End Solomon's reign	931				
Begin Kings of Judah and Israel	931		3		
			4		
Destruction of Temple-by Babylon	586		5		

TABLE B – 10 COMPARISON OF EGYPTIAN KINGS BETWEEN MANETHO AND JOSEPHUS

RULERS-18th DYNASTY	DURATION (Yr)⁽¹⁾	JOSEPHUS⁽²⁾	DURATION (Yr – Mo)
Ahmose I	22	Tethmosis I	25-4
		Chebron (son of Tethmosis I)	13
Amenhotep I (son of Ahmose I)	21	Amenophis I	20-7
Thutmose I (military leader)	1		
Thutmose II	48		
Queen Hatshepsut (daughter of Thutmose I)	15	Amesses (sister to Amenophis I)	21-9
Thutmose III (stepson of Hatshepsut)	54	Mephres, Mephr-Amuthosis	38-7
Amenhotep II	27	Amenophis II	30-10
Tutmoses IV	9	Teth-Mosis II	9-8
Amenhotep III (9 yr co-regent with Thutmose IV)	38	Orus	36-5
Akhnaton & Nefertiti (Amenhotep IV)	21	Rathotis & Acenchres (brother & sister)	21-1
Semenkhare & Tutankhamun	14		
Ay & Horemheb (military)	25	Acenchres I & II	24-8
TOTAL 18th DYNASTY	295		242
RULERS 19th DYNASTY			
Ramses I	2	Rameeses	1-4
Seti I (son of Ramses I)	11		
Ramses II (son of Seti I)	67	Amasis I, Amesses Miammoun	64-3
Merneptah	10		
Amenmesse	5	Amenophis III	19-6
Seti II	6	Sethosis-Ramesses	
Siptah	6	Armais (brother)	
Queen Tawosret	8	Queen to Sethosis	
TOTAL 19th DYNASTY	115		85-1
TOTAL 18th & 19th DYNASTIES	410		327-1

NOTES:

1. Durations from Table B-6
2. Flavius Josephus – Against Apion, Book 1:15 citing Manetho.

TABLE B-11 PERUVIAN HISTORY

<u>DYNASTY/CULTURE/TRIBE</u>	<u>LEADERS</u>	<u>DATE</u>	<u>COMMENTS</u>	<u>AGE</u>	
GODS	Viracocha-Pachayachachi		Name means Creator of 'All'		
GIANTS	Viracocha-Pachayachachi			AGE 1	
PRIMITIVE MAN	Viracocha-Pachayachachi			AGE 2	
Paloma & Chilca		5000 – 3800 BC			Coa
Caral		2627 BC	Oldest city in Americas		Cen
		2900 BC or 2319 BC	Flood (unu pachauti), Point Zero		
SEMI DIVINE RULERS			16 Rulers	AGE 3	
	Taguapaca		Sun, moon, & stars created		Titic
	2 Servants of Viracocha				Tiah
HUMANS CREATED	Viracocha & 2 Servants		Viracocha & 2 Servants leave by sea	Age 4	Nea
Ccapac/ Inca (4 men & 4 women)	Manco Ccapac, Mama Huaco		From House of Windows		Tam
Maras			From House of Windows		Tam
Sutic/ Tampu			From House of Windows		Tam
Sauaseras			Quichua-Aymara ?		Nati
Antsayas			Quichua-Aymara ?		Nati
Huallas			Quichua-Aymara ?		Nati

TABLE 6 - PERUVIAN HISTORY (Continued)

<u>DYNASTY/CULTURE/TRIBE</u>	<u>LEADERS</u>	<u>DATE</u>	<u>COMMENTS</u>	<u>AGE</u>	<u>LOCATION</u>
Alcabisa					Cuzco Immigrants
Copalimayta					Cuzco Immigrants
Calunchima					Cuzco Immigrants
# 1 Monarch	Pirua Manco	c. 2030 BC	Perhaps the Origin of the name 'Peru'		
# 2 Monarch	Manco Ccapac	c. 1980 BC			Ancient Cuzco
#3 Monarch	Huanacahui Pirua	C. 1950 BC			
#4 Monarch	Sinchi Cozque	c. 1900 BC	1000 years from Point Zero		
El Paraiso		c. 1800 BC			Mid-Costal
#15 Monarch	Titu Yupanqui Pachacuti	c. 1400 BC	NIGHT WITHOUT SUNRISE-PERU		
# 23 Monarch	Ticac Pupac	c. 1000 BC			
Cupisnique	Sinchi-cuna	1000 – 800 BC	Part time war chiefs		North Coastal
Chirpa & Pukara		1000 BC – 100 AD			South Highlands near Lake Titicaca
Chavin	Sinchi-cuna	900 – 250 BC	Part time war chiefs		North Central Highlands-Chavin de Huantar
Tiahuanaco (Tiwanaku)	Sinchi-cuna	800 BC – 1100 AD	Part time war chiefs		South Highlands-Tiahuanacu
Salinar	Sinchi-cuna	800 – 100BC	Part time war chiefs		North Coastal
Paracas	Sinchi-cuna	700 – 100 BC	Part time war chiefs		South Coastal
Nazca	Sinchi-cuna	200 BC – 300 AD	Part time war chiefs		South Coastal

TABLE 6 - PERUVIAN HISTORY (Continued)

<u>DYNASTY/CULTURE/TRIBE</u>	<u>LEADERS</u>	<u>DATE</u>	<u>COMMENTS</u>	<u>AGE</u>	<u>LOCATION</u>
Moche	Sinchi-cuna	100 BC – 800 AD	Part time war chiefs		North Coastal
Huari	Sinchi-cuna	300 – 900 AD	Part time war chiefs		South Coastal
Huari	Sinchi-cuna	600 – 1000 AD	Part time war chiefs		South Highlands
Wari		600 – 900 AD			North Coastal (Moche) to South Coastal Nazca) & North Highlands (Wari) to South Highlands (Cuzco)
Sican		700 – 1375 AD	Replaced Moche		North Coastal
Chimu/Chan-Chan	Sinchi-cuna	700 – 1465 AD	Part time war chiefs		North Coastal
Ica	Sinchi-cuna	800 – 1500 AD	Part time war chiefs		South Coastal
#32 Monarch	Tupac Yupanqui I	830 BC	2070 years from Point Zero		
#40 Monarch	Illja Tupac	400 BC	2500 years from Point Zero		
#58 Monarch	Illja Tupac Ccapac	0 AD	2900 years from Point Zero		
#62 Monarch	Cayo Manco Ccapac	120 AD	Comets, Earthquakes, End of Ancient Cuzco Empire		
#78 Monarch	Auqui Atau Huillja	600 AD	3500 years from Point Zero		
# 90 Monarch	Illja Toca	1100 AD	4000 years from Point Zero		
Sapa Inca	Manco Ccapac II	c. 1200 AD	Beginning of Inca Dynasty	AGE 5	Cuzco

TABLE 6 - PERUVIAN HISTORY (Continued)

<u>DYNASTY/CULTURE/TRIBE</u>	<u>LEADERS</u>	<u>DATE</u>	<u>COMMENTS</u>	<u>AGE</u>	
Sapa Inca	Sinchi Rocca	c. 1225 AD			Cuzco
Sapa Inca	Lloque Yupanqui	c. 1250 AD			Cuzco
Sapa Inca	Maita Ccapac	c. 1285 AD			Cuzco
Sapa Inca	Ccapac Yupanqui	c. 1315 AD	Began the counting of time		Cuzco
Sapa Inca	Inca Roca	c. 1350 AD			Cuzco
Sapa Inca	Yahuar Huacac	c. 1385 AD			Cuzco
Sapa Inca	Inca Viracocha	c. 1420 AD	8 th Inca		Cuzco
Sapa Inca	Pachacuti Inca Yupanqui	1438 – 1471 AD	Name means World Turner, 9 th Inca		Cuzco
Sapa Inca	Tupac Inca Yupanqui	1471 – 1493 AD	10 th Inca		Cuzco
Sapa Inca	Huayna Ccapac	1493 – 1527 AD	11 th Inca		Cuzco
Sapa Inca	Huascar	1527 – 1532 AD			Cuzco
Sapa Inca	Atahualpa	1531 -1533 AD	Captured by Pizarro		Quito
SPANISH	Pizarro	1532 AD			
Sapa Inca	Manco Inca Yupanqui (Last Inca)	1533 – 1545 AD	Pizarro Makes Inca , failed to throw Spanish out of Peru		Cuzco
Sapa Inca	Sayn Tupaq	1545 -1560 AD			
Sapa Inca	Titu Cusi	1560 – 1571 AD			

NOTES: 1) Sapa Inca means 'the only Inca'.

2) Inca in the Quichua language means 'Emperor'.

3) Ccapac means 'rich' as in qualifications to rule.

APPENDIX C

REFERENCE DATA

Properties of our galaxy and solar system are described throughout the text of this writing. This Appendix provides some relevant and interesting data which hopefully will serve as a useful frame of reference. Figure C-1 shows the relative sizes of the planets and Figure C-2 shows the planets in relation to the size of the Sun. Our sun is one of the smaller stars in our galaxy and the universe.

STRING THEORY

The universe has been described as consisting of matter and energy which were described by Einstein's equation; $E = mc^2$ where c represents the speed of light. It was known by physicists that there were shortcomings in Einstein's theory and discrepancies between Newton's Law of Gravity, the theory of Relativity and the theory of Quantum Mechanics. Einstein's theory says nothing moves faster than the speed of light yet the effects of gravity are felt instantaneously. Einstein further theorized that gravity was the warping of space and time.

The atom consisting of electrons, protons and neutrons, once thought to be the basic building block of all matter, is now believed to consist of much smaller building blocks. The discovery by the Stanford Linear Accelerator Center that protons and neutrons are not fundamental building blocks but rather are made up of what they have termed quarks (3 for the proton and 3 for the neutron). This discovery has led to the development of other theories such as String, Superstring and M theories. These theories explain the discrepancies and shortcomings mentioned above and will drastically change our concept and understanding of the universe. According to string theory all matter and all forces are made from one basic ingredient: the oscillating string. Everything at the microscopic level consists of vibrating strands. As discussed in Chapter 7, the ancients appear to have had an understanding of harmonics and their relationship to vibrating strands.

The basic building block is now described by modern day physicists as the 'string'. The string is defined as a vibrating, oscillating filament which makes up electrons and quarks. Everything in the universe at the microscopic level consists of combinations of vibrating strands. All matter and all forces arise from the oscillating string. The string as the fundamental building block can undergo an infinite number of different vibration patterns known as resonance. The different patterns of vibration of a fundamental string give rise to different masses and force charges. The energy of a particular strings vibration pattern depends on its amplitude and its wavelength and a property of the string known as jitter. The greater the amplitude and the shorter the wavelength of the vibration pattern, the greater its energy content will be. Also, the energy of the string is proportional to its tension.

PROPERTIES RELATED TO EINSTEIN'S THEORY OF RELATIVITY AND THE THEORY OF QUANTUM MECHANICS

The makeup of the atom consisting of electrons, protons, neutrons and their building blocks the quarks, and their respective building block the string is depicted below in Table C-1:

TABLE C- 1 MAKEUP OF THE ATOM

<u>ATOM</u>	<u>=</u>	<u>ELECTRONS +</u>	<u>PROTON +</u>	<u>NEUTRON</u>
			Quarks (3 each)	Quarks (3 each)
			• Up Quark (2)	Up Quark (1)
			• Down Quark(1)	Down Quark(2)
		String	String	String

Since the mass of a particle determines its gravitational properties there is a direct association between the pattern of string vibration and a particle's response to the gravitational force. There are twelve fundamental particles each containing a vibrating filament named a string which include:

- Neutrino, electron, up quark, down quark, muon, charm quark, strange quark, bottom quark, top quark, tau, muon neutrino, and the tau neutrino
- each quark also labeled red, green and blue
- each particle has an antiparticle = positron (antiparticle of an electron)

The particles can further be grouped into families of particles as follows: (* **mass = multiple of proton mass**).

FAMILY 1	MASS*	FAMILY 2	MASS*	FAMILY 3	MASS*
Electron	0.00054	Muon	0.11	Tau	1.9
Electron-Neutrino	<10 ⁻⁸	Muon-neutrino	<0.0003	Tau-neutrino	<0.033
Up quark	0.0047	Charm quark	1.6	Top quark	189
Down Quark	0.0074	Strange quark	0.16	Bottom quark	5.2

String theory requires that the universe have at least 9 and perhaps as many as 11 extra space dimensions and one time dimension. The extra space dimensions are theorized to be curled-up dimensions.

Every physical event, process, or occurrence in the universe is, at its most elemental level, discernable in terms of forces acting between the elementary material constituents. The forces acting within the universe are described below:

FOUR FORCES WHICH INTERACT BETWEEN PARTICLES

<u>FORCE</u> ¹	<u>PROPERTIES</u>	<u>ASSOCIATED</u>	<u>MASS</u> ⁵ <u>PARTICLE</u> ²
1) Gravitational ³	Unlimited range, mass and distance dependent	Graviton	Zero
2) Electromagnetic	Unlimited range, electric charge dependent	Photon	Zero
3) Weak force	works at microscopic scale, radioactive decay	Weak gauge boson	86, 97
4) Strong force ⁴	works at microscopic scale, affects quarks, protons, neutrons (keeps them together)	Gluon	Zero

NOTES:

1. Over large distances ($> 10^{-29}$ centimeters) the three non-gravitational force strengths appear to be equal.
2. The particles associated with the four forces provide the mechanism for transmitting the forces they constitute. They are the smallest constituents of the force.
3. Gravitational force between A and B = $\text{Mass A} \times \text{Mass B} / (\text{Distance between A and B})^2$
4. Strong Force = 100 times electromagnetic force = 100,000 times weak force = 10^{40} times gravitational force
5. Mass = multiple of a protons mass

PLANCK

- Planck Constant = h = maximum energy a wave/photon can carry is proportional to its frequency = 6.626×10^{-34} Joule second where 1 Joule = $1 \text{ kg M}^2/\text{S}^2$
- Planck Length = 10^{-33} centimeters = 10^{20} times smaller than an atomic nucleus
- Planck Tension = 10^{39} tons (string tension is inversely proportional to strength of the force transmitted by graviton)
- Planck Time = 10^{-43} seconds
- Planck Mass = 10^{19} mass of a proton where the mass of a proton = $9.11 \times 10^{-31} \text{ kg}$
- Planck Energy = mc^2

FIGURE C-1 SOLAR SYSTEM – RELATIVE SIZES

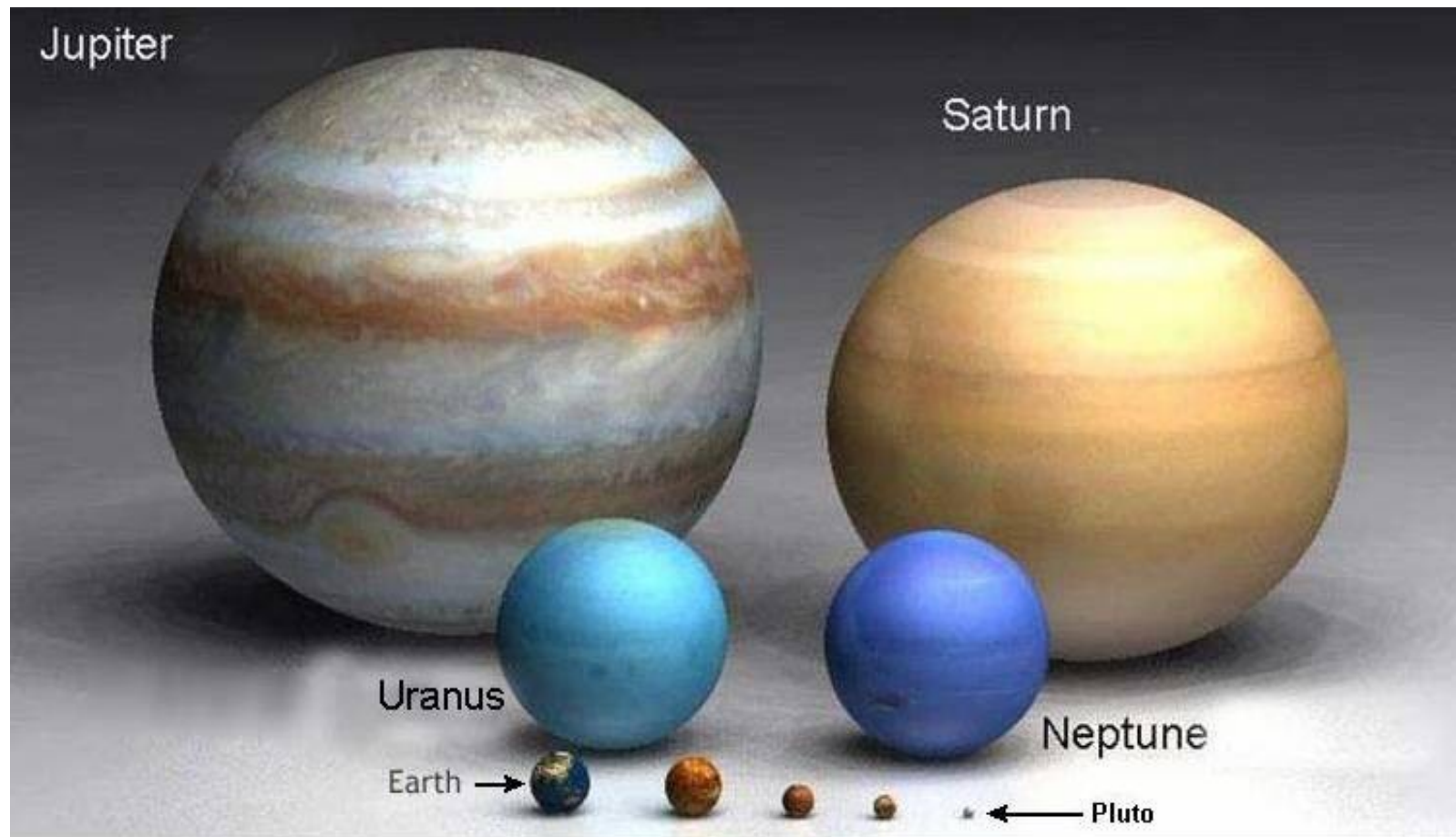
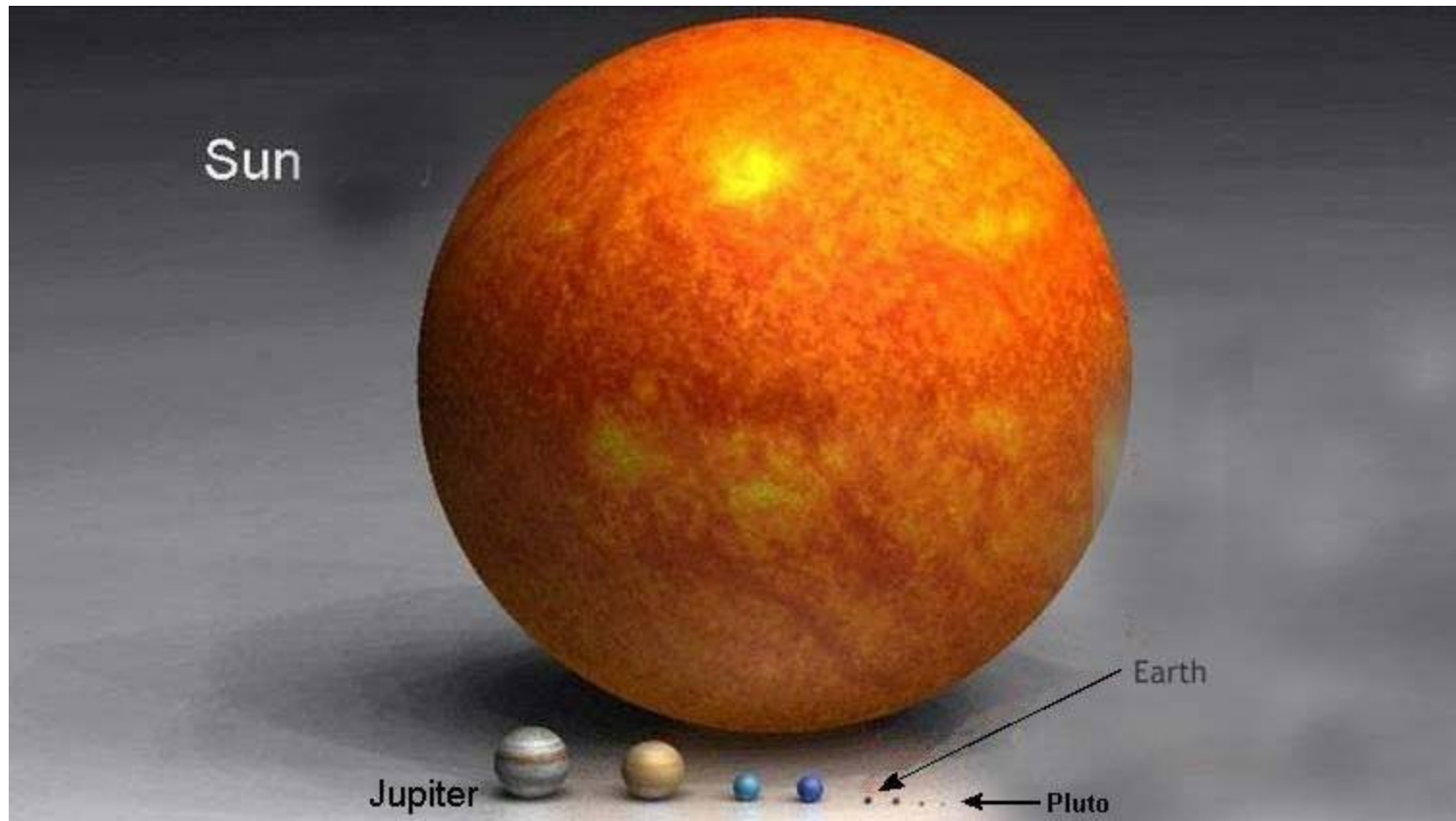


FIGURE C-2 RELATIVE SIZES – SUN & PLANETS



UNITS OF MEASUREMENT

GENERAL

- 1 Meter = 3.28094 ft = 5.39967×10^{-4} min of arc = 10^{10} Angstroms
- 1 Angstrom = 10^{-10} m
- 1 Statute Mile = 5280 ft = 1.60934 km
- 1 Nautical Mile = 1 minute of arc = 6076.11549 ft = 6000 geodetic ft
= 1851.9952 m = 0.016666667 degrees
- 360 degrees = 21,600 minutes of arc = 21,600 nautical miles
- 1 Light year = 9.46051×10^{12} km
- Speed of Light in a vacuum = 186,291 mi/sec = 670×10^6 miles/hr
= 299,792.458 km/sec
- Speed of Light in air = 299,729 km/sec = 186,251.6 mi/sec
- Wavelength of visible light between 200 nm (2000 Angstroms/Violet) and 700 nm (7000 Angstroms/Red)
- Pi = 3.1416 ... = transcendental number
- Golden Section = phi = 1.618 = irrational number
- Divine Number = $1/\text{phi}$ = 0.618
- Fibonacci Series = 3, 5, 8, 13, 21, 34, ...610
- 1 Joule = $1 \text{ kgm}^2/\text{sec}^2$

EARTH:

- Circumference @ Equator = 40,074.175 km = 24,901 statute miles which rotates
@ approximately 1040 mph
- Diameter at equator = 7930 miles = 12754.543 km = Approximately one millionth that of the solar system
- Diameter at poles = 7900 miles
- Weight 5273×10^{18} tons
- Density 5.52 g/cm³
- Density of water = 1.41 g/cm³
- Orbital speed = 107589 km/hr = 29.9 km/sec = 66,600 miles/hr
- Axis (current) = 23.4375 degrees = obliquity to the orbital path (ecliptic) or inclination of Earth's equator to its orbit
= 22.1 to 24.5 degrees over a 41,000 year period
= 4.87×10^{-5} degrees/year
- Tropical year = 365.2422 days = period from equinox to equinox
- Sidereal year = 365.242198 days
- Gregorian year = 365.2425 days
- Equinoxes = March & September = Sun crosses the equator
- Solstices = June & December = extreme north and south position of the Sun
- Precession cycle-between 25,800 and 26,000 years

SUN:

- Circumference = 2,712,960 miles
- Diameter = 864,400 miles (radius = 432,000 miles)
= 109.045 (diameter of earth)
- Volume = 1.3×10^6 (volume of earth)
- Density = 1.41 g/cm^3 = 1/4 density of earth
- Mass = 1.99×10^{30} kg
- Temperature = 10,000 degrees F @ surface, 27,000,000 degrees F @ center
- Distance from Sun to Earth = 8 light minutes = 93,000,000 miles avg.

MOON

- Diameter = 2160 Statute miles = 3476 km
- Lunar & solar eclipse occur together in a 54 year cycle or 669 synodic months
- Synodic rotation = the interval between two full moons or two new moons = 29.5306 days
- Anomalistic lunar cycle = 27.555 days (Moon closest to Earth)
- 99 lunations = 8 Haab years = 2920 days
- Mayan lunar table length = 11,958 days = 405 lunar months
- Average distance from Moon to Earth = 220,000 miles

MARS

- Average synodic cycle = 780 days = 3 X 260
- Sometimes served as the morning star in the absence of Venus
- When Mars and Venus appear in the East together, Mars remains long after Venus disappears
- Mars, for a time will go into a retrograde motion back towards Venus before resuming forward motion
- Mars exhibits a helical rise

VENUS

- Average synodic period = 583.92 days average (Rises the same point in the earth's sky)
- Time to orbit the Sun = 224.701 days
- Only planet whose day is longer than its year
- Only planet that rotates clockwise
- 584×117 revolutions = 68,328 days = sunspot cycle
- $584 \times 117 \times 20$ = number of Venus cycles to = 1,366,560 (Super Dresden number)
- 5 synodic Venus cycles = 8 Haab years = 2920 days = time for month signs to repeat

VENUS (Continued)

- 584 days of 5 periods
 - 20 day names repeat 29 times = 590 days; therefore a next Venus cycle will begin 4 days after 20 day names of the previous 580 day cycle
 - Only 5 day names can ever begin a Venus cycle: Junajpu, K'at, Q'anil, E, Ajmak
- 584 day synodic period is accomplished in 4 stages: Completes 65 of these cycles every 104 years (2 calendar rounds)
 1. Morning star = 236 days (8 synodic moons)
 2. Invisible for 50 days then reappears for 27 days as morning star + 13 days as evening star
 3. Evening star = 250 days
 4. Invisible for 8 days and then returns to stage 1
- The orbital periods of Venus (224.701 days) and Earth (365.256 days) are in an 8 year (2922 days) resonance with each other. In the time it takes the Earth to orbit the Sun eight times, Venus completes almost exactly 13 revolutions about the Sun.
- It had been recognized by almost every ancient culture that the path of Venus during this 8 year cycle traces out in the sky a pentagram which was one of the most potent and persistent symbols in human history.
- On the Mayan calendar only 5 day names can begin a Venus cycle: Junajpu (Flower), Kat (Lizard), Qanil (Rabbit), and Ajmak (Vulture).

SOLAR SYSTEM:

- Diameter = 137.14562×10^6 miles One forty-millionth the diameter of the Milky Way
- Distance from Sun to Sirius = 0.9031161×10^6 distance from Sun to Earth
- Distance to center of the galaxy = 2.62151×10^{17} km = 26,000 light years
- Distance from sun to Earth = 147 to 152×10^6 km = 93 million miles average
- Distance from sun to Mars = 23×10^6 km
- The average distance between the Sun and the Earth is transferred from elliptical to circular and back again ~ 93,000 years
- Sun moves in near circular orbit around the center of the Milky Way at a speed of 250 km/sec (1 orbit = 220 million years)

SIRIUS

Data on the Sirius star system is provided as part of this appendix because the mythologies of the Dogon, an African tribe, and the Egyptians refer to civilization as having come from the Sirius system. Sumerian mythology also alludes to this possibility as the myths refer to civilization coming from the heavens. In his book 'The Sirius Mystery', Robert Temple provides an excellent description of the mythologies and how they relate to modern day scientific facts.

Sirius is a double star consisting of one low-density star and one small extremely dense star. Some modern-day scholars suspect that Sirius is the greater Sun about which our solar system orbits, which in turn revolves about the center of the Milky Way.

SIRIUS A:

- Mass = $2.5 \times \text{mass of sun} = 4.975 \times 10^{30} \text{ kg}$
 $= 833500 \times \text{mass of earth}$
 $= 2.374169 \times \text{mass of Sirius B}$
- Distance to Sun = 8.7 light years = $82.306437 \times 10^{12} \text{ km}$
- Brightness = $35.5 \times \text{brightness of Sun} = 10,000 \times \text{brightness of Sirius B}$

SIRIUS B: (White dwarf)

- Diameter = $3 \times \text{radius of earth} = 11890.5 \text{ miles} = 19,131.814 \text{ km}$
- Density = 65,000 (density of water) = $91,650 \text{ g/cm}^3$
- Mass = $1.053 \times (\text{mass of sun}) = 2.09 \times 10^{30} \text{ kg}$
NOTE: $1.053 = 256/243 = \text{a universal harmonic}$
 $= 351070.2 \times \text{mass of earth}$
- Temperature = 8000 deg
- Orbit period about Sirius A = 49.5 earth years
- Radius = 0.0078 radius of our sun

SIRIUS C:

- Mass = 0.05 (mass of Sun)
 $0.05 (1.99 \times 10^{30}) = .0995 \times 10^{30} \text{ kg}$

TABLE C-2 SOLAR SYSTEM ORBITAL RATIOS

	ORBIT Km x e4		MERCURY	VENUS	EARTH	MARS
MERCURY	5791		1.0			
VENUS	10820		1.86668623	1.0		
EARTH	14960		2.5833189	1.3826247	1.0	
MARS	22794		3.9361077	2.1066543	1.5236631	1.0
JUPITER	77833		13.440338	7.193438	5.207406	3.4146266
SATURN	142940		24.683128	13.21072	9.5548128	6.2709484
URANUS	287099		49.576757	26.534103	19.191109	12.595375
NEPTUNE	450430		77.781039	41.62939	30.108957	19.760901
PLUTO	591352		102.11569	54.653604	39.528877	25.943318
Solar System dia	1275454. 3		220.24767	117.87932	85.25764	55.955703

	ORBIT Km x e4		JUPITER	SATURN	URANUS	NEPTUNE	PLUTO	Dia. Milky Way (510181.72 e12 km)
MERCURY	5791							
VENUS	10820							
EARTH	14960							
MARS	22794							
JUPITER	77833		1.0					
SATURN	142940		1.836496	1.0				
URANUS	287099		3.688539	2.008528	1.0			
NEPTUNE	450430		5.7871339	3.1511823	1.5689013	1.0		
PLUTO	591352		7.5977027	4.1370645	2.0597494	1.3112861	1.0	
Solar System dia	1275454. 3		16.387063	8.9230047	4.4425591	2.8316371	2.156844 4	1/40 e6

TABLE C-3 SOLAR SYSTEM IDEALIZED ORBITAL RATIOS

			MERCURY	VENUS	EARTH	MARS
MERCURY				1.8	2.6	4
VENUS			1.8		1.3	2
EARTH			2.6			1.5
MARS			4			
JUPITER			13			
SATURN			25			
URANUS			50			
NEPTUNE			78			
PLUTO			102			
Solar System dia			220			

			JUPITER	SATURN	URANUS	NEPTUNE	PLUTO	SUN
MERCURY			13	25	50	78	102	220
VENUS			7	13	26	42	55	118
EARTH			5	10	20	30	40	85
MARS			3.4	6.3	13	20	26	56
JUPITER			1.8	3.7	5.8	7.6	16.4	
SATURN				2	3	4	9	
URANUS					1.6	2	4.4	
NEPTUNE						1.3	2.8	
PLUTO							2.2	
Solar System dia								

TABLE C-4 SOLAR SYSTEM DENSITY RATIOS

A	Density g/cm ³	B >	MERCURY D _A /D _B	VENUS D _A /D _B	EARTH D _A /D _B	MARS D _A /D _B
MERCURY	5.43		1.0	1.0362595	0.9836956	1.3816793
VENUS	5.24		0.9650092	1.0	0.9492753	1.3333333
EARTH	5.52		1.0165745	1.0534351	1.0	1.4045801
MARS	3.93		0.7237569	0.75	0.7119565	1.0
JUPITER	1.33		0.2449355	0.2538167	0.240942	0.3384223
SATURN	0.69		0.1270718	0.1316793	0.125	0.1755725
URANUS	1.32		0.2430939	0.2519083	0.2391304	0.3358778
NEPTUNE	1.64		0.3020257	0.312977	0.2971014	0.4173027
PLUTO	2.06		0.3793738	0.3931297	0.3731884	0.524173
Sun	1.41		0.2596685	0.2690839	0.2554347	0.3587786

A	Density g/cm ³	B >	JUPITER D _A /D _B	SATURN D _A /D _B	URANUS D _A /D _B	NEPTUNE D _A /D _B	PLUTO D _A /D _B	SUN D _A /D _B
MERCURY	5.43		4.08270 67	7.86956 52	4.11363 63	3.31097 56	2.63592 23	3.85106 38
VENUS	5.24		3.93984 96	7.59420 28	3.96969 69	3.19512 19	2.54368 93	3.71631 2
EARTH	5.52		4.15037 59	8	4.18181 818	3.36585 36	2.67961 16	3.91489 36
MARS	3.93		2.95488 72	5.69565 21	2.97727 27	2.39634 14	1.90776 69	2.78723 4
JUPITER	1.33		1.0	1.92753 62	1.00757 575	0.81097 56	0.64563 1	0.94326 24
SATURN	0.69		0.51879 69	1.0	0.52272 727	0.42073 17	0.33495 14	0.48936 17
URANUS	1.32		0.99248 12	1.91304 34	1.0	0.80487 8	0.64077 66	0.93617 02
NEPTUNE	1.64		1.23308 27	2.37681 15	1.24242 424	1.0	0.79611 65	1.16312 05
PLUTO	2.06		1.54887 21	2.98550 72	1.56060 606	1.25609 75	1.0	1.46099 29
Sun	1.41		1.06015 03	2.04347 82	1.06818 18	0.85975 6	0.68446 6	1.0

TABLE C-5 SOLAR SYSTEM MASS RATIOS

		(kg)	MERCURY	VENUS	EARTH	MARS
	(kg)	M ASS B	3.3 e23	4.87 e24	5.97 e24	6.42 e23
	M ASS A		M _a /M _b	M _a /M _b	M _a /M _b	M _a /M _b
MERCURY	3.3 e23		1.0	.0677618	.05527638	0.5140186
VENUS	4.87 e24		14.75757 5	1.0	0.8157453	7.585669
EARTH	5.97 e24		18.09090 9	1.225872 6	1.0	9.299065
MARS	6.42 e23		1.945454 5	0.131892 751	0.1075376 8	1.0
JUPITER	1.9 e27		5757.575 7	390.1437	318.2579	2959.501
SATURN	5.68 e26		1721.212 1	116.6324 4	95.14237	884.7352
URANUS	8.68 e25		263.0303 03	17.82340 8	14.539363	135.20249
NEPTUNE	1.02 e26		309.0909 09	20.94455	17.08542	158.8785
PLUTO	1.27 e22		0.038484 848	0.002607 802	0.0021273 03	0.0197819 3
SUN	1.99 e30		6060303. 03	408624.2	333333.33 3	3099688

		(kg)	JUPITER	SATURN	URANUS	NEPTUNE	PLUTO	SUN
	(kg)	M ASS B	1.9 e27	5.68 e26	8.68 e25	1.02 e26	1.27 e22	1.9
	M ASS A		M _a /M _b	M _a /M _b	M _a /M _b	M _a /M _b	M _a /M _b	M _a /
MERCURY	3.3 e23		0.00017368 421	0.00058098 59	0.0038018 43	0.0032352 941	25.98425 1	0.0
VENUS	4.87 e24		0.00256315 78	0.00857394 3	0.0561059 9	0.0477450 98	383.4645 6	0.0
EARTH	5.97 e24		0.00308947 36	0.01051056 3	0.0687788	0.0585294 11	470.0787 4	0
MARS	6.42 e23		0.00033789 473	0.01130281 6	0.0073963 13	0.0062941 176	50.55118 1	0.0
JUPITER	1.9 e27		1.0	3.34507	21.8894	18.62745	149606.2 9	0.0

SATURN	5.68 e26	0.02989473 6	1.0	6.543778	5.5686274	44724.40 9	0.0
URANUS	8.68 e25	0.04568421	15.28169	1.0	0.8509803 9	683.4645 6	0.0
NEPTUNE	1.02 e26	0.05368421	0.1795774	1.175115	1.0	8031.496	0.0
PLUTO	1.27 e22	0.00000668 421	0.00002235 915	0.0001463 133	0.0001245 098	1.0	0.0
SUN	1.99 e 30	1047.3684	3503.521	22926.26	19509.803	15669291 0.0	

Note: Jupiter contains 2/3 the total mass of all planets.

REFERENCES

1. Augustine, "Confessions", translated by F. J. Sheed, Hackett Publishing Co, Inc, Indianapolis/Cambridge, 1993.
2. Edgar Hennecke, "New Testament Apocrypha", (Westminster Press, Philadelphia, 1963).
3. Bruce Metzger, editor, "The Oxford Annotated Apocrypha", (Oxford Press, NY, 1894, Revised 1957).
4. Maulana Muhammad Ali, "The Holy Qur'an", (Specialty Promotions Co., Chicago, 1985).
5. A. Cohen, "Everyman's Talmud", (Schocken Books, NY, 1949).
6. A. Stiensaltz, "The Essential Talmud", (Basic Books Inc., NY, 1976).
7. Swami Prabhavananda & Frederick Manchester, "The Upanishads". The New American Library, Mentor Books, 1963.
8. Dharam Vir Singh, "Hinduism, An Introduction", (Travel Wheels, Jaipur, India, 1995).
9. Edward Conze, "Buddhist Scriptures", (Penguin Books, 1959).
10. D. C. Lau, "Confucius - The Analects", (Penguin Books, 1979).
11. W. Whiston (Translator), "The Complete Works of Josephus", (Kregel Publications, Grand Rapids, Mich., 1981).
12. James M. Robinson, General Editor, "The Nag Hammadi Library", (Harper & Row, San Francisco, 1988).
13. Elaine Pagels, "The Gnostic Gospels", (Vintage Books, NY, 1981).
14. Wilson Edmund, "Israel & the Dead Sea Scrolls", (Farrar Straus Giroux, NY, 1978).
15. John Allegro, "The Dead Sea Scrolls", (Penguin Books, 1956).
16. A. Powell Davies, "The Meaning of the Dead Sea Scrolls", (Mentor Books, NY, 1956).
17. Glenn D. Kittler, "Edgar Cayce on the Dead Sea Scrolls", (Warner Books, 1970).
18. Jonathan Barnes, "Aristotle", (Oxford University Press, Oxford, NY, 1982).
19. Dennis Tedlock, Translated by; "Popol Vuh", Simon & Shuster, 1996
20. Ayn Rand, "Philosophy: Who Needs It?" (The Bobbs-Merrill Co., Inc., Indianapolis & NY, 1982).
21. Ayn Rand, "Introduction to Objectivist Epistemology", (Mentor Books, NY, 1966).
22. Jack Ensign Addington, "The Hidden Mystery of the Bible", (New York: Dodd, Mead & Company, 1969).
23. Julian Jaynes, "The Origin of Consciousness in the Breakdown of the Bicameral Mind", (Boston: Houghton, Mifflin Company, 1976).

REFERENCES (Continued)

24. Joseph Campbell, "The Masks of God: Oriental Mythology", (Penguin Books, 1962).
25. Dr. Joseph Murphy, "The Power of Your Subconscious Mind", (Prentice-Hall, 1963).
26. Lewis Spence, "Mexico and Peru-Myths and Legends", Senate-Studio Editions Ltd, London, England, 1994.
27. Jared Diamond, "Collapse, How Societies Choose to Fail or Succeed", Viking – Penguin Group, New York, NY, 2005
28. Col. James Churchward, "The Lost Continent of Mu", BE. Books, (The C.W. Daniel Company Ltd., Co-publisher, 1926, 1931, printed 1998)
29. "The American Heritage Book of Indians", by the Editors of American Heritage, Alvin Joseph Jr., Editor; William Brandon, Narrator; American Heritage Publishing Company, 1961
30. Karl Brugger, "The Chronicle of Akakor", Delacorte Press, NYC, 1977
31. Josef F. Blumrich, "The Spaceships of Ezekiel", A Bantam Book, Feb 1974.
32. Christopher Dunn, "The GIZA Power Plant-Technologies of Ancient Egypt", Bear & Company Publishing, Santa Fe, NM 1998.
33. Bauval, Robert, and Adrian Gilbert, "The Orion Mystery: Unlocking the Secrets of the Pyramids", New York: Crown, 1994.
34. Julian Jaynes; *ibid*, p. 54.
35. Peter Russell, "The Global Brain", (Pub., J.P. Tarcher Inc., Los Angeles; Dist., Houghton Mifflin Co., Boston, 1983).
36. Ruth Montgomery, "Aliens Among Us", (Fawcett Crest NY, 1985).
37. Zecharia Sitchin, "The 12th Planet", (Avon, 19).
38. Steve Nadis, "Pluto Fragments May Be Collision Relics", Astronomy, Jan 2000.
39. Richard Leakey & Roger Lewin, "Origins Reconsidered", Doubleday, 1992.
40. Brian M. Fagan, "World Prehistory", Longman, 1999
41. David Hatcher Childress, "Lost Cities and Ancient Mysteries of South America", Adventures Unlimited Press, 1989
42. Zecharia Sitchin, "Genesis Revisited", (Avon, 1990).
43. Carl Sagan, Intelligent Life in the Universe, p357, Delta Books: New York, 1966.
44. Brian Greene, "The Elegant Universe", Vintage Books, New York, 1999
45. Zecharia Sitchin, "The Stairway to Heaven", (Avon, 1980).
46. Zecharia Sitchin, "The Wars of Gods and Men", (Avon, 1985).
47. Zecharia Sitchin, "Divine Encounters", (Avon, 1996).
48. Zecharia Sitchin, "The Cosmic Code", (Avon, 1998).
49. Zecharia Sitchin, "The Lost Realms", (Avon, 1994)

REFERENCES (Continued)

50. Allan, D. S. and Delair, J.B., "When the Earth Nearly Died," Gateway Books, 1995
51. William Ryan and Walter Pitman, "Noah's Flood", A Touchstone Book (Published by Simon & Schuster, 2000)
52. Roberta and Peter Markman, "The Flayed God, The Mythology of Mesoamerica", (Harper San Francisco, 1992).
53. Gilele D'iaz & Alan Rodgers, Restoration by, "The Codex Borgia", Dover Publications, Inc, NY, 1993
54. Ernest G McClain, "The Myth of Invariance-The Origin of the Gods, Mathematics and Music from the Rig Veda to Plato", Nicolas-Hays, Inc., York Beach, Maine, 1984
55. John A. Eddy, "The Maunder Minimum", Science 192, (1976): 1189-120.
56. Brad Steiger, "Mysteries of Time and Space", Dell/Confucian, 1976.
57. Brown, R.L., and Johnston, K.J. "The gas density and distribution within 2 parsecs of the galactic Center", Astrophysical Journal 268 (1983): L85.
58. Lo, KY., and Claussen, M.J. "High-resolution observations of ionized gas in central 3 parsecs of the Galaxy: possible evidence for infall." Nature 306 (1983):647,
59. Lacy, J.H., Townes, C.H., Geballe, TR., and Hollenbach, D.J., "Observations of the motion and distribution of the ionized gas in the central parsec of the Galaxy", Astrophysical Journal 241 (1980):132.
60. LaViolette, P.A., "Earth Under Fire", Alexandria, VA: Starlane Publications, 1997.
61. La Violette, P.A., "Galactic Explosions, Cosmic Dust Invasions, and Climatic Change", Ph.D. dissertation, Portland State University, Portland, Oregon, August 1983.
61. Watts, Alan, "The Book: On the Taboo Against Knowing Who You Are", New York: Random House, 1972.
62. Richard F Townsend, "The Aztecs", Thames and Hudson Ltd., London, 1992.
63. Trevor Rice, "Eastern Mediterranean Late Bronze Age Chronology", [www. geocities.com/trevoraug](http://www.geocities.com/trevoraug).
64. Philip A. Means, (Editor), Memorias Antiguas Historiales del Peru, Fernando Montesinos, 1920

INDEX

A

Adapa, 16

Addington, Jack Ensign, 10, 52, 55, 56, 68

Advanced civilizations, 14, 16, 18, 21, 26, 28, 36, 51, 97, 125, 127, 147, 150, 214, 223, 254, 266, 277

Aircraft/Airships, 21, 155, 163, 164

Akakor, Chronicle of, 21, 22, 98, 100, 107, 108, 112, 176, 277, 292

Akhnaton, 108, 109, 233, 234, 283, 290

Akkad/Akkadian(s), 9, 13, 16, 71 – 76, 99, 100-103, 106, 107, 125, 126, 150, 164, 1923-194, 197, 224, 240-243, 253, 265, 279

Algae, 76

Allegory, 32, 42, 46

Amarna, 233, 234, 283, 306-310

Amazon, 23, 98

Amos, 35, 40, 41, 112, 226

Analog 'I', 34, 48, 222

Andes, 6, 17, 21, 74, 98, 99, 152, 166, 175, 186, 188

Antarctic/Antarctica, 16, 23, 133, 134, 146, 167-171, 174, 180, 185, 186, 256, 258

Anunnaki, 26, 72, 73, 76, 94-96, 99, 107, 109, 194

Apocrypha, 8, 39, 40

Archaeology, 5, 6, 17, 18, 20, 23, 26, 27, 31, 72, 73, 98, 108, 111, 147-165, 190, 192, 201, 277 – 280, 283, 284, 291

Aristotle, 8, 180

Artifacts, 1, 2, 13, 162-166

Ashoka, Emperor, 22, 226

Ashurbanipal, 35, 100, 192, 253

Assyria/Assyrians, 13, 42, 71, 106, 110, 164, 190, 192, 224, 233, 253, 255, 277, 279, 280, 283, 306-310

Asteroids, 28, 37, 109, 175-178, 214, 277, 287

Asteroid Belt, 75, 84

Astras, 22

Astronomy, 5, 13, 21, 26, 72, 74, 80, 97, 98, 110, 124-128, 162, 184, 256, 264, 265, 266

Atlantis, 6, 19, 109, 166

Atomic explosions, 110, 149

Atrahasis Epic, 73, 76, 100, 192

Augustine/Augustinus, St 1, 3, 45, 46

Aztecs, 70, 74, 83-93, 97, 112, 113, 120, 121, 164, 173, 177, 187, 210, 236, 257, 266, 269, 272

B

Baalbek, 19, 21, 140, 151

Babylon/Babylonians, 22, 25, 35, 38, 39, 42, 70-74, 100, 104, 111, 124-128, 139, 150, 190, 192, 193, 197, 224, 233, 240-243, 253, 255, 277, 280, 283, 306-312

Bacteria, 76, 81

Berosus, 194-197, 279, 280

Bible/Biblical, 8-10, 19, 21, 22, 33, 38-43, 52, 71-93, 106, 108, 150, 160, 174, 193, 224, 231, 255, 284, 287

Bicameral, 10, 31-44, 51, 228, 254

Big Bang, 71, 80, 81, 218

Black Sea, 98, 100, 108, 171, 191

INDEX

Bode's Law, 132

Bolling Period, 102, 198

Bosporus flood, 100, 101, 107, 108, 149, 171, 173, 191, 202

Brahmanism/Brahminic, 45, 225, 228

Brain, 11, 33 - 37, 48

Brauer, Gunter, 77

Bristlecone pine, 148, 174, 185

Brugger, Karl, 98, 99

Buache map, 23

Buddha/Buddhism, 8, 16, 222, 226, 228

C

Calendars, 1, 21, 25, 34, 35, 80, 98, 112, 115, 121, 129, 197, 256, 264-276

Campbell, Joseph, 10

Caracol, 162

Cataclysm(s), 2, 4, 15, 26, 28, 97-123, 152, 147, 200-206, 209, 214, 254-258, 265, 266 - 279

Catalhoyuk, 149, 150

Catholic Popes, 244-247

Cave art/paintings, 125, 165

Cayce, Edgar, 40, 45

Chalcedon, Council of, 235, 236

Chaldaeans, 13, 22, 125, 127, 194, 253

Charon, 72, 92

Chilam Balam, 267

Chile/Chilean, 17, 18, 112, 279, 296

Chinese/China/Tibet, 6, 17, 18, 22, 25, 73, 81, 97, 103, 109 - 113, 124-126, 132, 160, 164, 178, 180, 191, 192, 255, 265, 278

Christ/Christian/Christianity, 9, 78, 215, 223, 226, 228 - 238, 255, 291, 292

Chronometer, 134

Churchward, Colonel James, 19, 70, 99, 175

Cicero, 125, 127

Clay, 75, 100

Climate, 1, 5, 14, 17, 103, 110, 126, 152, 184-190, 214, 256

Cloning, 76

Codex Vaticanus, 97, 114-123, 256

Comet(s), 73, 79, 83, 109, 111, 112, 175-178, 257

Communication, 24, 31, 36, 37, 124, 128, 131, 160, 161, **221**, 222, 229

Comte de Buffon, 78, 79, 229, 237

Confucius, 8, 226

Conscious/Consciousness, 10, 11, 30 - 69, 82, 209-213, 215-222, 225 -232, 254

Construction, 24, 137, 152, 161

Copernicus, 124

Creation mythology, 14, 23, 24, 70-96

Cuneiform, 103, 123, 144, 192, 197

Cycles/Cyclical, 2, 13, 25, 28, 34, 42, 43, 49, 61, 73, 74, 112, 113, 117, 124, 127, 129, 135 167, 169, 180-182, 185, 196, 200, 214, 218, 220, 257, 258, 264, 266

D

Darwin, 219

Dating techniques, 147-149, 169

Dead Sea Scrolls, 8, 9, 27, 28, 40, 229

INDEX

Deluge, 15, 26, 73, 97, 99 -112, 114, 151, 191-198, 282-287, 291

Diorite vases, 164

DNA, 19, 24, 76, 77, 173, 178, 179, 186, 201, 278

Dresden Codex, 128

Dropa, 164

Dunn, Christopher, 36, 37, 133, 164

E

Ea, 16, 51, 139

Earth, 13, 26, 28, 37, 71, 75, 98 - 100, 109, 112, 129, 131, 133, 134, 160, 174, 176, 177, 181, 182, 185, 196, 256-258

Easter Island, 140

Ebla/Eblanite, 150, 192, 195, 196

Egypt/Egyptian, 1, 6, 10, 13, 16, 18, 19, 21, 23-26, 32, 36, 42, 71, 73, 81, 82, 97, 103, 106, 108, 110, 111, 112, 124-127, 130, 131, 150, 157, 162-165, 174, 186, 191, 192, 198-201, 223-225, 233-243, 255, 264, 265, 277-291, 306-310, 314-319

Einstein, 44, 327, 328

Encke Comet, 112, 176, 256, 257

Enki, 16, 51, 75, 139

Enuma Elish, 70, 71, 73, 83-933, 192, 224

Equinox, spring, autumn, 155, 182, 264

Erra Epos, 192

Eskimos, 20, 97

Eusebius, 199, 200, 278, 278, 283

Evolve/Evolution, 24, 26, 28, 30, 217 - 221, 228, 278

Exodus, 105, 110, 174, 287, 289, 290, 320, 321

Ezekiel, 21, 35, 40, 164

F

Farming, 17, 18, 101, 278, 202

Flight, 22, 23, 162-165

Fossils, 5, 6, 81, 99, 152, 165, 171, 172, 175, 178, 179, 219

Freud, 210

G

Galactic core explosions, 37, 183, 214, 256

Genesis, 1, 3, 4, 11, 14, 20, 38, 43, 51-69, 70, 97, 102, 106, 193, 213, 220, 225, 237, 284, 288, 289

Genesis Man, 40, 41, 228

Genesis Model, 3, 28, 30, 40, 42, 43, 45-50, 51-69, 81, 82, 210, 212, 215-218, 225, 229, 239, 258

Geology, 3, 5, 6, 26, 98, 99, 147, 166-175, 278

Giants, 19, 20, 114, 223, 291, 323

Gilgamesh, 100, 106, 107, 198, 282, 303

Gin-Gwins, 22

Giza, 13, 21, 24, 25, 36, 106, 130-133, 151, 154, 156-161

Gliders, 21, 165,

Glomar Challenger, 102, 171

Gnostic Gospels, 8, 9, 215, 230, 236

God(s), 3, 7-9, 13, 19, 21, 26, 30, 40-69, 73 - 82, 111, 130, 139, 210-218, 215, 220, 223-243, 279, 284

INDEX

Golden Age, 41, 113, 114, 223

Goliath, 20

Graham, David, 72

Gravity, Gravitation, 22

Great Assembly, 39

Greece, Greeks, 13, 20, 25, 32, 33, 35, 40, 41, 44, 60, 97, 110, 111, 113, 125, 126, 130-133, 140, 160, 194, 200, 217, 224, 240-243, 255, 280

Greene, Dr. Brian, 80

Greenland, 16, 97, 168, 173, 185, 257

Gulf Stream, 102, 168, 185, 257

H

Hakatha, 22

Hallucination, 31-41, 57, 254, 255

Hammurabi, 41, 253, 282, 283, 306

Harmonic(s), 24, 25, 37, 42, 130-133, 141, 160, 196, 216

Hebrews, 4, 10, 13, 20, 39 - 45, 70, 97, 98, 101, 104, 107, 110, 112, 126, 194, 198, 224 - 226, 233, 253, 265, 277, 283, 286, 306 - 310

Herodotus, 42, 106, 125, 191, 200, 224, 255, 278, 279, 283, 284, 311, 312

Hieroglyphics, 192

Hindu(s), 1, 6, 8, 13, 19, 20, 45, 97, 113, 126-128, 160, 164, 191, 225, 226, 228

Hittites, 281

Holocene, 16, 19, 102, 126, 167, 169, 189, 190, 202

Homo sapiens/sapiens, 27, 73-78, 178, 190, 195, 278

Hopi, 22

Hubble telescope, 72, 256

Hunter gatherers, 17, 101, 278

Hyades star cluster, 177

Hyksos, 111, 280, 281, 286, 289

I

Ice cores, Greenland, Antarctic, 16, 167-171, 185, 186

Inca, 6, 13, 74, 97, 107, 112, 113, 152, 163, 236, 269, 277, 291

IRAS (Infrared Astronomical Satellite), 184

Islam, 226, 235, 238, 248-253, 292

J

Jaynes, Dr. Julian, 10, 29-38, 63, 223, 255

Jericho, 149, 150, 163, 174, 253

Jerusalem, 39, 82, 104, 107, 230, 233, 234, 238, 284, 289

Josephus, 8, 80, 104-107, 198, 199, 278-290, 313, 320, 322

K

Kassites, 111

Khabiru, 233

Kings lists (Sumerian), 193-197, 207, 282, 303 - 305

Knights Templars, 236 - 238

Kuiper Belt, 72, 177, 184, 256

L

Language, 18, 113

INDEX

Latitude/Longitude, 13, 130-134, 140

Lemura, 19

Leyenda de los Soles, 113, 114, 116, 120, 121, 173, 274

Little Ice Age, 17, 179, 187, 190

Long Count, Maya, 117, 118, 127, 197, 275

M

M-theory, 130, 215, 216, 327

Machu Picchu, 21, 125, 140, 291

Magnetic field cycles, 148, 180-182, 184

Mahabharata text, 109, 128, 191

Manco Capac, 16, 291, 324

Manetho, 106, 125, 199, 279-288, 315-319, 322

Maps/mapping, 23, 134, 146

Marduk, 16, 51, 70, 73, 99, 139, 224

Mars, 26, 92, 111, 112, 128, 182, 333

Mathematics, 5, 13, 18, 25, 124, 126, 128, 160, 265, 279

MASER, 24

Maunder Minimum, 148, 179

Maya/Mayan, 1 - 4, 6, 9, 13, 15, 16, 70, 74, 75, 97, 98, 105, 107, 109 -117, 120, 121, 125-129, 176, 177, 184, 186, 195, 197, 201, 210 - 212, 223, 256 - 258, 265-275, 277, 284, 291, 292

Medical Trepanation, 23

Medieval Maximum/Minimum, 179, 180, 187

Mediterranean Sea, 98 -103, 107, 111, 168, 171

Mega Fauna, 17, 184, 202, 278

Megalithic structures, 21, 24, 27, 150-12, 201

Memory, 15, 32, 223

Men/beings/gods/celestials/Masters from the sky, 21, 22, 164, 223

Mesoamerica, 6, 17, 19, 21, 25, 26, 36, 71, 74-76, 97, 98, 112, 114, 122, 124, 126, 127, 161, 210, 256, 257, 269, 279

Mesopotamia, 4, 6, 16 - 19, 26, 37, 72, 97, 103, 106 - 108, 111, 126, 127, 131, 150, 155, 160, 161, 174, 192, 196, 224, 277, 280-283, 287, 290

Metaphor, 2, 34, 46, 80, 213

Meteors, 103, 112, 175-178, 202, 282

Mexico, 11, 17, 74, 107, 108, 110, 113, 121, 125, 162, 165, 172, 202, 265

Milky Way, 8, 37, 71, 117, 183, 184, 195, 201

Mitanni, 281

Mithras, 231, 232

Mnemonic art, 32

Mohenjo-daro, 109, 149

Montesinos, 278, 279, 291, 292

Monte Verde, 279

Moon, 26, 51, 73-76, 99, 124, 128, 165, 333

Moses, 3, 16, 33, 41, 42, 224, 226, 289, 292, 320, 321

Mountains, 80, 98, 99, 101, 152, 175, 264

Mu, 6, 19, 99, 166

Muhammad, 40, 226, 234, 235, 238, 253, 255, 292

Murphy, Joseph, 10

Music/Musical, 5, 18, 25, 32, 196

Muslim Shias/Sufis/Sunnis, 215, 220, 223, 226, 234 - 236, 238, 240-243, 255, 292

INDEX

N

Naacal, 70, 71, 73-77, 83-93, 99, 100, 108, 284

Nabi, 35,

Nabta, 125

Nag Hammadi, 8, 9, 40

Narmar palette, 164, 284

Narratization, 33, 48

Nazca, 21, 74, 140, 154

Neanderthal, 76-78, 81, 178

Nebuchadnezzar, 21, 39, 104, 284, 287, 288

Nefilim/Repha'im, 20

Nibiru, 71 -76, 109

Nicea, Council of, 40, 229, 230, 231, 235, 236, 256

Nimrod, 19, 151

Norte Chico, 6, 18

Nostradamus, 40, 254-256

Nuclear war/explosions, 109, 149

Numbers, Prime, Special, 13, 25, 30, 70, 117, 124-146, 196, 197

O

Oaxaca, 17

Observatories, 124-126

Ofir, 22

Og, King of, 19, 20

Old Testament, See Bible

Olduvai Gorge, 170

Olmec, 6, 70, 74, 110, 121, 202

Oort cloud, 72, 177, 184, 256

Oracles, 36, 131, 227, 255

Osiris, 16, 225

P

Palermo Stone, 198

Papyrus, Turin, 198, 199, 283, 286, 314

Paracus Trident, 21, 154

Patagonia, 20, 110, 112

Pentateuch, 39, 105, 224

Persia/Persians, 13, 35, 39, 42, 103, 104, 106, 111, 255, 277, 280, 283, 290, 311, 312

Peru, 6, 16, 18, 21, 24, 99, 110, 125, 126, 150-153, 161, 166, 171, 175, 186, 236, 255, 290, 292, 323 - 326

Petroglyphs, 22

Phaistos, Crete, 190

Phillippe Buache map, 23

Phoenicians, 110, 253, 281, 283, 313

Pi, 160

Piri Reis map, 23

Plate tectonics, 6, 99, 101, 152, 166, 171, 173, 214

Plato, 107, 108, 109, 191

Pleiades star cluster, 177, 184

INDEX

Pleistocene Ice Age, 14, 16, 17, 19, 30, 100, 101, 102, 108, 152, 167, 189, 203, 277 - 279, 284

Pluto, 72, 73, 92

Poetic/Poetry, 32, 34

Popol Vuh, 8, 71 - 75, 83-93, 110, 113

Precession, 13, 26, 117, 127, 129, 130, 137, 138, 179, 182, 184, 195, 200, 211, 266

Prediction(s), 254-258

Proclus, 125, 127

Prophets/Prophecy, 33, 35, 39, 41, 164, 224, 226, 227, 234, 238, 254-255

Pseudepigrapha, 8, 39

Puma Punku, 21, 98, 152

Puranic gods, 226

Puritans, 237

Pyramids, 13, 21, 24, 25, 37, 74, 106, 130-133, 150, 154, 156-162

Pythagoras, 25

Q

Quetzalcoatl, 16, 226, 267, 268

Quipu cords, 113, 291

Qumran, 231

Qur'an/Koran, 8, 9, 226, 228, 234, 238, 255, 292

R

Radiation, 37, 148, 149, 180, 184, 189

Radiocarbon dates/dating, 147-149, 174, 178

Rama Empire 22, 109

Ramayana text, 109, 191

Rand, Ayn, 8

Reincarnation, 12, 228

Religion, 7-12, 210-213, 223-253

Resurrection, 228

Rice, Trevor, 283, 284

Rivers, Tigris & Euphrates, Tunguska, Nile, 6, 18, 103, 191, 192

Rock Art, 165

Rocket ship, 163

Russell, Peter, 36, 218-221

S

Sacsahuaman, 21, 125, 140, 151-153

Sagan, Dr. Carl, 78

Sages, 16, 226, 227, 265

Santorini, 111, 172, 174, 176

Saqqara, 163

Sarmizegetusa, 125, 155

Semitic Tribes, 224, 253

Septuagint, 40, 103, 105, 255

Siculus, Diodorus, 125, 199, 200, 278, 279, 283

Sifrala, 22

Sitchin, Zecharia, 72, 76, 98, 99, 109, 149

Skeleton/Skeletal, 5, 109, 149, 164

Solar Calendar, 35, 265

Solar Evidence, 179-184

Solar Flares/Wind, 179, 180, 181, 184, 189, 256

Solomon, 285, 288, 289

INDEX

Solstice, 117, 155, 183, 264

Space ships/flight, **21**

Spence, Lewis, 11

Sporer Minimum, 179

Stonehenge, 125, 130, 140, 155, 156

String/superstring theory, 46, 80, 130, 202, 215, 216, 327, 328

Sumerians, 1, 6, 9, 11, 13, 14, 19-26, 36, 38, 70-75, 83 – 93, 97, 100, 103, 107, 108, 112, 124-129, 139, 149, 150, 154, 164, 182, 191-198, 201, 202, 207, 208, 219, 223-225, 240-243, 265, 278, 279, 284, 290

Sumerian cities, 208

Sun, 7, 83, 108, 109, 112, 117, 155, 165, 175-184, 200, 218, 234, 327, 264, 331, 333

Sunspot(s), 26, 148, 179, 180, 257

Semitic, 78, 253

Synergy, 217, 218

T

Talmud, 8, 9, 39, 160, 255

Taurid stream, 112, 176, 178, 256

Teotihuacan, 98

Tethyan Seaway, 101
 Theory of Plate Tectonics, 6, 101, 166
 Tiahuanaco, 21, 140, 152, 291
 Tiamet, 73-75
 Tikal, 161
 Titicaca, Lake, 99, 152, 166, 171, 175
 Toba, Mt, 78, 172, 173, 201, 258

 Toltec, 16, 74, 113, 121, 176, 187
 Torah, 39
 Trepanation, 23
 Tsunami, 108, 110, 112, 178, 283

U

Ubaid/Ubadians, 104, 150, 192
 Ugaritic culture, 98, 240-243
 Underwater cores, 171, 172
 Upanishads, 45, 50, 52, 227, 230
 Ur, 104, 125, 150, 191, 198, 282, 288
 Ussher, Archbishop, 78, 79, 229, 237

V

Vedas/Vedic, 19, 21, 45, 52, 71, 107, 109, 164, 191, 225, 226
 Vela Supernova, 99, 100, 107, 149, 202

Venus, 26, 75, 79, 109, 128, 333, 334
 Vespucci, Giovanni, 23
 Vesuvius, Mt, 121, 172, 173, 199, 202, 277
 Vimanas, 22, 164
 Viracocha, 16, 21, 226, 291
 Volcanoes, 1, 5, 78, 111, 112, 172-175, 214, 218, 258, 277
 Vostok, 170, 186, 195
 Vumaanika-Shaastra, 22

W

Weld-Blundell, 193, 194

INDEX

Wahhabists, 235, 238, 252

Writing, 1, 2, 3, 11, 13, 14, 15, 19, 25, 27, 31-34, 37 - 42, 110, 113, 164, 190-200, 221, 226, 264, 291

X

Xibalba, Road of, 71, 117, 184

Y

Yahweh, 112

Yoga, 227, 228

Yellowstone, 78, 173, 258

Yonaguni Island, 21

Younger/Older Dryas, 108, 169,
186, 189, 202, 278

Z

Zodiac, 100, 127, 182, 184, 196,
200, 204-206, 314