

7. Old Time Religion

The ancients all believed the gods were like humans. They ate, drank, fought, loved, fornicated with one another and with humans, gave birth, were spiteful and jealous and in all other ways behaved just as humans do. The only differences between gods and humans were that gods were immortal and immensely powerful. It's probably only natural that our ancestors dimensioned the gods with human measure because it was psychologically necessary for them to have some sort of image of the god to whom they prayed, and human behavior is all our ancestors knew. The image of God being somewhat humanlike persists to modern times as *Genesis 1:26* says: "And God said, Let us make man in our image, after our likeness:" (KJV). Many people believe that to be literally true. When Michelangelo painted *The Creation of Adam* on the Sistine Chapel ceiling between 1511 and 1512, he pictured God as a bearded old man.

Ancient people were hampered by their lack of knowledge about the Universe: its size, what it's made of, and how it works. They did as well as could be expected considering this ignorance. The thrust of this work is that we must shed old superstitions born of ignorance and consider God as revealed by the size, construction, and operation of the Universe because it is the Almighty's creation and the true word of God. The religions of ancient peoples attempted to do that as much as their poor knowledge permitted.

This chapter contains a thumbnail sketch of the religions of ancient Egypt, Mesopotamia, Greece, Rome, and Mesoamerica within the context of their respective state histories. Any one of these topics could be a book in its own right, so the presentations here are extremely brief and merely illustrate the foundations of contemporary religious thought. These contemporary international religions have often been at odds with secular governments because they both pursue the same thing: the allegiance of the people. However, ancient religions were more closely aligned with the state and often advised leaders of the nations. In no ancient religion did the faithful gather in a group to worship according to a ritual of some complexity as modern Western religions do. Worship was left to the individual or to priests alone on behalf of the believers. All dates in this chapter are before the current era (BCE) unless otherwise noted.

Egypt

Although the idea of a spirit world was widespread in ancient time, specific gods were not. They tended to be local to a town or small region

because routine travel and the spread of a specific culture over long distances were uncommon. For example, in predynastic and early dynastic Egypt (one of the best documented of ancient cultures) the main deity of the town Buto (Per-Wadjet in Egyptian) in the delta was the cobra goddess, *Wadjet*, while *Neith* (*Nit* in Egyptian) reigned just a few miles up the river in another delta town called Sais (Zau in Egyptian). *Heryshef* was the principal god at Herakleopolis Magna (Egyptian: Henen-nesut) a little further up the Nile. As travelers went further upriver, they would meet *Anubis* (*Anapa* in Egyptian) at Lykopolis (Zawty); *Osiris* at Abydos (Abedju in Egyptian); *Min* at Koptos (Gebtu in Egyptian); *Seth*, or *Set*, at Naqada (Nubt in Egyptian); *Hathor* at Aphriditopolis, which is sometimes called Pathyris (Per-Hathor in Egyptian); and the falcon god *Horus* (*Heru* in Egyptian) at Hierakonpolis (Nekhen in Egyptian). All ancient Egyptian names were replaced with Greek names during the reign of Ptolemy I and his heirs as kings. Ptolemy was Alexander the Great's general who had inherited Egypt when Alexander died and his empire was divided among his generals. Greek names are more commonly known.

The Egyptian pantheon is extensive and somewhat bewildering, but it can be divided into two types of gods: those that are representative of natural phenomena such as the annual Nile flood (*Anuket* and *Hapi*, goddess and god of the Nile) and death (*Anubis* and *Osiris*) and those that are intimately associated with the king such as *Horus* and *Ra*, or *Re*. The importance of gods associated with natural phenomena was relatively stable during ancient Egyptian times, but the gods associated with royalty tended to change in importance depending on who was king.

The struggle between secular government and religious authority for control of people's lives is one of the enduring themes of world history. However, religion and the state were joined in some early cultures, and in few were they as intimately intertwined as they were in the Inca, Aztec, and Egyptian. Of the three, ancient Egyptian culture is by far the most completely documented.

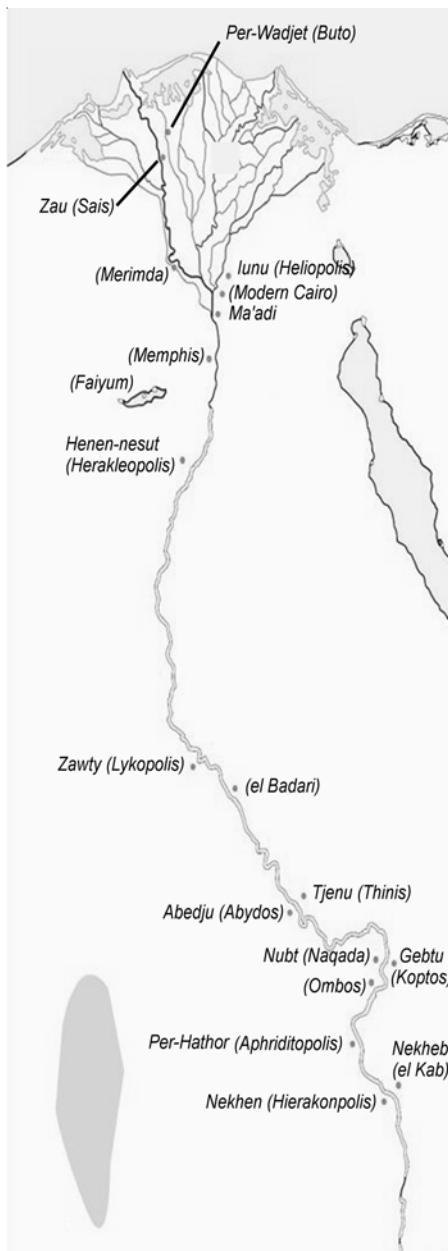
Egyptians had to abandon their nomadic life and settle along the Nile before they could develop their culture to its fullest and leave a record of it for us to find. Our knowledge of Egyptian culture before 3000, when writing was developed, is only inferred from sparse archeological evidence. Around 10,000, the Sahara had enough rainfall to support a savannah ecosystem, and the human inhabitants were wandering hunter gatherers who left little trace of their existence. But the Sahara was beginning to dry up, driving the people into small, more permanent settlements around water, such as oases and the Nile, and forcing them to learn farming skills to replace the diminishing game in their diet.

Archaeological evidence of neolithic (new stone age) habitation back to the neighborhood of 5000 to 4800 has been found at Merimda Beni Salama, on the western edge of the Nile delta about 50 or 60 kilometers (31 to 37.3 miles) northwest of Cairo, and archeologists have found a number of graves there. Although burial goods are rare at Merimda, the fact that they're found at all is testimony that ancient Egyptians were thinking of an afterlife

even at this early date. This probably should not be surprising considering the Neanderthal finds at Shanidar cave. Similar burial practices from about the same time period have been found at Ma'adi, south of modern Cairo. As of the turn of the second millennium of the current era (CE), excavations at Merimda, Ma'adi, and similar sites in the Faiyum have revealed no differences among the graves in the quantity and quality of burial goods, suggesting classless societies. This is in stark contrast with finds at burial sites later in Egypt's development.

The accumulated silt from the annual Nile floods and continuous cultivation have resulted in the excavation of only a few archeological sites in the delta region, called lower Egypt because it's down river. Merimda was probably found because it's on the edge of the desert and not in the delta proper like the site now being excavated at Buto (Per-Wadjet). Up river, in Upper Egypt, there are quite a number of sites bordering the desert that have been excavated, so our knowledge of Upper Egypt is a bit more extensive. The oldest Upper Egypt culture found so far was discovered at el Badari in 1923 and extended around 33 kilometers (20.5 miles) south to Mostagedda. The time over which the Badarin culture thrived began around 4800, overlapping that at Merimda, and drew to a close around 4000 as a more advanced culture gradually replaced it. The flood plain is narrower at el Badari than at many other places along the Nile, and the forty or so settlements tended to be inhabited only intermittently.

The settlements in the Badari-Mostagedda region contain more extensive selection of burial goods than at Merimda. For the first time in the evolution of the Egyptian culture, grave



Ancient Egypt

Consistent with the pre-Greek time period this map represents, city names are Anglicized equivalents of original Egyptian pronunciations as best we understand them. Greek or Arabic names are included in parentheses.

goods included items of personal adornment such as cosmetic palettes; hairpins (sometimes of copper); bracelets and decorative combs made of bone and ebony; and necklaces made of turquoise (and sometimes copper) beads, glazed soapstone, and shells. These burial goods imply a firm belief in a life after death. However, the imagination of the people was not sufficiently developed to conceive of the idea that life after death could possibly take a form completely different than the physical body. To the early Egyptians, the afterlife had to be the same as this life, requiring plates for eating food and jewelry for personal adornment. It's important to realize that some present day religions, such as Islam and a few Christian sects also believe in the resurrection of the body; they've not progressed beyond the primitive beliefs of ancient Egyptians in that respect.

Toward the end of the Badarian culture, around 4000, a new culture was rising in the area that is now called Naqada, just a short way upriver from Badari. This new culture is called Naqada after the place where its artifacts were first discovered in the late nineteenth century, and it would replace the Badarian. The discoverer, W.M.F. Petrie, divided the Naqada culture into three phases, which he called Amratian (after the cemetery near El-Amrah), Gerzean (after the cemetery near Gerzeh), and Semainian (after the cemetery near Es-Semaina) and which have since been renamed Naqada I (4000 to 3500), II (3500 to 3200), and III (3200 to 3000), respectively. The Naqada period was the bridge between the more primitive Merimda/el Badari cultures and Pharaonic Egypt. It was the time when wealth and power became concentrated and religious and secular power bases joined.

Naqada is thought by some to have been the necropolis of the nearby town of Ombos, and both were devoted to the god *Seth*. *Seth* was connected with the kingship during Early Dynastic times, appearing on the mace head of pre-dynastic King Scorpion. *Seth* and *Horus* were considered to be embodied in the person of the king. The idea that god takes the form of man was rejuvenated in Imperial Rome and the Christian Trinity.

Nubt/Naqada was located across the river from the entrance to the Wadi Hammamat, which had direct access to the gold and copper reserves of the eastern desert and to the Red Sea beyond. The appearance of a few copper pins and beads among Badarian grave goods suggests that 4000 was the time when Egyptians were developing the technology to smelt copper and gold, making Nubt/Naqada ideally situated to exploit this new technology.

The mining and working of gold and copper during Naqada I contributed heavily to the development of artisan and leader classes of society to augment the farming class. Some individuals among these classes accumulated more wealth than others as is indicated by the rise of differences in the quality of grave goods and the size of the tombs among the grave sites. Ultimately, these differences grew to the point that some grave sites have come to be called elite tombs.

This growing inequality in the distribution of wealth is typical of developing civilizations and a common theme throughout history as Will Durant

noted in a footnote on page 18 of *Our Oriental Heritage*: "As the life of a society becomes more complex, and the division of labor differentiates men into diverse occupations and trades, it becomes more and more unlikely that all these services will be equally valuable to the group; inevitably those whose greater ability enables them to perform the more vital functions will take more than their equal share of the rising wealth of the group. Every growing civilization is a scene of multiplying inequalities; the natural differences of human endowment unite with differences of opportunity to produce artificial differences of wealth and power."

Although it's not yet recognized to be so, these multiplying inequalities in wealth, and more importantly, power, that are so universal in all civilizations at all times throughout history have their roots in the natural forces that shaped our three billion years of evolution from blue-green algae to human beings. The as-yet unrecognized message of evolution is that a significant portion of our behavior is shaped by those evolutionary forces, and the better we understand that message, the better we understand ourselves as human beings. The accumulation of power and wealth in the hands of the few is a consequence of the alpha drive common throughout the animal kingdom. The need that these alpha driven people feel to accumulate wealth is the instinct for self preservation, to make sure they, and maybe more importantly, their genetic code carried by their offspring have whatever is necessary to survive. There's nothing strange or mysterious about it. It's a natural, but not necessarily culturally favorable condition.

Naqada I was the birth of these differences in wealth and power in Egypt, and elite tombs of the Naqada I period have been found at Naqada/Nubt (Ombos), Hierakonpolis (Nekhen), Abydos (Abedju), and Diospolis Parva (Hut-Sekhem in Egyptian). These four population centers, possibly along with Pathyris (Per-Hathor), are thought to have been centers of power, sort of local chiefdoms too small to be called kingdoms.

The inequalities of power and wealth in ancient Egypt grew during Naqada II, although we can only speculate on the avenue by which these inequalities and the elite class developed. Archeological evidence of trade with Palestine and of increasing specialization among craftsmen suggests that the industrial side of the economy rather than the agrarian side was probably the avenue by which the elite class developed. On the other hand, the elite class could have been the priests that controlled worship of the gods such as *Seth* at Nubt/Naqada, *Horus* at Hierakonpolis (Nekhen), and the vulture goddess *Nekhbet* at Nekheb across the river from Nekhen. The Naqada period was the time when secular and religious leadership were joined, and it's easier for a priest to take a secular leadership role than for a secular leader to assume religious authority with all its special knowledge of ritual and special connections with the gods.

During Naqada II, Naqada/Nubt and Hierakonpolis built walls around their towns, and the four chiefdoms at Naqada/Nubt, Hierakonpolis, Abydos, and Diospolis Parva probably fought among themselves. Because of their close proximity to one another (they were across the river from one another) Hierakonpolis and modern El Kab (Nekheb) probably formed a con-

Serekh of King Djjet

This serekh of King Djjet was carved into a stele that's housed in the Louvre. A stele is a stone or wooden monument that's taller than it is wide. The figure of *Horus* sitting atop the stylistic palace facade identifies the snake in the rectangle just below as the king's *Horus* name, *Horus Cobra* or *Serpent of Horus*. Djjet was the fourth king of the first dynasty. This stele was found in a tomb at Abydos.



federation sometime during Naqada II or III. *Horus (Heru)*, the falcon god of Hierakonpolis, and *Nekhbet* became prominent deities throughout Egypt's history as a result. The ruler of the Nekhen/Nekheb confederation became known as the Earthly embodiment of Nekhen's *Horus*, and *Nekhbet* became known as his protector. After centuries of struggle among the Upper Egypt chiefdoms, they were reduced by the time of Naqada III to three dominant states: Naqada, Thinis (Tjenu in Egyptian), and Nekhen. Naqada was the first of the three to fall.

There is considerable debate over the kings that ruled during Naqada III, which is sometimes called Dynasty 0, or the protodynastic period. The cause of the debate is that several rulers are known from that time period; however, all but one are dated to a time before the unification of Upper and Lower Egypt. Thus, all but that one were probably relatively minor kings, or chieftains, of local chiefdoms rather than kings of Egypt. That they have tombs at Abydos alongside later kings of Egypt is a puzzle but not as big a puzzle as the fact that they predated the unification.

The first known of these early rulers is called Iry-Hor. Little is known of him, but he might have ruled a chiefdom centered at Thinis. Another Naqada III ruler was Ka, who is thought to have ruled over the Thinis chiefdom after Iry-Hor, although some believe that he ruled from Nekhen (Hierakonpolis). Perhaps the Thinite line simply moved the capital from Thinis to Nekhen. Such moves happened often during the centuries to follow. The reasons for these moves are never clear but probably reflected complex political conditions at the time. Ka appears to have been the ruler who established the custom of inscribing his name in a serekh, which is a rectangular drawing containing a stylized representation of a palace with the symbol for the king's name above it. The serekh is considered to be symbolic of the king and preceded the cartouche. Later serekhs also had the falcon symbol of *Horus (Heru)* perched above the palace/name rectangle. Relief-carved serekhs of Ka have been found as far afield as Tel Lod in the southern Levant, but no one knows how they got there.

The chieftain called Scorpion II appeared during the late Naqada III time period. The relationship between Scorpion II and Ka is uncertain, although most Egyptologists believe that Scorpion II was Ka's successor



Narmer Palette

This ceremonial palette was found in Nekhen, which the Greeks called Hierakonpolis. Egyptologist Bob Brier called the Narmer Palette “the first historical document in the world” because it records the historical event of Egypt’s unification. Other Egyptologists disagree.

and ruled from Nekhen, where his macehead was found. The mace was the ceremonial symbol of the ruler’s power and was often shown as the ceremonial weapon the ruler used against enemies. Scorpion II was significant by being the first shown wearing the White Crown of Upper Egypt. He had probably united Upper Egypt under his rule.

Scorpion II was followed by Narmer, who is generally considered to be the king who unified Upper and Lower Egypt. Thus, Narmer is considered by some Egyptologists as the last Dynasty 0 king and by others as the first king of Dynasty 1. Perhaps he was both. The unification is pictorially described on a palette found at Nekhen. The Narmer palette is a flat slab of schist stone about 65 centimeters (25 inches) high that is carved in relief on both sides. One side shows a king wearing the White Crown of Upper Egypt vanquishing an enemy with his mace while *Horus* sits atop some papyrus plants. That *Horus* is shown indicates the king comes from Nekhen in Upper Egypt. Moreover, *Horus* sitting atop papyrus plants, which are characteristic of the Nile delta, implies that Upper Egypt triumphed over Lower Egypt. On the other side, the king, now wearing the Red Crown of Lower Egypt, is inspecting a pile of corpses, indicating that the king is now the ruler of Lower Egypt as well. Both sides have the serekh of Narmer at the top.

Most Egyptologists accept the Narmer Palette as an historical document, but a few are skeptical, which is a good thing. Skepticism always keeps everyone honest as long as the skeptics are honest themselves. Unfortunately, honesty is sometimes a hit or miss thing among human beings.

King Tutankhamun's Death Mask

Although King Tutankhamun was a relatively minor king, his death mask has become a popular symbol of ancient Egypt. His headdress has representations of the king's two protective deities, Per-Wadjet's cobra goddess, *Wadjet*, from Lower Egypt and Nekhbet's vulture goddess *Nekhbet*, from Upper Egypt.



After unification, or perhaps before (the historical record is scanty), the king assumed the form of the living *Horus*. *Nekhbet* became known as his protector. As a goodwill gesture to Lower Egypt after unification, the cobra goddess, *Wadjet*, of the delta town of Per-Wadjet (Buto) joined *Nekhbet* as the king's co-protectors; for example, they are placed together on Tutankhamun's headdress. In addition, the king's crown was henceforth a combination of Upper Egypt's White Crown and Lower Egypt's Red Crown.

Little is known about the First Dynasty, which began either with Narmer or his death depending on which expert Egyptologist we choose to believe. It was a time of consolidating the unification and establishing the traditions for subsequent millennia to follow. One of these traditions was for the king to add another name, a *Horus* name, to his birth name. This was the name written in the serekh that had *Horus* perched atop it.

This is also the time during which the individual gods of the various cities such as *Anubis* at Lykopolis (Zawty); *Osiris* at Abydos; *Min* at Koptos, or Coptos; *Seth* at Naqada; and *Hathor* at Aphriditopolis were probably given their specific duties in the Egyptian pantheon and woven together by myths into a whole religious cloth that further consolidated the unification. This is speculation because there's no historical evidence of this process (of course, historical evidence of anything from those ancient times is sparse at best), but it's a logical speculation. When each town had been independent, its god was probably responsible for the general welfare of it and its people, *Wadjet*, of the delta town of Buto for example. After unification, this responsibility for general welfare was assumed by the god-king, *Horus*, and the gods of individual towns could then become specialized. The power of their god and the fame of their town could then spread throughout the land.

No literature describing the gods of Egypt tells the complete story of when all the gods entered the pantheon, but Egyptians believed in approximately 125 spiritual beings by the time Alexander the Great conquered Egypt. Egyptians must have felt that if a few gods were good, a hundred must be better. Some had been imported from Nubia and the Middle East.

Not all of these spiritual beings were gods in the sense that they were worshipped. Most simply had roles to play in the Egyptian myths of the spiritual world, which they constructed as a mirror of Earthly civilization. For example, *Aken* ferried the dead to the underworld in a boat while his consort, *Ament*, greeted the souls of the newly dead and offered them bread and water following their arrival at the gates, but neither were actually worshipped as gods. This underworld river and its ferryman were the forerunners of similar Greek myths; perhaps the Greeks adopted them from the Egyptians.

After Egypt's political unification by Narmer's army, the kings of the First Dynasty probably began a cultural unification by encouraging the priests of the various gods to create myths surrounding the gods, and these myths inevitably required the addition of other gods and mythological characters such as *Aken* and *Ament* to complete their stories. That's partly how the Egyptian pantheon grew so large.

Once a god was created to fulfill a purpose in the myths, the Egyptians usually expanded its duties, and this expansion often duplicated duties of other gods (although Egyptians probably understood subtle differences between them) or was unrelated to the original purpose. For example, *Taweret* was created as the goddess of childbirth, duplicating the childbirth goddess *Bes*, but her duties were expanded to include fertility, rebirth in the after-life, the harvest, and strangely, the northern sky as depicted in the tomb of Seti I. The Egyptian pantheon became an unruly lot. Not all the Egyptian gods were formally worshipped in a temple. Many, such as *Taweret* and *Bes*, were household deities though universally revered.

The Egyptian religion had some similarities with early Hinduism (the religion of people who inhabited the Indus valley in what is now Pakistan) which was roughly contemporary with Egypt's Old Kingdom, 2700 to 2200. For example, the Egyptians were concerned with universal order as represented by *Ma'at*, just as Hinduism is concerned with cosmic order as represented by *Rta*, or *Rita*. The Egyptian gods *Atum* and *Benu* created themselves just as the Hindu god *Brahma* was self created. The Egyptian composite god *Ptah-Seker-Osiris* represented the three-fold creation, stability, and death just as *Brama*, *Vishnu*, and *Shiva* represent creation, preservation, and destruction in the Hindu pantheon. The Egyptian religion and Hinduism have similar creation myths: the Egyptian creation myth is that the Earth rose as a mound called *Benben* in darkness out of a lifeless sea, and the 129th hymn of the 10th book, or *Mandela*, of Hinduism's *Rig Veda* says, "At first there was only darkness wrapped in darkness. All this was only unillumined water." Such similarities leave room for speculating that there might have been some communication between these two ancient peoples, perhaps somewhere in the Near East; both civilizations traveled there around that time. However, no evidence of such interaction exists.

After unification, the various kings begot several long series of hereditary dynasties. Each dynasty lasted only a few generations before being replaced by another. As Will Durant noted in one of his history books, de-

scendants of a strong king seldom inherit the king's abilities. Little is known about the first two dynasties, but during that time, the capital of the unified kingdom is known to have been moved to Memphis (in Greek), closer to the Delta. The reason for the move is unknown but could have been merely because the area around Memphis was more lush and inviting than Upper Egypt, where the flood plain is narrower and the desert never very far away. However, burial sites for the first kings are found at the traditional cemetery, known as the Umm el-Qa'ab, in the necropolis at Upper Egypt's Abydos; there are also duplicate early dynasty burial sites at the necropolis of Saqqara near Memphis. The sites at either Abydos or Saqqara are cenotaphs, which are empty tombs that are erected as memorials while the true burial site is elsewhere. But which sites are the cenotaphs and which the true burial sites is unknown.

During the First Dynasty, the king adopted a second name, the Two-Ladies name (nebty name), to his titulary in addition to his *Horus* name. The "two ladies" refer to the goddesses *Nekhbet*, patron deity of Upper Egypt, and *Wadjet*, patron deity of Lower Egypt, both of which were charged with the task of protecting the king. The First Dynasty king Semerkhet was the first to quasi-officially use a nebty name, which didn't become a fully independent title until the Twelfth Dynasty. The existence of three official names for the king (birth name, *Horus* name, and nebty name) has probably created some problems to Egyptologists attempting to identify various kings. The ruler was called "king" during these times; "pharaoh" wasn't used as a title for the king until the New Kingdom's eighteenth dynasty, after the reign of Hatshepsut.

First Dynasty kings burial sites at Abydos were underground chambers having several rooms for storing food and implements that the king would need in the afterlife. The underground chambers at Saqqara, near Memphis, were topped above ground with a rectangular mud brick structure called a mastaba. The early kings had relatively small burial sites of only two or three rooms, but burial practices became more elaborate with each generation. During the First Dynasty, members of the king's court, and sometimes animals, were sacrificed upon his death so he could be amply served in the afterlife. King Djer's burial site includes the tombs of 338 individuals, all of whom appeared to have died peacefully; it was an honor to serve the living *Horus* in this life and the one beyond. This practice was discontinued after the First Dynasty.

During the First Dynasty, the kings divided the kingdom into a number of provinces called nomes in Greek (sepats in Egyptian) in order to better organize administration. This organization legitimized the loose collection of autonomous city-states that had existed in pre-dynastic times. Each nome was controlled by a governor (nomarch), which became a hereditary position.

The middle of the Second Dynasty is particularly mysterious, but some Egyptologists believe that Egypt separated once again into Upper and Lower kingdoms for several decades. The fourth king of the Second Dyasty, Senedj

(*Horus Sa*), was probably too weak to hold the fledgling empire together against the growing power of the monarchs. One of the late Second Dynasty kings, Peribsen, abandoned the traditional connection with *Horus* in favor of *Seth* (or *Set*), the predynastic local god of Nubt (Greek *Ombos*). Peribsen's serekh had the *Seth* animal atop it instead of *Horus*, suggesting that he was the king only of Upper Egypt and thus fortifying the separation hypothesis. The serekh of the last Second Dynasty king, Khasekhemwy, had both *Horus* and the *Seth* animals atop it, suggesting that a temporary heresy and division of the empire was being smoothed over.

Moving the capital to Memphis brought it closer to Heliopolis (Iunu), which had the Sun god *Ra*, or *Re*, as its city god. The priests of *Ra* probably made impressive presentations to the king extolling the power and majesty of their Sun god because *Ra* quickly became Egypt's principle god, and *Horus* became more of a traditional god. Egypt's pantheon was always complicated.

The Third Dynasty began what is usually called the "Old Kingdom" (ca. 2700 to ca. 2200; dates vary), which encompasses the third through the sixth dynasties. It was the time when Egypt became the great civilization and world power that would last for over two millennia. The Old Kingdom was the time during which the great pyramids were built. The first was the Step Pyramid built at Saqqara, northwest of Memphis, by Imhotep for Djoser, or Zoser, who was either the first or second king of the Third Dynasty. Imhotep was the first Egyptian to build with stone instead of mud brick and might have gotten the idea of stone pyramids by combining the ziggurat form with the limestone temple to *Inanna* in Uruk's Eanna district in Mesopotamia; or maybe the influence was the reverse of this speculation. Imhotep was later deified. After Djoser, the Third Dynasty kings ruled for less than ten years apiece until the last, Huni, who had an unremarkable reign of over twenty years.

The Fourth Dynasty was the time of great pyramids and the Sphinx. The dynasty began with Sneferu, whose *Horus* name was Nebmaat. He reigned for approximately thirty years and was responsible for the famous bent pyramid at the Dahshur complex. The bent pyramid's lower part has a 54 degree slope, but it then changes abruptly to a 43 degree slope. Engineering analysis has revealed that stacked-block pyramids constructed without mortar at a 54 degree slope are unstable beyond a certain height and will collapse under their own weight. This instability was probably the cause of the collapsed pyramid at Meidum, which is suggested to have been built for Huni. The collapse of the Meidum pyramid during the construction of the bent pyramid probably resulted in the bent pyramid's design change.

It was during the reign of the second king of the Fourth Dynasty (Khufu, who the Greeks called Cheops) that the great pyramid at Giza was constructed. Later Fourth Dynasty kings (Djedefre, Khafre, and Menkaure) constructed smaller pyramids, and the last, Shepseskaf, had to be content with simply a mastaba; building the great pyramids probably depleted the state treasury. The Fourth Dynasty was the time when the sun god, *Re*, became the dominant god as indicated by the "re" at the end of the names

Djedefre ("enduring like *Re*"), Khafre ("appearing like *Re*"), and Menkaure ("eternal like *Re*"). Beginning with Djedefre, the title "Son of *Re*" was added to the royal titulary.

The first king of the Fifth Dynasty, Userkaf, initiated reforms that weakened the central government, allowing the nomarchs to become more powerful. The Fifth Dynasty kings didn't construct large pyramids, opting instead to build large temples to *Re*. The last king of the Fifth Dynasty, Unas (ca. 2375 to ca. 2345), was the earliest ruler to have the spells known as the pyramid texts inscribed in his tomb to protect him in the afterlife.

The Sixth Dynasty, the last in the Old Kingdom, had a number of weak kings who had difficulty commanding respect. For example, Manetho, an Egyptian priest who lived around the third century before the current era and wrote a history of Egypt titled *Aegyptiaca*, claimed that Teti, the Sixth Dynasty's first king, was murdered by his palace bodyguards. Teti reigned for only ten years or so, and was followed by Userkare, who ruled for only two years, which prompts most Egyptologists to suggest that Userkare was a usurper. Even the long reigns of Pepi I and Pepi II could not enable the central government to stand against the growing power of the nomarchs. Moreover, some Egyptologists speculate that pyramid and temple building during the fourth and fifth dynasties had depleted the state treasury to point that the Sixth Dynasty was unable to withstand the final blow: a severe drought in central Africa between 2200 and 2150 (reported by Thompson and coworkers in a 2002 issue of *Science*) led to a drastic drop in the annual flooding of the Nile as reported in a 2003 issue of *Geoarchaeology*. This drought was related to aridification of the climate over much of the Northern hemisphere called 4.2 kiloyear event. The result was the collapse of the Old Kingdom followed by decades of famine and strife, which is called the First Intermediate Period.

As indicated previously, one of the central themes of the Egyptian religion is that order and harmony (and their associated principles truth, balance, law, morality, and justice) are of fundamental importance. This principle of order and harmony was given the name *ma'at* and was even given the status as a god *Ma'at*. As the physical *Horus*, the divine king was to insure that *ma'at* prevailed. The inability of the kings to do that during the decline into the First Intermediate Period probably brought the divinity of the king into question and was probably one of the prime reasons that the stature of the kingship deteriorated, which was to plague the office for the remainder of Egypt's history, sometimes resulting in royal conspiracies and struggles for power. On the other hand, the royal court was likely never convinced of the king's divinity anyway. A prophet is without honor in his own house. (Matthew 13:57, Mark 6:4).

The First Intermediate Period (ca. 2200 to ca 2050; dates vary) is usually considered to consist of the seventh through the tenth dynasties and the first part of the eleventh. It was a time when Egyptians believed that *Ma'at*, the living spirit of order and harmony, fled Egypt, and *Isfet*, the living spirit of chaos and violence, walked the land. It was a period when no

central government existed, and Egypt reverted to Upper and Lower parts. During this time, three centers of power competed for supremacy: Memphis (the seat of power in the Old Kingdom and dynasties seven and eight), Hierakliopolis (home of the rulers of dynasties nine and ten), and Thebes (the home of the rulers of the eleventh dynasty and the Middle Kingdom, which lasted from ca. 2050 to ca. 1650; dates vary). Dynasties seven through ten were actually nomarchs, or regional governors, who were competing for the right to call themselves "king". Calling these competing nomarchs "dynasties" simply perpetuates the illusion of continuous government where none actually existed.

Beginning with the First Intermediate Period, some commoners became wealthy enough to erect elaborate tombs that rivaled those of royalty. The writings on the walls of these tombs has enhanced our knowledge of ancient Egypt because they describe ordinary life as opposed to merely accomplishments of kings. Moreover, the first written papyri appeared during the Middle Kingdom, and these too were often devoted to ordinary events or even to literature, such as *The Story of Sinuhe*. Prior to this time, all information about Egypt was recorded on royal tombs or on monuments called stelae and described only the glory of the king.

The First Intermediate Period ended when the Eleventh Dynasty's Mentuhotep II, who was the nomarch of the region around Thebes, defeated all other nomarchs and reunified Egypt, creating the Middle Kingdom. During this period, *Amun* replaced *Monthu* as patron deity of Thebes and, combined with *Re* as *Amun-Re*, eventually rose to be the most important deity of Egypt. Priests were constantly competing with one another to make their god preeminent.

As Will Durant remarked so often happens, the last kings of the Eleventh Dynasty didn't have the ability of Mentuhotep II, so the throne was usurped by Amenemhat I, a commoner and probably Mentuhotep IV's vizier, ending the reign of Mentuhotep IV and the Eleventh Dynasty and beginning the Twelfth Dynasty, which is generally considered to be the high point of the Middle Kingdom. Amenemhat I moved Egypt's capital from Thebes to a new city named Amenemhat-itj-tawy, which is called simply Itjtawy. Itjtawy's location has not been found but is thought to be near the Fayium, probably near the royal graveyards at el-Lisht.

As usually happens to a prosperous nation, the peace and prosperity of the Twelfth Dynasty weakened its citizens, and Egypt slowly declined into the chaos of the Second Intermediate Period (ca. 1650 to ca. 1550; dates vary). A Thirteenth Dynasty is recorded as ruling from Itjtawy, but it was weak and left few firm records of its existence. The power vacuum of the Thirteenth Dynasty permitted a competing Fourteenth Dynasty to be formed in the delta region, and the disintegration of the central government was complete. The Fourteenth Dynasty was composed of Canaanites who had emigrated into the delta during the weak Thirteenth Dynasty. These emigrants were called Hyksos (foreigners) by the native Egyptians, and what Egyptologists call the fourteenth through the sixteenth dynasties were Hyksos

ruling houses in Lower Egypt. The thirteenth through the seventeenth dynasties were nothing more than local native Egyptian kingdoms in Upper Egypt. All these "dynasties", from the thirteenth to the seventeenth, were merely local kingdoms that had little to recommend themselves as Egyptian dynasties.

The Second Intermediate Period ended when Ahmose I of Thebes, defeated all other local kings, expelled the Hyksos, formed the Eighteenth Dynasty, reunified Egypt again, and established the New Kingdom (ca. 1550 to ca. 1070; dates vary). The Eighteenth Dynasty ruled for over 200 years, producing fourteen kings and one queen and reaching Egypt's pinnacle of power and size. The dynasty produced two of Egypt's best known pharaohs, Amenhotep IV and Tutankhamun.

The Hyksos had introduced advances in warfare such as the horse and chariot and the composite bow, although they didn't use them to entirely conquer Egypt. However, Thutmose III, the sixth king and warrior pharaoh of the Eighteenth Dynasty, used them effectively to expand Egyptian influence to its greatest extent of antiquity, from Niya in North Syria to the fourth cataract of the Nile in Nubia. Also during his reign, 'Pharaoh' became a form of address for the king; it had originally referred only to the palace in which the king lived. Tribute conquered peoples paid to Egypt made it the wealthiest nation of its time, and subsequent Pharaohs used much of this wealth to finance building projects of the temples to the various gods, chiefly *Amun-Re*, which had become the primary god during the Sixteenth Dynasty.

By the time the eighth Pharaoh of the Sixteenth Dynasty, Amenhotep III, came to the throne, the priests of *Amun-Re* had become so wealthy and powerful that they began to constitute a threat to the government, and he sought to curtail their power by promoting the minor god *Aten*, the solar disk, as a competitor. His son, Amenhotep IV, carried the promotion further by calling *Aten* the only god as a sort of monotheism and changing his name to Akhenaten (variously translated as "Effective for *Aten*", "Benevolent one of, or for, the *Aten*", "He who is of service to the *Aten*", "Effective Spirit of *Aten*"). Akhenaten built a new city called Akhetaten which was about half way between modern Luxor and Cairo. As soon as Akhenaten died, all his effort to make *Aten* the sole god was reversed, and Akhetaten was abandoned. It's now an archaeological site called Amarna.

Akhenaten devoted much of his time to promoting the god *Aten* to the detriment of international affairs. Consequently, the Hittites were free to gradually extend their influence in the Middle East and become a major power. This was the first movement in the long, slow decline of the Egyptian civilization from greatness to mediocrity, a decline that was only briefly interrupted by the warrior kings of the nineteenth and twentieth dynasties.

The Nineteenth Dynasty pharaoh Ramesses II ('the Great') tried to reclaim territory in the Middle East from the Hittites. He met them in the Battle of Kadesh in which he led Egyptian army into a trap that was the first military ambush in recorded history, but Ramesses was able to rally his

troops and fight to a draw. The two nations ultimately signed a peace treaty. Records from both countries indicate that, naturally, both claimed victory at Kadesh.

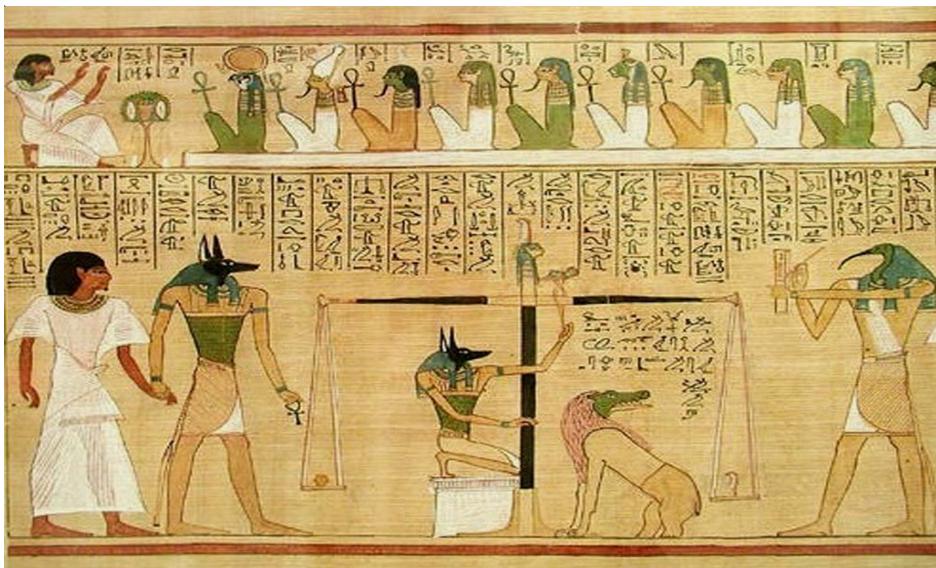
Ramesses III, a Twentieth Dynasty pharaoh, was the last great king. He successfully fought two battles with an enigmatic group called simply "the Sea Peoples" who tried to invade Egypt. He also was compelled to fight two campaigns against Libyan tribesmen who tried to invade the western delta. Three of Ramesses III's sons successively ruled as Ramesses IV, Ramesses VI, and Ramesses VIII as his heirs bickered for years over the throne. Egypt was increasingly beset by droughts, below-normal flooding of the Nile, famine, civil unrest, and official corruption. By the end of the Twentieth Dynasty, Ramesses XI had become so weak that Egypt once again split into upper and lower parts and the High Priests of *Amun* at Thebes became the *de facto* rulers of Upper Egypt. History has shown time and again that those with high alpha drive aren't necessarily the most capable leaders. Wanting it and being able to do it well are separate things, and with a sufficient alpha drive, even the most incapable have risen to power.

After the Twentieth Dynasty, Egypt descended into the chaos of the Third Intermediate Period (ca. 1070 to ca. 712; dates vary). After the Third Intermediate Period, the last days of ancient Egypt were marked by a succession of foreign rulers, Nubians from the south, Assyrians from the east, and eventually Greeks and Romans.

Within the ebb and flow of peace and chaos of Egypt's political fortunes, the common people, as they always have, sought the stability and serenity of their religion. Egyptians never composed a unified dogma nor wrote a comprehensive account of their religion. What we know of it has been gleaned from numerous writings, called the pyramid texts, on Old Kingdom royal tomb walls, writings called the coffin texts inscribed on Middle Kingdom coffins, and papyri called *Book of the Dead*, or more accurately the *Book of Coming Forth by Day*, that were placed in the coffins.

The spells, or utterances, of the pyramid texts are primarily concerned with protecting the pharaoh's remains, reanimating his body after death, and helping him ascend to the heavens. The spells describe all of the ways the pharaoh could travel, including the use of ramps, stairs, ladders, and flying. The spells could also be used to call the gods to help, even threatening them if they did not comply. Because the pyramid texts are found only on royal tombs, Egyptologists have the viewpoint that, during the Old Kingdom, Egyptians believed only the king could go to an afterlife, although no records exist to verify this viewpoint. The poor seldom leave any trace.

Beginning with the First Intermediate Period, even common people who could afford to have a coffin began to inscribe funerary spells called the coffin texts on their coffins. As opposed to the celestial focus of the pyramid texts, the coffin texts focus on the afterlife in the Duat ruled by *Osiris*, which is imagined to be filled with evil beings and traps. The texts provide spells designed to enable the deceased to avoid these pitfalls and enjoy a happy existence. Coffin text 1031 is spoken by the deceased, who says:



Weighing the Heart

Weighing the Heart was a judgement ritual from the Ancient Egyptian *Book of the Dead*. The deceased would be led by jackal-headed *Anubis* into the presence of *Osiris*, where he would plead his innocence of sin. After this confession, his heart would be weighed against the feather of truth. If the scales balanced, the deceased had led a good life, and his *ba* would be released from his body to join his *ka* and live among the stars as a complete being, *akh*. If the heart was heavier, *Ammit*, the Devourer, would eat it and the dead person would cease to exist at all. The proceedings would be recorded by ibis-headed *Thoth*, the scribe of the gods and the deity of wisdom.

I shall sail rightly in my bark, I am lord of eternity in the crossing of the sky.

I am not afraid in my limbs, for Hu and Hike overthrow for me that evil being.

I shall see light-land, I shall dwell in it...

Make way for me, that I may see Nun and Amun! For I am that Akh who passes by the guards...

As for any person who knows this spell, he will be like Re in the eastern sky, like Osiris in the netherworld. He will go down to the circle of fire, without the flame touching him ever!

The *Book of Coming Forth by Day* was intended to supplement the coffin texts, probably by providing the deceased with a portable handbook. There was no universal *Book of Coming Forth by Day*, each version reflecting the needs of the particular individual. Current understanding of the Egyptian religion has been pieced together from the pyramid texts, coffin texts, and *Book of Coming Forth by Day*.

The spirit of the pyramid texts, coffin texts, and *Book of Coming Forth by Day* lives on in the Catholic Sacrament of Extreme Unction that's delivered as part of the last rites to a dying person. Both western and eastern

sects of the church administer the rites though with somewhat different procedures. Extreme Unction involves a priest reciting, "Through this holy unction and His own most tender mercy may the Lord pardon thee whatever sins or faults thou hast committed [*quidquid deliquisti*] by sight [by hearing, smell, taste, touch, walking, carnal delectation]", while simultaneously anointing the dying person's eyes, ears, nostrils, lips, hands, and feet with olive oil that has been blessed by a Bishop. The Sacrament of Extreme Unction is intended to strengthen the dying against the temptations of the devil, remove temporal punishment due to sin, and prepare him or her for immediate entry into Heaven.

As was typical of primitive religions, that of ancient Egypt was essentially a nature religion. It explained every operation of the Universe, from childbirth to the movement of the sun, as being the work of numerous gods. As mentioned earlier, it was similar to Hinduism by considering order, justice, and truth (*ma'at* in Egyptian) to be the primary goal. A religion can certainly do worse. When *ma'at* is considered as an idea, it is spelled with a small 'm', but is spelled with a capital 'M' when considered as a god. The king was considered to be a living manifestation of the god *Horus*, and his primary duty was to maintain *ma'at*. The earliest records of the importance of *ma'at* are the pyramid texts written on the walls of Unas' tomb (ruled ca. 2375 to ca. 2345).

The condition of *ma'at* was part of the creation of the world, and it was constantly threatened by the forces of chaos, injustice, and lies as represented by *Isfet*. This is the classic battle of good (*Ma'at*) versus evil (*Isfet*), which is at the heart of all religions, the central theme of most literature, and indeed, the focus of civilization itself. All of Egyptian society was required to maintain *ma'at* by cooperation and coexistence in harmony, and all of the forces of nature (the gods) should also function in harmony to maintain it. The Egyptians sought to help the gods do this through offerings and rituals that perpetuated the orderly cycles of nature.

It's well known that Egyptians believed in life after death which, as mentioned earlier, was believed to be similar to life before death. Egyptians constructed a complicated scenario for the death process. They believed that a person's life force, 'ka', left the body at death. A person also had his or her individual spiritual description, 'ba', which remained attached to the body at death. Egyptologists are of the understanding that, early in the Old Kingdom, Egyptians believed that only the king had a *ba* and could live among the stars after death while ordinary people went to a bleak, dark place. After death, the king's heart was weighed against *ma'at* as represented by the feather of truth. If the heart was lighter than the feather, the king was deemed to have lived according to *ma'at*, and his *ba* was released from his body to join his *ka* and live among the stars as a complete being, 'akh', which is mentioned in Coffin text 1031 above. But if the heart was heavier, it was immediately eaten by a demon called *Ammit*, and the king's *ka* died. This is perhaps the first instance in recorded history of the notion that the dead will be judged to determine what sort of afterlife the spirit

would experience, a theme that is a vital part of all major modern religions. Late in the Old Kingdom, belief shifted to allow ordinary people the opportunity to have their heart weighed and go to an afterlife more pleasant than the bleak darkness of earlier belief.

As Egypt matured, a complex myth was woven around the daily journey of the sun god *Ra*. He was reborn at dawn and devoured the stars, which were symbols of all the other gods. Then he traveled across the sky bringing light to the earth and sustaining all living things. He reached the peak of his strength at noon and then aged and weakened as he moved toward sunset. At the end of the day, he spat out all the other deities, and the stars then reappeared. As he disappeared below the western horizon, called the akhet, he was sometimes considered to die and pass through a gate, or door, to Duat, realm of the dead. Thus the west was always considered to be the direction of the realm of the dead. As he traveled through Duat, he fought with *Apèp*, a serpent god of chaos and disorder, in order to preserve ma'at. Sunrise was the declaration that *Ra* had won and was reborn, and ma'at was maintained. These themes of order, chaos, and renewal, which are so similar to Hinduism, were fundamental to Egyptian religious belief, and seemed to mirror the country's political fortunes of orderly kingdom, chaotic intermediate period, orderly kingdom.

Many more myths were created to explain how the numerous gods related to one another and to the lives of mortals. One of the most complex was the *Osiris* myth. There were several forms of this myth, but they all describe the struggles *Osiris*, *Isis*, and *Horus* had with *Set*. The myth begins with *Osiris* being killed by his brother *Set*, who usurps his position as king. *Isis*, *Osiris'* sister and wife, finds her husband's body and briefly revives him to conceive the god *Horus*. During the next phase, *Isis* gives birth to *Horus* and raises him in secret places hidden from *Set*. The episodes of this phase demonstrate that *Isis* is the epitome of maternal devotion and a powerful practitioner of healing magic. In the third phase, *Horus* competes with *Set* for kingship through a great number of episodes. In the end, *Horus* triumphs and becomes king of the living while his dead father, *Osiris*, becomes king of Duat, the realm of the dead. With *Osiris* as king, Duat becomes a pleasant place. This myth was probably created relatively late in the history of ancient Egypt because *Horus* comes late in the chronology of the gods. *Horus* of the First Dynasty was much more preeminent. People create the gods and can, therefore, change them as they please.

Though never of daily concern to believers, explanations of where the world comes from lie in the background of all religions, and Egyptians, too, had theirs. Consistent with the rest of their religion, Egyptians had several creation myths with different deities involved in each one. Each myth was devised by the priests in a different prominent city, such as Innu (Heliopolis in Greek) or Thebes, in order to promote their particular god. The Egyptians always saw these different myths as complementary rather than antagonistic, a viewpoint that was probably encouraged by the desire to maintain ma'at. Although all the myths were greatly modified into numerous versions during the almost three thousand years of ancient Egypt's exist-

ence, a common theme among all the versions of all the creation myths is the emergence in darkness of a mound of primeval dry land called the *benben*, which itself is deified as the god *Tatenen*, from the lifeless waters of chaos (deified as *Nu*, or *Nun*). This emergence of land from dark waters of chaos established *ma'at*, creating conditions favorable for the origin of life.

Perhaps the oldest of the Egyptian creation myths was devised by priests of *Atum* in the city of *Innu*. This is the myth described in the pyramid texts found on the walls of Old Kingdom royal tombs. In the *Innu* myth, the god *Atum* was considered to have existed in the waters of *Nu* as an inert potential being. *Atum* created himself from his potential being and sat upon the primeval land *benben* (*Tatenen*). He then spat, sneezed, or ejaculated the air god *Shu* and his sister *Tefnut*, the goddess of moisture. Next, *Shu* and *Tefnut* coupled to produce the earth god *Geb* and the sky goddess *Nut*. With *Shu*, *Tefnut*, *Geb*, and *Nut*, the basic elements of the world came into existence. Once again, these are themes similar to those found in Hinduism. *Geb* and *Nut*, in turn, had four children, who represented the forces of life: *Osiris*, god of fertility and regeneration; *Isis*, goddess of motherhood; *Set* (or *Seth*), the god of male sexuality; and *Nephthys*, the female complement of *Set*. Thus, all lesser gods and everything in the world were merely extensions of *Atum*. As mentioned earlier, all Egyptian gods, however, tended to assume alternate personalities over time. Because they both came from the city of *Innu*, *Atum* and *Ra* eventually merged into the composite god *Atum-Ra*.

The creation myth from the city of *Khmun* (Hermopolis Magna in Greek) focused primarily on the nature of the universe before the creation of the world. The god *Nu* and his female consort *Naunet* deified the lifeless primeval water itself, whereas *Huh* and his consort *Hauhet* represented the water's infinite extent. The god *Kuk* and his consort *Kauket* were the darkness within the water. *Amun* and his consort *Amaunet* represented the water's hidden and unknowable nature. These eight spiritual beings (which together are called the Ennead) eventually converged with a great upheaval that produced the primeval mound *benben* from which the sun emerged, rising into the sky and lighting the world. It's interesting that *Huh/Hauhet*, *Kuk/Kauket*, and *Amun/Amaunet* represent rather abstract concepts.

The city of Memphis had its own version of creation centered on its town god, *Ptah*. The Memphite myth said that *Ptah* created the world simply by thinking and speaking the names of all the gods. Thus, the world was an intellectual creation by the word and the mind of *Ptah* rather than a physical one. This is another interesting abstract idea. The Memphite creation myth coexisted with that of *Innu* because *Ptah*'s creative thought and speech were believed to have been what brought *Atum* forth from his potential existence in the dark waters of *Nu*.

The creation myth from Thebes centered around *Amun*. *Amun* was an old god, being mentioned in the pyramid texts written on the walls of Old Kingdom royal tombs. The priests of *Amun* worked tirelessly to promote their god such that he replaced *Monthu* as the patron of Thebes during the

Eleventh Dynasty. That was also the time when *Amun* joined with *Ra* to form the composite god *Amun-Ra*, further elevating it. The large amount of wealth given to *Amun*'s cult during the Eighteenth Dynasty of the New Kingdom allowed its importance to grow to the point that high priests of *Amun* ruled Upper Egypt during the Third Intermediate Period. Anticipating the nature of God in modern theology, *Amun* was considered to be separate from the world and the ultimate source of all creation; his true nature was concealed even from the other gods. All the gods, including the other creators such as *Atum* and *Ptah*, were in fact merely aspects of *Amun* as a trinity *Amun*, *Ptah*, and *Re*. *Amun* eventually became the supreme god of the Egyptian pantheon.

Of course, the great proceedings of kings and priests were too remote from the common Egyptian to be of daily concern. As usual throughout history, our knowledge of the "commoner" is biased toward the wealthiest of them; the common commoner has always been too poor to leave any trace. The poor have always been the invisible ones, their "lives of quiet desperation" unnoticed. Yet, upon their backs, great nations are built.

People usually had in their homes small images of gods important in everyday life such as the fertility goddess *Taweret* to insure a good harvest and stave off famine that sometimes stalked the land and the household protector *Bes* to aid in childbirth, which has always been a dangerous process. The people didn't abandon their household gods even when Akhenaten attempted to make *Aten* the only deity. People were occasionally able to escape the drudgery of their lives when celebrations of state gods such as *Amun* and *Osiris* were held. For the common people, if not for cynical royalty, religion was a vital part of their everyday lives. The Greek historian, Herodotus (c. 484 to 425) wrote in *An Account of Egypt* as translated by G.C. Macaulay that the Egyptians "are religious excessively beyond all other men".

A few beliefs of modern religions are echos of some Egyptian beliefs. The similarity between some Egyptian beliefs and some of those of Hinduism has been noted previously. The Egyptian belief that the king was the physical son of *Re* has been echoed in the Christian belief that Jesus is the physical son of God. Moreover, the deification of the Egyptian king is echoed in the deification of Jesus in the Christian Trinity, which says that Jesus is coeternal and consubstantial with God. It must be pointed out, however, that not all Christians believe in the Trinity; some denominations believe that Jesus is only similar to God but not of the same substance. The belief developed during the New Kingdom that *Amun* is not part of this world is a forerunner of the modern belief that God is a spiritual being wholly separate from the material Universe.

Mesopotamia

Mesopotamia has been inhabited by *Homo sapiens* since their earliest migration out of Africa and was the most southern known Neanderthal habitation, the Shanidar cave shown on page 178, for example. However, *Homo sapiens* didn't leave serious evidence of habitation until Neolithic

farming settlements appeared around 10,000. The area was one of the prime scenes, along with Egypt, the Indus Valley, and Mesoamerica, of the most significant change in civilization: the shift from a nomadic life style of hunting and gathering to one of planting and herding, a change that occurred independently in many parts of the world. In Mesopotamia, this shift of life style was made possible by domestication of three cereals (einkorn wheat, emmer wheat, and barley), four legumes (lentils, peas, bitter vetch, and chickpeas), and flax as well as domestication of animals such as sheep, goats, and pigs. Although herds of animals could be maintained by a wandering shepherd life style, people needed to settle in one place to maintain crops. Archeologists correlate this beginning of farming with the Younger Dryas period, which was a time of cold and drought lasting $1,300 \pm 70$ years that occurred between approximately 10,800 and 9,500. It's named after the increased prevalence of an indicator genus, the alpine-tundra wildflower *Dryas octopetala*. The Younger Dryas is the most recent, or younger, of the several periods during which the Dryas wildflower became unusually prevalent. The Younger Dryas was the event that began North Africa's desertification.

According to the Teacher's Resource Center of the University of Chicago's Oriental Institute, this life style transition occurred in northern Mesopotamia over the period between 10,000 and 6000. For example, the village of Jarmo, now simply an archeological site, in the foothills of Zagros Mountains of what is now northern Iraq, was settled in 7090. By 5800, people were settling in the southern plains of the Tigris and Euphrates Rivers and creating cities such as Nineveh (ca. 6000) and Eridu (ca. 5400). The area was home to wild plants and animals such as wheat, barley, sheep, cattle, goats, and pigs that eventually were domesticated. The world's first large population centers, such as Uruk (ca. 4500) and Ur (ca. 4000) appeared in Mesopotamia. Mesopotamia became home for two peoples from slightly different backgrounds: the Sumerians, who apparently came from the south through the Persian Gulf, and native Semitic people such as Akkadians and Assyrians. According to Biblical legend, the Semitic people were the descendants of Noah's son Shem. Samuel Noah Kramer, Assyriologist and expert in Sumerian history, described the Sumerians as "endowed with an unusually creative intellect and a venturesome, resolute spirit."

Göbekli Tepe is an archaeological site that has been excavated in southeastern Anatolia (now Turkey) by a German archaeological team led by Klaus Schmidt. The site encompasses two phases, dating from the tenth to eighth millennium. Schmidt's view is that Göbekli Tepe is a stone-age mountain sanctuary, a view that might be accurate even though firm evidence of such a use is absent. If Schmidt's view is correct, it is the oldest religious site found to date.

Polish and Syrian archaeologists working at an archeological site at the foot of the Taurus Mountains that is called Tell Qaramal found four circular towers 6 meters (19.5 feet) in diameter with walls 1.5 meters (5 feet) thick. The site is dated at 9650, which is during a time called Neolithic 1, or Pre-Pottery Neolithic A. This is a period before firing pottery had been de-

Ancient Mesopotamia

These are some cities of Ancient Mesopotamia. The shore of the Persian Gulf was different than it is today. The modern Persian Gulf inundates some ancient cities.



veloped, when people used sun baked clay for pots. People of this period farmed and had domesticated animals. They buried their dead under the floor of their houses, which was an ancient, widespread custom. Tell Qaramal was active during the time when a settlement called Tell es-Sultan near Jericho also thrived. This settlement had a stone wall 3.6 meters (11.8 feet) high and 1.8 meters (5.9 feet) thick at the base. Inside the wall stood a circular tower over 3.6 meters (11.8 feet) high with an internal stone staircase of 22 steps. Jericho is widely considered to be the current settlement that has been continuously inhabited for the longest time. Some time in Jerico's history, the inhabitants stopped burying their dead under their houses and established a separate cemetery.

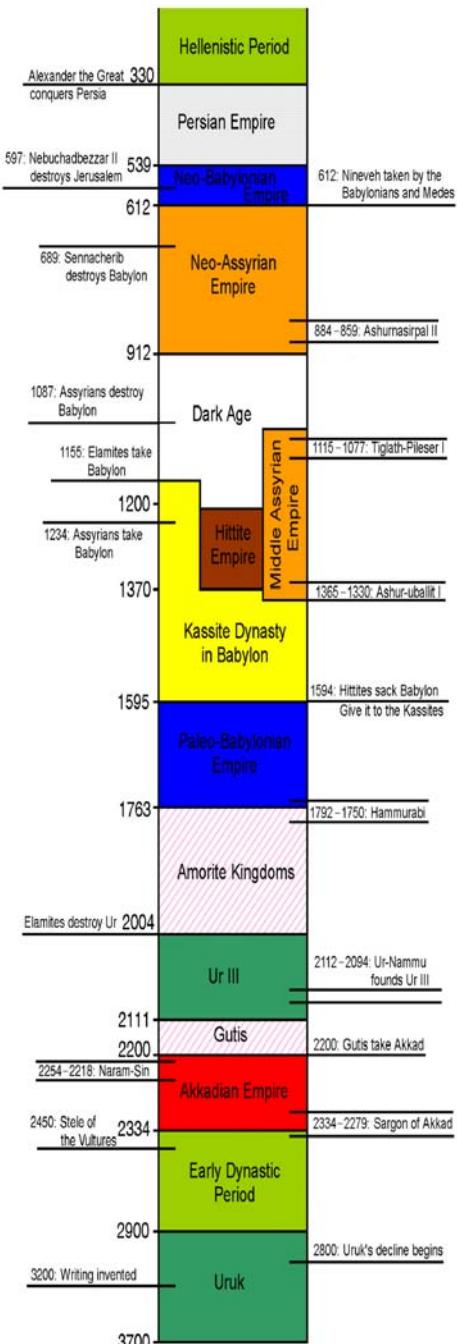
Between about 6000 and 5500, a northern Mesopotamian group called the Halaf culture learned how to fire clay to make durable pottery. The Halaf culture was followed by the somewhat more centrally located Samarran culture, which lasted between 5500 and 4800. Archeologists found evidence of growing flax and the earliest known evidence of irrigation at the Samarran site called Tell es-Sawwan, which is a little north of Baghdad. The land in southern Mesopotamia was exceptionally fertile from annual floods of the Tigris and Euphrates in the same way Nile floods made its flood plain fertile. However, rainfall was insufficient to grow crops, and the rivers weren't dependable, drying up in the searing heat of the summer. The farmers solved these problems by irrigation possibly from reservoirs filled during the annual floods and from water drawn up from the high water table, and ditches eventually laced the fields.

The Ubaid period, which lasted between 5300 and 4300 in the north and 6500 and 3800 in the south, overlapped the Samarran culture. The Ubaid mud brick houses and use of irrigation indicate that this period was heavily influenced by the Samarran culture. The period marked the first tentative movement towards urbanization; Eridu, which was on the shore of the Persian Gulf at the time, and Susa (both c. 5000) were among the

earliest settlements as was Gawra (5000 to 1500) in the north. This was also the period of increasing social stratification. Grave goods of Halaf and Samarran cultures suggest that these were relatively egalitarian societies, but grave goods of the Ubaid period reveal the growth of an elite class, a social development similar to that in ancient Egypt. We must recall that the footnote on page 18 of Durant's *Our Oriental Heritage* that was mentioned earlier details the ubiquity of this evolution in social structure. The growth of this elite class was the precursor of the warfare that was to wrack Mesopotamia for centuries to come.

The Halaf and Samarran cultures were active at the end of the Neolithic period, and the Ubaid period spanned the transition from Neolithic to Chalcolithic (copper) technologies and, ultimately, to the Bronze Age as people learned to alloy tin with copper to make the harder bronze metal. It would be interesting to know whether adding tin to copper was a serendipitous accident or a deliberate experiment.

The Ubaid period was followed by the marvelous Uruk period. The Uruk period was marvelous because it was the time the cuneiform script gradually emerged and recorded history began, although we must always remember that winners write history while losers are forgotten. Writing is more than history, however; it's also the means by which knowledge is preserved and passed to following generations. Writing has made advances in civilization possible. The Uruk period is named after the Sumerian city of Uruk, which had been founded around 5000 on an ancient, now dry, former channel of the Euphrates River east of its present bed.



Mesopotamian Chronology

All dates are before the current era.

A Cuneiform Inscription

This image is a detail showing about half of one face of a Sumerian plaque written by an expert scribe. The text is a list of "gifts from the High and Mighty of Adab to the High Priestess, on the occasion of her election to the temple". The plaque probably dates to approximately 2350 when Lugal-Anne-mundu ruled Adab, modern Bismayah, Iraq, as "King of the four quarters of the Universe."



Uruk had an enormous influence because it's credited with a number of 'firsts' in the development of civilization. It is considered the world's first true city, the place where writing originated (although Egyptian hieroglyphics might have predicated Mesopotamian cuneiform script), the place where building with stone originated and the first large stone structures were constructed, the origin of the ziggurat, and the city where the cylinder seal was developed. Ancient Mesopotamians used cylinder seals to designate personal property or as a signature on documents. The Uruk period marked a shift from small, agricultural villages to larger urban centers with a full-time bureaucracy, military, and stratified society. For centuries after its fall, Uruk was remembered with near reverence by subsequent Mesopotamian dynasties. Though significant in history, the Uruk period was short lived, spanning 4000 to 3100. Its king could be considered the first of what is called the Early Dynastic Period.

English climatologist Hubert Lamb noticed that the end of the Uruk period coincided with a climate phenomenon called the Piora Oscillation and suggested in his book *Climate, History, and the Modern World* that the Piora Oscillation was the cause of Uruk's decline. The Piora Oscillation was an abrupt cold and wet period that occurred between 3200 and 2900. Some have conjectured that it also was the source of the numerous stories of a great flood, such as that of Noah. The phenomenon is named after Switzerland's Piora Valley, where evidence of it was first detected. In the Alps, glaciers advanced and the tree line dropped by 100 meters during that time. In the Middle East, the surface of the Dead Sea rose nearly 100 meters (328 feet) before receding to its usual level.

The Uruk period was followed by a century and a half of stasis called the Jemdet Nasr period that some have called a 'Dark Period' because little

happened. No dominant political organization like Uruk existed, and no major developments in culture or technology appeared. It was a time during which the Sumerian script invented in Uruk began to evolve into a more useful writing system.

Originally, the Sumerian script was merely drawn pictures, technically called pictographs, representing nouns such as 'goat' or 'temple'. Gradually the pictographs were replaced by abstract marks, and verbs and modifiers were added to describe what relationship a goat had with a temple, for example. This was when the writing system evolved into cuneiform script in which a blunt reed was used to make wedge-shaped marks on clay tablets that could be reused or sun dried to make them permanent. Unlike in Egypt, where early writing was used primarily to extol the king's greatness and to record spells protecting him in the afterlife, early cuneiform tablets were devoted to such mundane topics as lists of animals a person owned or the amount of taxes paid. Neither Egyptian nor Mesopotamian scribes made a comprehensive record, a sort of bible, of their religions. The closest they came was the record of a number of gods and myths.

Around 2900, Mesopotamia entered the Early Dynastic period during which wars were fought between city-states such as Kish, Uruk, Ur, and Lagash. Throughout its recorded history, which predates that of Egypt, Mesopotamia has seldom been a unified state that was home to unified peoples; it was the scene of almost incessant political turmoil and warfare. In the roughly 1300 years between 2600 and 1300, Mesopotamian warfare significant enough to be included in written records included among others: Enmebaragesi of Kish subdued Elam; Enshakushanna conquered Hamazi, Akkad, Kish, and Nippur; Eannatum of Lagash conquered all of Sumer, parts of Elam, and defeated Enakalle of Umma (Stele of the Vultures); Entemena of Lagash defeated Illi of Umma; Lugalzaggesi of Umma conquered Lagash, Ur, Nippur, Larsa, and Uruk; Sargon of Akkad defeated Lugalzaggesi and the Awan king Luh-i-shan; Naram-Sin of Akkad defeated the King of Magan and the hill tribes in the Taurus Mountains to the north; The Gutis defeated the Akkadian army, took Akkad, and destroyed it; Utu-hengal defeated the Guti king Tirigan; Ur-Nammu conquered Lagash and died on the battle field against the Gutians; Shulgi fought the Gutians; Amar-Sin fought Urbilum and Elamite rulers such as Arwilukpi of Marhashi; Shu-Sin fought an open revolt of his Amorite subjects; Ibbi-Sin fought losing battles against the Amorites and revolting Elamites; warlords jockeyed for power; Zalpa attacked Kanesh; Zalpa's son Pithana conquered the city of Kanesh; Anitta defeated Huzziya of Zalpuwa and king Piyusti of Hattusa, destroying the city; Sin-Muballit conquered the minor city-states of Borsippa, Kish, and Sippar; Hammurabi defeated Elam, Larsa, Eshnunna, and Ishme-Dagan I of Assyria; Samsu-iluna fought violent uprisings of areas conquered by his father, Hammurabi; Mursili I conquered the kingdom of Yamhad and sacked the city of Babylon; throughout the fifteenth century, dynastic quarrels and warfare with the Hurrians occupied the Hittite kings; Telepinu won a few victories to the southwest; King Tudhaliya I

vanquished Aleppo, Mitanni, and Arzawa; Eriba-Adad I revolted against Mitanni; the Assyrian Ashur-uballit I defeated the Mitanni king Shuttarna II; the Hittite Suppiluliuma I conducted lengthily campaigns against the Kaskas, the Hayasa-Azzi confederation, and Egypt's vassal states in Canaan and Northern Syria; Burna-Buriaš II of Babylon and his Kassite army unsuccessfully rebelled against Ashur-uballit; Kurigalzu II of Babylon and Enlil-nirari of Assyria fought, both sides claiming victory. And it went on and on.

Around 2330, the dynastic period began in earnest when Sargon became ruler of Akkad in northern Mesopotamia and proceeded to conquer an area that stretched from the Persian Gulf northward as far as the mountains, westward to the Mediterranean, and eastward over Elam, creating the world's first multi-national empire. The Akkadians were a Semitic people different from the Sumerians. The Akkadian language became widespread, creating a bilingual empire where both Sumerian and Akkadian were spoken. The Akkadians adopted and improved the Sumerian cuneiform script.

It was typical in those days for the king to appoint his daughter as a high priestess (nepotism is an ancient practice, although it also gave the king an additional means of control over the people), so Sargon placed his daughter, Enheduanna, as high priestess of the Sumerian moon god, *Nanna*, at the temple of *Sin* (the Akkadian name for *Nanna*) in the Sumerian city-state of Ur.

The Akkadian Empire fell apart around 2200. This collapse is thought to have been caused by the same 4.2 kiloyear climatic aridification event that caused the collapse of Egypt's Old Kingdom. The collapse of the Akkadian Empire was complete when the Guti from the Zagros Mountains invaded. The Guti apparently were barbarians little interested in writing and culture because they left little trace of themselves. Their hold on Mesopotamia was tenuous, and several city-states such as Lagash were more or less independent of Gutian rule.

After the century of Guti rule and the 4.2 kiloyear aridification event had run its course, the Third Dynasty of Ur, also known as the Neo-Sumerian Empire, or the Ur III Empire, became the dominant power, although it was not as powerful or extensive as the Akkadian Empire had been. Probably the finest product of the Neo-Sumerian Empire was the Code of Ur-Nammu, which is named after king Ur-Nammu the oldest known law code surviving today. It is written in the Sumerian language on tablets that date in the 2100 to 2050 time frame. The code's prolog decrees "equity in the land":

"After An and Enlil had turned over the Kingship of Ur to Nanna [the Sumerian moon god], at that time did Ur-Nammu, son born of Ninsun, for his beloved mother who bore him, in accordance with his principles of equity and truth... Then did Ur-Nammu the mighty warrior, king of Ur, king of Sumer and Akkad, by the might of Nanna, lord of the city, and in accordance with the true word of Utu, establish equity in the land; he banished malediction, violence and strife... The orphan was not delivered up to the rich man; the widow was not delivered up to the mighty man; the man of one shekel was not delivered up to the man of one mina."

Among the surviving laws are these:

- If a man commits a murder or a robbery, that man must be killed.
- If a man knocks out the eye of another man, he shall weigh out 1/2 a mina of silver.
- If a man has cut off another man's foot, he is to pay ten shekels.
- If a man appeared as a witness, and was shown to be a perjurer, he must pay fifteen shekels of silver.

The economy, such as agriculture and textiles, was largely a centralized, state run operation, and many men, women, and children were employed to sow and harvest and to produce wool and linen clothing. Many cuneiform tablets have been found that detail wages paid and grain distributed from public stores.

The Third Dynasty of Ur soon faded, but no single, strong kingdom rose during the following two centuries. Southern Mesopotamia was dominated by the Amorites while Assyrians and Amorites struggled with one another in the north. Babylonia was founded as an independent state by an Amorite chieftain named Sumuabum in 1894. It was a minor and relatively weak state for over a century after its founding until the Amorite Hammurabi turned Babylon into a major power and eventually conquered Mesopotamia. We know more about Hammurabi's reign than most other kings because of the large number of records it left, many probably found among the 20,000 tablets discovered in the library of Mari. After Hammurabi's death, the first Babylonian dynasty unraveled, and Babylonia fell to the Hittites in 1595.

The Hittites were soon expelled from Mesopotamia, and in 1365 Ashurnaballit I founded the powerful Middle Assyrian Empire. However, rebellions and attacks from without eventually wore the empire down, and though the center remained stable and strong, outlying areas were sheared off such that it was essentially reduced to the cities of Ashur, Kalhu (Nimrud), Nineveh, and several smaller towns by 936.

However, in 911, Adad-nirari II became king of the Assyrian Empire and initiated a series of successful wars of expansion that marked the beginning of the Neo-Assyrian Empire. His grandson, Ashurnasirpal II, was the third king, and his first campaigns were putting down rebellions. To avoid expending more time and resources on future rebellions, he made an example of the rebels in the city of Tela. In his inscriptions he, himself, writes:

"I built a pillar over against the city gate and I flayed all the chiefs who had revolted and I covered the pillar with their skins. Some I impaled upon the pillar on stakes and others I bound to stakes round the pillar. I cut the limbs off the officers who had rebelled. Many captives I burned with fire and many I took as living captives. From some I cut off their noses, their ears, and their fingers, of many I put out their eyes. I made one pillar of the living and another of heads and I bound their heads to tree trunks round about the city. Their young men and maidens I consumed with fire. The rest of their warriors I consumed with thirst in the desert of the Euphrates."

This is perhaps the ultimate in barbarian rage.

Subsequent kings continued these wars of expansion until, at its height under Assurbanipal in 650, the Neo-Assyrian Empire extended from southernmost Egypt in the south to the Black Sea in the north and from the Mediterranean in the west to parts of modern day Iran in the east. It was the largest empire the world had ever known. Simo Parpola wrote in a 2004 issue of the *Journal of Assyrian Academic Studies*, "The Neo-Assyrian Empire (934-609BC) was a multi-ethnic state composed of many peoples and tribes of different origins." The people spoke several native tongues, but Aramaic gradually became the common language of the empire. It was the language Jesus spoke. Aramaic replaced Akkadian just as Akkadian had replaced Sumerian around 2000. The two Assyrian empires spanned the beginning of the Iron Age.

Like all previous Mesopotamian empires, the Neo-Assyrian Empire eventually crumbled and was replaced by the Neo-Babylonian Empire, which lasted for less than one hundred years. This was the last time Mesopotamia was ruled by native kings. In 539, the Persian Achaemenid Empire under Cyrus the Great invaded Babylonia, defeated the hopelessly outnumbered Babylonian army, and peacefully entered Babylon. Alexander the Great brought the Persian reign to an end in 330.

The first several thousand years of Mesopotamian civilization was dominated by either Sumerians or various Semitic peoples such as Akkadians or Assyrians. The Sumerians and Semites mingled somewhat freely and shared many gods although each named them according to their own language. It's unknown whether primacy in the development of Mesopotamian religion should be attributed to either the Sumerians or Semites, but the Sumerians' "unusually creative intellect" and the respect subsequent Semitic empires paid their history suggests that they were its prime architect.

The Sumerians often associated a sacred number with their deities, or dingir. For example, 60 was the sacred number of their deity, *An*. *An* is thought to have been the primary deity in the early days of Sumer, which was probably the reason why Sumerians made 60 the base for calculations, such as the number of minutes in an hour. An article in a 2007 issue of *Scientific American* says, "Hipparchus and other Greek astronomers employed astronomical techniques that were previously developed by the Babylonians, who resided in Mesopotamia. The Babylonians made astronomical calculations in the sexagesimal (base 60) system they inherited from the Sumerians, who developed it around 2000 B.C." Our 60-minute hour is a relic of the Sumerians' "unusually creative intellect" and the Sumerian religion of 4000 years ago.

In neither Egypt nor Mesopotamia was there written a comprehensive description of their religion—a holy book. Our understanding of their theology is a collection of inferences drawn from their myths. That these myths weren't recorded until well after the religions had already experienced significant development hampers our inferences. This is especially true in Mesopotamia where most early written records involved mundane daily affairs instead of religious myths.

A Mesopotamian Goddess

This object was not archaeologically excavated but, rather, appeared on the antiquities market in the early twentieth century. Thus, its authenticity has been questioned. However, several scientific and cultural analyses have led to the conclusion that it's a genuine artifact. Because it was not archaeologically excavated, its position in geographical and historical contexts is unknown. It's generally believed to represent *Ishtar*, although some believe it is *Ereshkigal*, the goddess of the underworld, or a Sumerian female demon called Lilitu (Lilith in the Bible). The object is currently housed in the British Museum, which dates it in the 1800 to 1750 time period.



When nomadic people settled into villages and towns, they established their nomadic gods as village and town patrons. For example, *An*, he of the 60 minute hour, was the patron of Uruk, *Enki* the patron of Eridu, *Nanna* the patron of Ur, and *Nergal* the patron of Cuthah. *Nergal* is mentioned in 2 Kings, 17:30 of the Hebrew Bible as the deity of the city of Cuth (Cuthah): "And the men of Babylon made Succoth-benoth, and the men of Cuth made Nergal and the men from Hamath made Ashima," (KJV). Mesopotamian scribes compiled long lists of their gods. There were hundreds of gods who were responsible for every thing in the world, from rivers and mountains to making bread or pottery. The gods were the same for everyone but were known by different names depending on whether the scribes wrote Sumerian or Akkadian dialects of Assyrian such as *An* in Sumerian (*Anu* in Assyrian), *Enlil* in Sumerian (*Ellil* in Assyrian), and *Enki* in Sumerian (*Ea* in Assyrian).

Apparently, like contemporaneous Egyptians and Indus Valley people (who were composing Hinduism's *Rig Veda* at the time), Sumerians believed that the universe was created from an endless chaotic sea. They believed the universe was composed of a disk shaped earth surmounted by a heaven that was separated from it yet connected to it somehow. The atmosphere filled the space between heaven and earth, and the heaven/earth/atmosphere was contained in some sort of vault that floated on an endless, chaotic, primordial sea. The stars and planets were made of the same substance as the atmosphere but given the additional property of illumination. To the Sumerians, the most fundamental and important aspects of creation were heaven, earth, the atmosphere, and the primeval water; the gods that represented them were the most important: *An* (god of heaven), *Enlil* (god of the air), *Ninhursag* (god of earth), *Enki* (god of water). These were the Sumerian creator gods. Samuel Noah Kramer said in his book *The Sumerians* that the creator gods brought things into being simply by uttering the word for them. This is similar to the Egyptian Memphite creation myth in which *Ptah* created the other gods by saying their names.

As mentioned earlier, the ancients believed all these gods were like humans. They ate, drank, fought, loved, fornicated with one another and with humans, gave birth, were spiteful and jealous and in all other ways behaved just as humans do. For example, the blatantly erotic love poem *The Courtship of Inanna and Dumuzi* relates the coupling of the goddess *Inanna* with the shepherd Dumuzi. The only differences between gods and humans were that gods were immortal and immensely powerful.

Sumerians believed that the gods had set everything in motion according to a plan, called the *me*, that the primary god had devised. Thus, the modern belief that God has a plan has ancient roots. Everything in the universe, from the Sun and Moon that grace the heavens to the sickle that cuts the wheat and barley, had its own god and its own *me*. The exact nature of *me* is never explained, but its usage in myths suggests it to be a combination of the plan establishing a thing's place in the universe, the rules by which it operates, and its ultimate fate.

In the beginning of Sumerian civilization, *An* was the chief god and the author of the plan, the *me*, for the universe, but just as *Horus* in Egypt yielded to *Ra* and *Amun* (and the Hindu gods of the *Rig Veda* yielded to *Brama*, *Vishnu*, and *Siva*), *An* eventually (by 2500 or so) lost eminence to *Enlil*, and *Enlil* was thereafter considered to be the author of the *me* for the universe. However, in Mesopotamia, the shift was more in the name than a change in essence. Although *Enlil* was the author of the plan for the universe, *Enki* was the god who carried out the plan. *Enlil*'s sacred number was 50, and the Sumerian sexagesimal number system based on *An*'s sacred number of 60 rather than *Enlil*'s sacred number of 50 attests to *An*'s primacy at one time.

The Sumerians had a myth describing the creation of humans. In this myth, the lesser gods, which were the children of the greater gods, became weary of the plowing, sowing, tending, and other labors necessary to keep the world running, and threatened to stop working and let the world revert back to chaos. *Enki* relented and ordered humans to be made out of "mud and a little blood" to relieve the lesser gods of their toil.

Like the Indus Valley people, Sumerians believed that civilization was the result of the gods' triumph of order over chaos and that human beings were created as co-laborers with the gods to maintain order and hold back chaos. Early Sumerians believed that their patron god owned the entire town and that every member of society was obligated to help the gods maintain order. Thus, the entire focus of life was the support of the town god in this great endeavor. The town leader (*ensi*) was simply another co-laborer but with the additional duty of organizing the labors of his fellow townsfolk to efficiently do their part. Like democratic Rome millennia later, the *ensis* were sometimes granted near dictatorial power in times of emergency. Again like Rome and in a Durant-like evolution of power, the *ensis* eventually were able to convince the town's people and their god that they should not give up their power, and they became kings. But this all happened even before Sumerians began to record history.

Inanna, the Sumerian goddess of sexual love, fertility, and war, was the most powerful goddess and probably ranked just below *Enlil* and *Enki* in importance. She was certainly the most popular and was featured prominently in many myths such as *Inanna and the Mes*, *Inanna and Ebih*, *Inanna and Shukaletuda*, *Inanna and An*, *Inanna's Descent to the Underworld*, and hymns of praise such as *The Exaltation of Inanna*. *Inanna's* Assyrian equivalent was *Ishtar*, which had, since 3000, an important religious center at Nineveh. The Greeks referred to *Inanna/Ishtar* as *Astarte*. By 1750 or so, the Sumerians had been completely subsumed into the Semitic culture and ceased to exist as a separate people, and the name *Inanna* was almost completely replaced with *Ishtar* in the myths, *Inanna's Descent to the Underworld* became *Ishtar's Descent to the Underworld*, for example. The more recent decipherment of numerous Sumerian clay tablets now affirm *Inanna's* prominence and precedence to *Ishtar*.

Ancient religions observed the cycle of the seasons as the cyclic birth and death of a god, To the Akkadians, this god was *Tammuz* (Dumuzi, or Dumu-zid, in Sumerian), the god of food and vegetation. The *Tammuz* myth is based on the Sumerian story of *Inanna's Descent to the Underworld* in which *Inanna* goes to the underworld. However, she's trapped there and can only leave if she is replaced with another. That other was her husband, the shepherd Dumuzi. In the Akkadian version, the part of Dumuzi is taken by *Tammuz*, the god of food and vegetation, explaining the yearly vegetation cycle of growth and hiatus.

The yearly death of *Tammuz* was even mourned at the door of the Israelite Temple in Jerusalem. The prophet Ezekiel experienced a vision of the mourning of *Tammuz*: "Then he brought me to the door of the gate of the Lord's house which was toward the north; and, behold, there sat women weeping for Tammuz. Then said he unto to me, 'Hast thou seen this, O son of man? turn thee yet again, and thou shalt see greater abominations than these.' " [Ezekiel 8:14-15 (KJV)]. Of course, Ezekiel's vision denigrates the apostasy of Hebrews who abandon the God of Abraham in favor of pagan gods and is the only mention of *Tammuz* in the Hebrew Bible.

Other prominent Mesopotamian gods include the Moon god *Nanna* (*Sin* in Assyrian); the goddess of the underworld, *Ereshkigal* (*Allatu* in Sumerian); and the Babylonian god *Marduk*, which had no Sumerian counterpart. *Marduk* was the patron of Babylon and a relatively new god just as Babylon was a relatively new city, having been founded around 2230. When Hammurabi of Babylon conquered most of the rest of Mesopotamia, he made *Marduk* the king of all the gods, and *Marduk's* priests devised myths to support his elevation.

People seem eager to escape the drudgery of their daily lives and to be easily swept up and drawn along by pageantry (a trait the Nazis used effectively), and ancient religions appealed to this trait with numerous festivals and celebrations. Towns often held celebrations during which the town god was removed from its temple and paraded through the streets. In Babylon, at the beginning of each new year, which they considered to begin

when spring's first new crescent moon was sighted low on the western horizon at sunset (in March or April according to modern calendars), the citizens of the city held a twelve day New Year festival (Akitu), during which the king would kneel before the idol of *Marduk* and vow that he was a good ruler. On the fifth day of the festival, *Marduk* was taken prisoner by demon spirits. On the sixth day, idols personifying *Marduk*'s son, *Nabu*, and gods from surrounding towns traveled in processions to Babylon to free *Marduk*. On the seventh day, the people chanted encouragement while they followed all the rescuing gods as they were being carried to where the idol of *Marduk* was held prisoner. On the eighth day, the rescuing gods would free *Marduk*, and the king of Babylon would implore all the gods to honor the king of the gods. On the ninth day, all the gods would be taken to a special place outside the city to prepare for a feast. On the tenth day, the gods would feast before returning in processions to their respective temples on the eleventh day. It is often by such extravagant celebrations and festivals that people become bound to a religion or cause.

The close relationship between the various peoples of Mesopotamia resulted in the integration of their individual myths. The only myth to survive this integration as distinctively Sumerian is the *Epic of Gilgamesh*, which is one of the earliest literary works known although the original author is unknown. Tablets of several versions of the epic have been found, all of which differ slightly from one another. Most experts on ancient Mesopotamia consider the epic to be "enhanced history" based on the fifth Sumerian king of Uruk. In the epic, *Gilgamesh* is an Uruk king whose father is a human and mother is the goddess *Ninsuna*, and thus, he is two-thirds god and one third man with abnormally great strength and courage as befits someone who is part god. Tablet I of one version of the epic describes *Gilgamesh*:

*"It was he who opened the mountain passes,
who dug wells on the flank of the mountain.
It was he who crossed the ocean, the vast seas, to the rising sun,
who explored the world regions, seeking life.
It was he who reached by his own sheer strength Utanapishtim, the
Faraway,
who restored the sanctuaries (or: cities) that the Flood had de-
stroyed!
... for teeming mankind."*

He acquires a companion named *Enkidu*, and the two slay both a monster that guards the cedar forest and the "bull of heaven". However, *Enkidu* must die as punishment for killing the bull of heaven. In the final tablets, *Gilgamesh* laments *Enkidu*'s death and searches for the secret of immortality. Since the epic was translated in recent times, it has acquired a popular following, spawning modern novels and stories, operas and popular music, plays and films, and so on.

As with all other ancient faiths, Mesopotamian religions assumed the gods behaved the same way humans do, and this assumption forms the plots of their various myths. In *Inanna and the Mes*, for example, *Inanna* travels to visit *Enki*, who was the keeper of all the *mes*, each of which, as

described earlier, sketches the rules by which a specific thing, such as a sword, operates and foretells its ultimate fate. *Inanna* got *Enki* drunk and convinced him to give her the *mes* of all the various things in the universe. When *Enki* sobered, he tried to get the *mes* back, but *Inanna* escaped and brought them to her city.

The Exaltation of Inanna is the oldest literary work known that can be traced to a specific author. It was composed around 2250 by Enheduanna who, as mentioned previously, was appointed high priestess of the Moon god *Nanna* (*Sin* in Akkadian) in the Sumerian city-state of Ur by her father, King Sargon of Akkad. The Exaltation is a hymn praising *Inanna* and is similar in tone to the hymns to the various early Hindu gods that was composed as the *Rig Veda* a few hundred years later by the people of the Indus valley. The the following brief glimpse of *The Exaltation* is from the Electronic Text Corpus of Sumerian Literature that's maintained on the internet by the University of Oxford:

*"Lady of all the divine powers, resplendent light,
righteous woman clothed in radiance, beloved of An and
Urac! Mistress of heaven, with the great pectoral jewels,
who loves the good headdress befitting the office
of en [high] priestess, who has seized all seven of its divine powers!
My lady, you are the guardian of the great divine powers!
You have taken up the divine powers, you have hung the divine
powers from your hand.
You have gathered up the divine powers, you have clasped the
divine powers to your breast.
Like a dragon you have deposited venom on the foreign lands.
When like Ickur you roar at the earth, no vegetation can stand up to
you.
As a flood descending upon (?) those foreign lands, powerful one of
heaven and earth,
you are their Inana."*

The Electronic Text Corpus of Sumerian Literature contains around 200 translated Sumerian texts such as royal correspondences, narratives, hymns to various deities such as *The Exaltation of Inanna*, and so forth.

Several Mesopotamian written tracts are similar to those in the Hebrew Bible, but whether the Hebrew stories were inspired by those earlier Sumerian or Babylonian tales is impossible to know. The story of the deluge described in *Genesis* 6-9 was probably not inspired by the Sumerian flood myth but both were independent of one another because, as discussed in Chapter 6, such stories are part of folklore the world over and are probably the result of natural phenomena.

It's possible, however, that the *Book of Job* in the Hebrew Bible was inspired by a similarly-themed Babylonian story of the righteous sufferer. The sufferer, who was righteous by the customs of the times, lamented his bad luck:

*"As I turned around, / it was more and more terrible;
My ill luck was on the increase, / I could find no good fortune.*

*I called to my god, / but he did not show me his face,
I prayed to my goddess, / but she did not raise her head."*

In the *Book of Job*, God and Satan have an unusual discussion about a very wealthy man named Job who God said was a pious man. Satan suggested that Job was pious merely because he was blessed with wealth and sons and that if he lost all he had and became much afflicted, he would not remain righteous but would curse God to His face. So God allowed Satan to put Job to the test, and Satan caused Job to lose all he had. Job lamented his ill fortune with his friends but remained steadfast to his faith in God, so everything was ultimately restored to him.

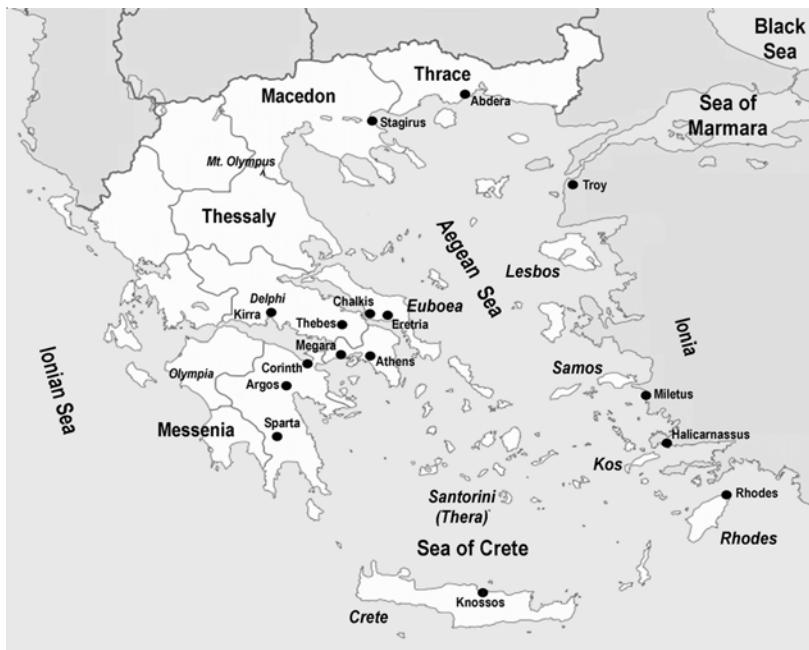
Mesopotamians followed a code of morality and virtue that, though quite similar to modern religions, was a little different in the way they viewed sex. The code focused on duty and ritual; sexual conduct was relatively unimportant and had few restrictions. The gods decreed that every man had duties to his fellow man which included setting innocent prisoners free, being truthful, being honest in trade, respecting boundary lines and property rights, not causing dissension between friends and relatives, and not being arrogant with subordinates. Some of these guidelines of morality and virtue are found in the second tablet of the Surpu incantation series, which consists of a long ritual confession of offences against the moral or social order and, therefore, against the gods. An incantation from the Surpu series says, "Do not return evil to the man who disputes with you, requite with kindness your evil-doer, maintain justice to your enemy... Let not your heart be induced to do evil... Give food to eat, beer to drink, the one begging for alms honor, clothe; in this a man's god takes pleasure, it is pleasing to Shamash, who will repay him with favor. Be helpful, do good". In exchange for authority granted by the gods, the king had the duty to his subjects to exercise justice and righteousness. The reward to mankind was success and long life.

Sin was described as anything which incurred the wrath of the gods. Sickness or misfortune were the punishment for transgressing a divine prohibition, which one could do without knowing it. Retribution for sin also applied to the nation, and Mesopotamian literature sometimes considered that war and natural disasters were punishment from the gods.

Mesopotamian religion and civilization were highly sexualized, particularly in Babylon, where free sexual expression was viewed as one of the natural benefits of civilized life; homosexuality, lesbianism, transvestitism, and male and female prostitution were considered normal. Sumerians believed that "nothing is prohibited to *Inanna*".

Greece

Greece is a segment of European mainland extending south of the Balkans into the Mediterranean Sea and incorporates a large number of islands south of the mainland that include the thirty or so islands and islets called the Cyclades, and farther south, the larger island of Crete. It's a rather mountainous and somewhat volcanic country typical of a geologic subduction zone. As illustrated by the U.S. Geologic Survey Map of the mid-



Ancient Greece

Greece has a history almost as long as those of Egypt and Mesopotamia. There were far, far more settlements in ancient Greece than those shown here. The region on the right was the western part of what was known as Anatolia, now called Turkey. This was settled by Ionian Greeks, but was annexed by Cyrus the Great. The collection of small islands between Crete, the mainland, and Anatolia are the Cyclades.

ocean rift system on page 121, the spreading center south of Africa is slowly pushing it northward and subducting the floor of the Mediterranean Sea under Europe. Such subduction zones are always accompanied by earthquakes, volcanism, and mountain building, but the process is so slow that the cataclysms are infrequent in human terms.

Ancient Greece followed the same cultural evolution from hunting and gathering to city-states that Egypt and Mesopotamia experienced. In that part of the world, only the barbarians of Europe refused this evolution. Throughout most of their history, the Greek city-states were able to escape the incessant warfare that wracked Mesopotamia, perhaps because the Greeks shared a common heritage. Analyses of mainland Helladic skeletons reveal a strong homogeneity in the Bronze Age inhabitants of mainland Greece and suggest a single, homogeneous population. Internecine wars didn't appear in Greek history until around 1400, during the Mycenaean period. Until that time, they shared metallurgical advances and common economic interests, although economic leadership passed from one area to another over the centuries.

The drift toward a seafaring people that was a natural consequence of the numerous islands south of the mainland enabled the Greeks to develop



Linear A Accounting Tablet

Linear A had around a hundred symbols rather similar to those of hieroglyphics. The Minoans apparently used their hieroglyphic writing system only on seals or religious texts and used Linear A to maintain order in their trading networks, but as of the early third millennium of the current era, the number of records discovered has been insufficient to permit decipherment of either.

an extensive trade network. Initially, around the year 3000, this trade network was centered in the Cyclades because of the numerous natural harbors among the islands, although the southern mainland cities known as the Helladic civilization also established their own trade network. The islands were fortunate enough to have sources of copper and tin (both necessary for manufacturing bronze) that were easily mined, giving them excellent goods to trade throughout the Mediterranean.

The Minoan civilization existed on the large island of Crete south of the Cyclades around the same time as the Cycladic civilization and the Helladic civilization on the mainland. The term "Minoan" refers to Crete's mythic king Minos. The Minoans were a trading people like those of the Cyclades and the mainland, but they were a little more active than the other two such that they were the dominant force by 2000. Their contact with Egyptians and Egyptian hieroglyphics prompted the Minoans to develop their own hieroglyphic writing system, which evolved into a system called Linear A by around 1800.

Some time in the neighborhood of 1600 the Thera volcano on the island of Santorini, which is 110 kilometers (68 miles) north of Crete, erupted. Estimates of the amount of material ejected range up to 60 cubic kilometers, which would equate to a Volcanic Explosivity Index (VEI) between 6 and 7 depending on the length of time over which the eruption occurred. By comparison, Tambora ejected 150 cubic kilometers of material and had a VEI of 7 whereas the 1883 eruption of Krakatau ejected 21 cubic kilometers of material and had a VEI of 6. When its magma chamber emptied, Thera collapsed beneath the sea, and tsunamis were inevitably created, probably killing many people on the northern side of Crete, which faced Santorini. By comparison, tsunamis generated by Krakatau's caldera collapse killed over 36,000 people. Pyroclastic flows of superheated gas and ash possibly killed additional Minoans on the Santorini side of Crete. Pyroclastic flows from Krakatau killed around 4500 people. When pyroclastic flows encounter water, they flash boil the surface to steam, which acts as a lubricant allowing the flow to very rapidly travel long distances.

Santorini



In this Landsat image of Santorini, the collapsed caldera of Thera is the large open area in the center of the island. Cone building subsequent to the 1600 eruption is in the center of the collapsed caldera. The southwest part of Santorini, lower left of the image, was blown away in the eruption. Crete lies 110 kilometers (68 miles) south southwest of Santorini. Such volcanic activity is common in subduction zones such as the northern Mediterranean.

The Minoans never really recovered from the Thera eruption although archeological remains suggest attempts at rebuilding for a couple centuries. They were unable to resist the Mycenaeans from the mainland who took control of Crete around 1420, and the Minoans slowly disappeared from the world stage. Mycenaean Greece was divided into territories, each of which ruled by a king who claimed authority under divine right by descent from a heroic ancestor. The nobility owned large estates while the rest of the population lived in small towns. The Mycenaeans adopted the Linear A script and developed it into Linear B, which has been largely deciphered. Linear B is a syllabic script, which is one that has a separate symbol for each syllable of the spoken language rather than a symbol for letters that can be combined to form syllables. The Mycenaean period is sometimes called the age of heros; it's the period of Greek history that's the setting of much ancient Greek literature such as the epics of Homer.

The period from 1200 to 900 was a sort of dark age, called the Late Bronze Age Collapse, for the entire Near East, North Africa, Caucasus, Mediterranean, and Balkan regions; it was a time of widespread famine. In *The End of the Bronze Age: Changes in Warfare and the Catastrophe ca. 1200 B.C.*, Robert Drews describes the collapse as "the worst disaster in ancient history, even more calamitous than the collapse of the Western Roman Empire". This was the time of the Third Intermediate Period of Egypt and the collapse of the Hittite and Middle Assyrian empires that left Mesopotamia to revert to disunified city-states. In a 2013 article published in the *Journal of the Institute of Archaeology of Tel Aviv University*, Dafna Langgut, Israel Finkelstein, and Thomas Litt wrote that pollen in sediment cores from the Dead Sea and the Sea of Galilee show a period of severe drought existed at the start of the collapse. Several archeologists subscribe to the position that this drought was the proximate cause of the collapse, but no fundamental principles that point to the cause of the drought, and thus the ultimate cause of the collapse, has been found so far. In *The Long Summer: How Climate Changed Civilization*, Brian Fagan noted that the Late Bronze Age collapse was associated with the diversion of mid-winter Atlantic storms to north of the Pyrenees and the Alps, bringing wetter conditions to Central Europe and drought to the Eastern Mediterranean, but the ultimate cause of such a diversion is unknown.

During the Late Bronze Age collapse, almost every city from Gaza to the Peloponnese region of Greece was violently destroyed and often thereafter left unoccupied as people coped with the drought and famine by taking what was needed from other people. In Anatolia, the city of Karaoglan was burned and the corpses left unburied. This was the time when the Bronze Age gave way to the Iron Age. It was also the time of the Greek Dark Age.

In Greece, the Late Bronze Age collapse is known as a Dark Age because there is scant record of the events of those centuries. Beginning around 1200, the centers and outlying settlements of the Mycenaeans' highly organized culture began to be abandoned or destroyed, and by 1050, the Mycenaean culture had disappeared. The cause of the end of Mycenaean domination is not strictly known, but hypotheses abound. Perhaps the most salient is a weakening from famine stemming from the general Mediterranean drought and a subsequent invasion by the enigmatic Sea Peoples. As mentioned on page 199, the Sea Peoples were raiders who repeatedly scourged Mediterranean cities for centuries; they built nothing and left no written record of themselves. They apparently simply came, destroyed, and left, taking with them whatever they wanted. All that is known of them has been gleaned from written accounts of their victims. However, no written records of any kind describe Greece after the Mycenaean's fall. Linear B writing fell into disuse and was forgotten as the population apparently returned to a nomadic herding life style.

By 800, population centers were being rebuilt, and a new written Greek language was created that was based on the Phoenician script with added vowels. Greek is the first fully alphabetic script, which is one in which both consonants and vowels have symbols. Alphabetic scripts need only a relatively small set of symbols and simple rules for how to combine them such that they code for any sound of any spoken language. Thus, it's easy to learn and adaptable in use, so Greek soon became the dominant script throughout the Mediterranean. It's difficult to overstate the influence alphabetic scripts have had on the intellectual development of the human species. They've allowed knowledge to easily be passed down from generation to generation so Newton could say, "If I have seen further it is by standing on the shoulders of giants."

After emerging from the Dark Age, Greece began what is usually called the Archaic Period. Greek nationalities were composed of four tribes that descended from the four children of a mythical Hellen, who is not to be confused with Helen of Troy: Achaeans, Aeolians, Ionians, and Dorians. The population centers they rebuilt chose to remain independent city-states such as Athens, which was largely Ionian, and Sparta, which was primarily Dorian. The choice to remain independent city-states increased local loyalties at the expense of national ones, leading to increased competition. Once they had recovered from their Dark Age around 800, the Greeks began to war with one another until the Romans put an end to their squabbles at the Battle of Corinth in 146. Although they fought with one another, the city-states were also tied together by common language and religion. (To

help unify the Greek spirit, the first Olympic games were held in 776 on the plains of Olympia in the western Peloponnese to honor the Olympian gods *Zeus, Hera, Poseidon, Demeter, Athena, Apollo, Artemis, Ares, Aphrodite, Hephaestus, Hermes, Hestia, and Dionysus*.) They were like brothers, sharing a common heritage but squabbling among themselves. Part of the reason for continued conflict was the lack of sufficient arable land for the burgeoning population, which was also an important motivation for the Greeks to colonize places in southern Italy, Sicily, Sardinia, Corsica, the southern French coast, the eastern Spanish coast, the coast of the Black Sea, and Cyprus, among others.

Between the years 800 and 700, conflicts in Greece included: Sparta conquered Messenia, and the Messenian Aeolians were relegated to serfs known as helots, who were often hired as mercenary soldiers in subsequent centuries; on the large island of Euboea, which lies close to the eastern shore of the mainland, Chalkis and Eretria fought over the fertile Lelantine plain; around forty years after the First Messenian War, the Messenian helots revolted with help from Argos, and the Spartans needed seventeen years to put down the revolt.

In approximately the fourth year of the twenty-third Olympiad (685) the Messenians revolted again, and Sparta was forced to reconquer Messenia (the Second Messenian War). The revolt was finally put down in the first year of the twenty-eighth Olympiad (668), and many of the helots fled to Italy. There is some debate over the date of the Second Messenian War.

The Greeks didn't just make war. The Archaic Period was the time when Greek thought came alight and would shine like a beacon for eons until our present time. The first Greek philosopher we firmly know about is Thales, who was born around 624 in the Ionian city of Miletus on Aegean coast of Anatolia. Many, such as Aristotle, regard him as the first philosopher in the Greek tradition. Bertrand Russell said of him, "Western philosophy begins with Thales." Thales was the first known to attempt explaining natural phenomena such as thunder without resorting to mythology and was the first to propose general principles that underlie everything although Aristotle wrote that Thales thought the primary principle is water. Almost all of the other Pre-Socratic philosophers followed him in attempting to explain the ultimate substance, change, and existence of the world without reference to mythology. Eventually Thales' rejection of mythological explanations became the fundamental principle of the scientific revolution. He can, thus, probably be considered the first scientist and has been called the "father of science" by many, although some reserve that title for Democritus.

The First Sacred War was fought during the period 595 to 585 between the city of Kirra and the Amphictionic League, which was a military alliance dedicated to protecting holy site of Delphi. Kirra was a heavily fortified city that controlled access to Delphi from the Corinthian Gulf. This strategic location allowed Kirra's citizens to rob pilgrims on their way to the Delphic Oracle and to annex Delphic land sacred to Apollo. The war is notable for the use of chemical warfare during the siege; the Amphictionic League allegedly used a species of hellebore to poison the city's water supply. After

Kirra gave up the fight, the people were put to death, and town was completely destroyed.

Pythagoras followed close on the heels of Thales. Pythagoras was born around 570 on the Ionian island of Samos, which is not far from Miletus. He believed in transmigration, or the reincarnation of the soul again and again into the bodies of humans, animals, or vegetables until it became immortal, which is an essential part of Hinduism. It is unknown whether or not Pythagoras came into contact with Hindu philosophers that were formulating similar beliefs at about the same time. He is most noted for the geometric principle known as the Pythagorean theorem, which relates the length of the sides of a right triangle to one another. He left Samos during the time when Polycrates was tyrant (ca. 538 to 522).

Polycrates commissioned Eupalinos of Megara in West Attica to dig a tunnel through a small mountain on Samos to bring fresh water from a spring to his capitol city. The tunnel is 1,036 m (3,399 ft) long and is notable for being the second tunnel excavated simultaneously from both ends, the first being Hezekiah's tunnel in Jerusalem, which was completed around 700. Eupalinos' tunnel was guided strictly by geometry whereas Hezekiah's tunnel was dug close enough to the surface that the two teams could be guided towards one another by loud banging from the surface. Eupalinos' aqueduct is a marvel of ancient engineering and is now part of the Pythagoreion UNESCO World Heritage Site.

A series of wars between Greece and Persia began in 547 when Cyrus the Great annexed the Ionian city-states in Anatolia. For the next hundred years, Greeks and Persians skirmished with one another numerous times, and Persia attempted two outright invasions of Greece. The first Persian invasion was ordered by king Darius I. It began in 492, and ended with the Athenian victory at the Battle of Marathon in 490. After Darius died, Xerxes personally led the second Persian invasion in 480 with one of the largest armies ever assembled in ancient times. Victory at the Battle of Thermopylae allowed the Persians to torch Athens and overrun most of Greece. However, while seeking to destroy the combined Greek fleet, the Persians suffered defeat at the Battle of Salamis. The following year, the confederated Greeks went on the offensive, defeating the Persian army at the Battle of Plataea and ending the Persian attempts to invade Greece.

The Greco-Persian Wars began the period called Classical Greece. To be sure, it was a time of warfare. Once the Persian menace was overcome, the Peloponnesian War broke out between Athenian and Spartan coalitions in 431. By 404, Athens surrendered to Sparta, their surrender brought about by both military defeat and economic collapse from the cost of the war. Because of its poor handling of the war, Athenian democracy was briefly overthrown in 411, but it was restored in 403 after the war had ended.

In spite of incessant war, Classical Greece was the time when Greek thought reached its zenith. Some of the most important figures of Western cultural and intellectual history lived during the tribulations of the Classical period: the philosophers Socrates, Plato, and Aristotle; the historians

Herodotus, Thucydides, and Xenophon; the dramatists Aeschylus, Aristophanes, Euripides, and Sophocles; and the poet Simonides.

The ancient Greek historian Herodotus (ca. 484 to 425) was born in Halicarnassus (modern-day Bodrum, Turkey), south of Miletus. Cicero called him the Father of History because he was the first historian known to systematically and critically collect his materials and then to arrange them into a narrative.

Socrates (ca. 470 to ca. 399) was an Athenian philosopher credited as one of the founders of Western philosophy. He is a somewhat enigmatic figure known chiefly through the accounts of later classical writers, especially the writings of his students Plato and Xenophon and the plays of Aristophanes, his contemporary. He made lasting contributions to the field of epistemology (the branch of philosophy concerned with the nature and scope of knowledge), and the influence of his ideas and approach remains a strong foundation for much western philosophy that followed. Socrates, himself, left no writings. Most of what is known of his teachings is drawn from the writings of his student Plato.

Democritus (ca. 460 to ca. 370) was born in Abdera, Thrace and is primarily remembered for the first formulation of the principle that all matter is composed of tiny, irreducible particles that he called atoms. Like Thales, he believed everything that happens is the result of natural laws and not the work of supernatural gods.

Hippocrates (ca. 460 to ca. 370) was born on the Greek island of Cos. In an intellectual approach analogous to Thales and Democritus, he separated medicine from religion, arguing that disease was not a punishment inflicted by the gods but rather the product of environmental factors, diet, and living habits.

The exact time and place of Plato's birth are not known, but it is certain that he belonged to an aristocratic and influential family. Based on ancient sources, most modern scholars believe that he was born in Athens or Aegina sometime between 429 and 423. He was Socrates' student, and founded the Academy in Athens, the first institution of higher learning in the Western world. Along with his teacher, Socrates, and his most-famous student, Aristotle, Plato helped to lay the foundations of Western philosophy and science.

Aristotle (384 to 322) was born in Stagirus, northern Greece. He was the first of what would later be called a Renaissance Man because his writings cover so many subjects: physics, biology, zoology, metaphysics, logic, ethics, aesthetics, poetry, theater, music, rhetoric, linguistics, politics, and government. They form the first comprehensive system of Western philosophy and were the foundation of higher education for two millennia; Isaac Newton had to study Aristotle before he was permitted to study anything else. According to the *Encyclopædia Britannica*, "Aristotle was the first genuine scientist in history. ... Every scientist is in his debt."

After the Peloponnesian War, Sparta and Thebes dueled for 40 years over control of the Peloponnesus, but Macedon's supremacy temporarily

ended their squabbles. In 359, Philip II became king of Macedon. The rise of Macedon from a small Greek kingdom at the periphery of Classical Greece to domination the entire known world occurred in just 26 years, between 359 and 323. In 360, the Macedonian army under king Perdiccas III was defeated in battle by king Bardylis of Illyria, which is on the Balkan Peninsula; Perdiccas and 4,000 troops were killed. After Perdiccas' death, the Thracians (Pausanias) and Athenians (Argaeus) each began to support a different pretender to his throne, but Philip II became king by acclamation of the army, a system of succession that would be revived hundreds of years later in Rome.

Philip's first priorities were to rebuild the army and to restore the morale of both the army and the people. According to Diodorus Siculus' *Bibliotheca Historica*, he held a series of assemblies and built up their morale by "exhorting them with eloquent speeches", a tactic Adolf Hitler would use more than two millennia later. He diligently trained the army, so they were always better prepared than their enemy. Although his phalanx was equipped with longer pikes and, thus more formidable, than other similar formations, his true genius was in his use of combined infantry, cavalry, and boulder-hurling artillery in response to whatever terrain and enemy dispositions he faced. He was simply an outstanding battlefield tactician. He was also a superb diplomat. In 356, Alexander was born.

Philip probably saw in Alexander the seeds of a great king, so around 343, shortly after Plato died, he brought Aristotle to become tutor of the boy. Aristotle probably also recognized greatness in Alexander because he remained the boy's tutor for eight years. After bringing most of Greece under his control through both war and diplomacy, Philip was assassinated in 336, and Alexander became king at the age of 20. After Philip's death, much of Greece tried to revolt against the Macedonians, but Alexander managed to regain supremacy. He needed a united Greece at his back when he invaded Persia, a campaign most of Greece supported. Alexander managed to surpass his father as a general and diplomat, and his tour through the Persian Empire became the stuff of legends.

After Alexander died, the great centers of Hellenistic culture and power shifted from the Greek peninsula to eastern cities (such as Alexandria, Pergamon, Ephesus, Rhodes, and Antioch) where Greek-Macedonian political elites dominated and maintained the preeminence of Greek customs that was encouraged by a steady emigration of the young and ambitious from the old country. Alexander's empire was divided among his generals whom wretched hubris drove to continue wars for supremacy among themselves until Rome forced peace down their throats at the point of a sword.

Through all the vicissitudes of their lives, the Greeks, like the Egyptians and Mesopotamians, found refuge in their religion. The gods were the one constant source of tranquility in an ever changing, always dangerous world.

The absence of written details of Minoan Civilization leaves us to infer their religious practices from archeological evidence alone, a practice that's fraught with uncertainty. Apparently Minoan goddesses were more numerous than gods. Minoans left no buildings that can be identified as temples;



Orestes Pursued by the Furies

Homer relates the tale that king Agamemnon sacrificed his daughter Iphigenia to obtain favorable winds during his voyage to Troy. When Agamemnon returned from the Trojan War his wife, Clytemnestra, murdered him in retribution for the sacrifice. Orestes avenged his father's death by slaying his mother and is pursued by the *Erinyes*, whose duty is to punish any violation of the ties of family piety. The story was a favorite of Greek playwrights Aeschylus, Sophocles, and Euripides.

they seem to prefer small shrines in structures on mountain tops or in a room set aside in palaces. Caves also were treated as sacred. Some were high in the mountains, but an accessible one at Amnisos near Knossos, mentioned by Homer in the *Odyssey*, had a history of receiving offerings from the Middle Minoan time down to the classical period. Archives of Knossos record offerings of honey sent to this cave for the goddess known to the later Greeks as *Eleithyia*, the patron of childbirth.

Minoans had a mother goddess of fertility, a mistress of the animals, and protectresses of cities, the household, the harvest, and the underworld. *Earthshaker* was a god that could be expected in a place such as Crete that's subjected to earthquakes. Ariadne, the legendary daughter of King Minos, was deified as the mistress of the labyrinth where lived the Minotaur, the mythical creature with the head of a bull on the body of a man. She is identified in Mycenaean Linear B tablets in Knossos. As a goddess, *Ariadne* survived the collapse of the Minoan culture to pass on to mainline Greek and even Etruscan myth as guardian of the labyrinth.

The mother goddess also seems to have survived the Minoan collapse because it's found among Mycenaean icons. Linear B texts found at both Pylos on the mainland and at Knossos in Crete reveal that the classic Olympian gods *Zeus*, *Hera*, *Poseidon*, *Artemis*, *Apollo*, *Athena*, *Hermes*, and *Dionysus* were the most significant Mycenaean deities. The Mycenaean pantheon even included the *Erinyes* (the Furies). *Artemis* was the Mycenaean mistress of animals and possibly could have been the same as the Minoan mistress of the animals. Probably we'll never know whether they were independent creations or whether the Minoan begat the Mycenaean.

After the Dark Age, the Greek religion developed its richness. Like all other religions, the Greeks had a creation myth. Although these creation myths are not an important part of daily worship, all religions seem bound to create a story about where everything comes from so they can establish a relationship between the gods and people. In contrast to Egypt and

Mesopotamia, the Greeks wrote about their religious beliefs, and much of what we know about their ancient religion was recorded by Hesiod around 700 in an epic poem called *Theogony* and in a genealogical poem, *Catalogue of Women* that describes the origins and genealogies of the Greek gods. Later myths sometimes altered Hesiod's pantheon.

Like other contemporary religions, the Greeks believed that everything was born out of chaos. According to Hesiod, first there appeared the primal gods (proto-genoi) *Gaia* (Earth, the home for gods and mortals), *Tartarus* (the abyss that is deeper than Hades and used as a dungeon of torment and suffering for the wicked; the Greeks used the same name for both the god or goddess personifying a thing as well as for the thing itself, *Tartarus*, for example.), and *Eros* (the god of sexual love). Later myths identify *Eros* as the son of *Aphrodite* rather than a primal god. Then *Erebus*, the deification of darkness, and *Nyx*, the deification of the night appeared out of the void. *Eros* caused *Erebus* to couple with *Nyx*, who gave birth to *Aither* (heavenly light) and *Hemera* (day); these were the first components of the primeval universe. *Aither* rather than the sun was considered to be the source of light during the day; this viewpoint was probably a result of daylight extending all over the heavens rather than being concentrated in the sun. *Nyx* draws a veil of mist to hide *Aither* during the night, and *Hemera* pulls aside the night mist to reveal *Aither* and bring the day.

Then *Nyx* alone gave birth to many gods that were deifications of the attributes of life. Most of these were negative attributes such as Doom (*Moros*), Death (*Thanatos*), and Woe (*Oizys*), but she also bore Sleep (*Hypnos*) and Dreams (the *Oneiroi*).

Without mating, *Gaia* gave birth to *Pontus*, the deification of the all-important Mediterranean Sea, and *Ouranos*, or *Uranus*, the deification of the heavens. *Gaia* lay with her child *Uranus*, or Heaven, (after all, there was no one else around) and conceived sons *Oceanus*, *Coeus*, *Crius*, *Hyperion*, *Iapetus*, and *Cronos*, and daughters *Rhea*, *Theia*, *Themis*, *Mnemosyne*, *Phoebe*, and *Tethys*. These six sons and six daughters Hesiod called Titans. *Cronos* was the youngest of the twelve and hated his father.

With *Uranus*, *Gaia* then gave birth to the three Cyclopes, *Brontes*, *Steropes*, and *Arges*. Instead of two eyes, the Cyclops had only one eye in the center of their forehead. In-breeding will do that sort of thing. Finally *Uranus* and *Gaia* conceived their last three monstrosities, the Hecatoncheires, *Cottus*, *Briareos*, and *Gyes*. These had fifty heads on their shoulders and a hundred arms; they "were the most terrible". *Uranus* hated the Cyclopes and Hecatoncheires "from the first" and hid them away in a dark place as soon as they were born. This made *Gaia* angry, so she shaped a great, jagged sickle of grey flint and plotted with the Titans to kill *Uranus*.

All of the Titans except *Cronos* were reluctant to kill their father. *Cronos* hid, and when Heaven came down full of love and spread himself over Earth, *Cronos* castrated him with the great, jagged sickle. The drops of blood that fell on the Earth became the *Erinyes*, or Furies (three female deities of vengeance); "the great Giants with gleaming armor"; and the

Meliae (nymphs). *Cronos* cast *Uranus'* members into the sea, and as Hesiod said "a white foam spread around them from the immortal flesh, and in it there grew a maiden" *Aphrodite*, who went into the assembly of the gods. Some myths describe *Aphrodite* as the daughter of *Zeus*. *Uranus* cursed *Cronos* that he would suffer the same fate as he had inflicted on his father.

The titans wed one another and gave birth to many children. For example, *Tethys* bore to *Oceanus* many daughters that deify rivers and streams such as *Clymene*, whom some call *Asia*; and *Styx*, who deifies the terrible river that borders the underworld; and 3000 sea nymphs. *Theia* and *Hyperion* gave birth to *Helius* (Sun), *Selene* (Moon), and *Eos* (Dawn). *Iapetus* wed his niece *Clymene* who bore him *Atlas*, *Menoetius*, *Prometheus*, and *Epimetheus*.

Because he was courageous enough to castrate his father, *Cronus* became the leader of the Titans. Some have written that the period during which *Cronus* ruled was called the Golden Age because the people of that time had no need for laws; everyone automatically did the right thing.

Cronus wed *Rhea* and sired the gods *Hades* and *Poseidon* and the goddesses *Demeter*, *Hestia*, and *Hera*, but he devoured them all as soon as they were born to prevent fruition of *Uranus'* prophecy that he was destined to be overcome by his own sons just as he had overthrown his father. When the sixth child, *Zeus*, was about to be born, *Rhea* sought *Gaia* to devise a plan to save him and to eventually get retribution on *Cronus* for devouring his children. *Rhea* secretly gave birth to *Zeus* in Crete, and handed *Cronus* a stone wrapped in swaddling clothes, known as the Omphalos Stone, which he promptly swallowed, thinking that it was his son. This secret birth is similar to the birth of *Horus* in late Egyptian myths.

Once he had matured, *Zeus* used an emetic given to him by *Gaia* to force *Cronus* to vomit his two brothers and three sisters. After freeing his siblings, *Zeus* released the Hecatonchires and the Cyclopes who forged for him his thunderbolts, for *Poseidon* his trident, and for *Hades* his helmet of darkness.

In the Titanomachy, a great and cruel war made all the more terrible because all the combatants were immortal, *Zeus* and his brothers and sisters with the help of the Hecatonchires and Cyclopes, overthrew *Cronus* and the other Titans. *Prometheus* and *Epimetheus*, sons of *Iapetus*; *Styx*, daughter of *Oceanus*; and *Themis* abandoned the cause of the Titans and joined *Zeus*. However *Iapetus'* son *Atlas* led the titans in battle. After the triumph of *Zeus* and his cadre, the Titans were confined in Tartarus, and *Zeus* sent the Hecatoncheires to be their wardens. *Atlas* was given the special punishment of holding up the sky, although modern interpretations assign him the task of holding up the Earth.

Gaia became angry with *Zeus* over the imprisonment of her children, the Titans, so she coupled with *Tartarus* and bore her last child, the most fearsome of all monsters, *Typhon*, whom she sent to claim revenge. *Zeus* and *Typhon* fought savagely, and *Typhon* tore the sinews from *Zeus*, rendering him helpless. However, *Hermes* recovered the sinews and restored them to *Zeus*. In their second fight, *Typhon* was defeated by *Zeus*, who trapped him beneath Mount Etna.

This was the final battle among the immortals. *Zeus* became king of all the immortals, and moved to Mount Olympus with his supporters. Similar to the Titans, the core of the Olympians were six gods (*Zeus, Poseidon, Apollo, Ares, Hephaestus, and Hermes*) and six goddesses (*Hera, Demeter, Athena, Artemis, Aphrodite, and Hestia*). Some writers replace *Hestia* with *Dionysus*, who had been part of the Greek pantheon since Mycenaean times. All of these core Olympians except *Aphrodite* were either *Zeus'* siblings (*Poseidon, Demeter, Hestia, and Hera*) or children (*Apollo and Artemis* from *Leto*, *Hephaestus* and *Ares* from *Hera*, *Athena* from the Oceanid *Metis*, *Hermes* from the Pleiad *Maia*). Other gods and goddesses doubtless lived from time to time on Mount Olympus with the Olympian gods. *Hades*, for example, left the underworld periodically to take part in Olympian celebrations, and *Persephone* was allowed to leave the underworld for part each year and dwell on the mountain, thus creating the Greek explanation of the seasons. *Heracles*, or *Hercules*, also lived there at times. This is the story and genealogy of the gods as told by Hesiod. During the time from 700, other writers have modified it somewhat.

Epimetheus and his brother *Prometheus* were given the task of populating the earth with animals and men, and *Zeus* gave them a box of gifts to distribute among the creations. However, *Epimetheus* bestowed all the gifts the gods had allotted for the task (such as swiftness, cunning, strength, fur, wings) on the animals, leaving none for mankind, *Prometheus'* masterpiece. So *Prometheus* stole fire from heaven to aid mankind. This theft angered *Zeus* who punished *Prometheus* and ordered the creation of *Pandora*, the first woman, to punish man. As soon as *Pandora* appeared, she lifted the lid of a container the gods had given her, releasing a plague of harmful daimones (spirits) to trouble mankind. Out of pity, the gods left *Hope* (*Elpis*) to succor unfortunate man.

Greek mythology also records the ancestry of the Greeks. *Pyrrha*, daughter of *Epimetheus* and *Pandora*, and *Deucalion*, the son of *Prometheus* and the Oceanid Nymph *Pronoia*, begot *Hellen* who was the mother of sons *Aeolus*, *Dorus*, and *Xuthus*. According to Hesiod's *Catalogue of Women*, each of *Hellen*'s sons founded a primary tribe of Greece: *Aeolus* founded the *Aeolians*, *Dorus* the *Dorians*, *Achaeans* from *Xuthus*'s son *Achaeus*, and *Ionians* from *Xuthus*'s adopted son *Ion*, who was, in truth, a son of the god *Apollo*. *Hellen* is also another name for Greek, meaning a person of Greek descent or pertaining to Greek culture, and is the source of the adjective *Hellenic*. According to Fragment 3 of Hesiod's *Catalog of Women*, *Zeus* bedded *Thyia*, a daughter of *Prometheus* and *Pronoia*, and *Thyia* gave birth to *Macedon*, the Greek tribe from which came Alexander the Great.

In a story similar to the Mesopotamian descent of *Inanna* to the netherworld, the Greeks explained the yearly cyclical growth and hiatus of vegetation by creating a myth of a goddess who spends part of the year in the underworld and part of the year on Mount Olympus. In the Greek myth, *Demeter*'s daughter *Persephone* was gathering flowers when she was seized by *Hades*, the god of the underworld. He took her to his underworld king-

dom, raped her, and made her his queen. Distraught, *Demeter* neglected her duties as the goddess of vegetation as she searched diligently for her daughter. The people suffered and starved. *Zeus* heard their anguish and forced *Hades* to return *Persephone*. However, the Fates had established a rule that whoever consumed food or drink in the Underworld was doomed to remain there forever. Before *Persephone* was released, *Hades* tricked her into eating pomegranate seeds which obliged her to remain with *Hades* for one month per seed, but she could stay on Mount Olympus with her mother for the remainder of the year. *Demeter* was unhappy and neglected the earth while *Persephone* was in *Hades* but became joyful and cared for the earth again when *Persephone* returned to Mount Olympus.

Although immortal, the gods were not all powerful. As exemplified by *Persephone*, they had to obey fate, which was the master of all. Those who attempted to circumvent their destiny usually ended up fulfilling it in an ironic fashion. The myth of *Cronus* and *Zeus* is an example.

Sophocles also expressed the invincibility and inevitability of fate in his play *Oedipus the King*. Oedipus was the child of Laius and Jocasta, the ruling couple of Thebes. The Oracle at Delphi told Laius that his newborn son would grow up to kill his father (*Cronus* revisited) and marry his mother, so he had the child's ankles pierced and tied together (Oedipus means 'swollen foot') and abandoned the boy on a nearby mountain. However, fate cannot be avoided that easily, and Oedipus was rescued by a peasant in the employ of king Polybus of Corinth, who gratefully adopted the child because he and his wife, Merope, had been unable to conceive. Polybus and Merope raised Oedipus as their own. One night a drunken man shouted at Oedipus that he had no idea who his father was, so Oedipus traveled to the Oracle at Delphi and asked her the identity of his parents. However, rather than tell Oedipus who his parents were, the Oracle revealed the prophecy that he would kill his father and couple with his mother, so Oedipus headed for Thebes rather than go back to Corinth and possibly kill his adoptive father. On his journey, Oedipus came across King Laius and killed him in an altercation, thus unwittingly fulfilling half of the prophecy. The rest of the prophecy was fulfilled when a complex series of events resulted in his marriage to the King's widow, his mother.

In Greek mythology, it was an honor to die for something worth fighting for, and that the person was believed to be honored in the underworld, which is a belief that has been resurrected in Islam. A few, like Achilles, Menelaus, and a great number of those who fought in the Trojan and Theban wars, were considered to have been physically immortalized and brought to live forever in Elysium, or the Elysian Fields. For example, Hesiod wrote in *Works and Days*

"And they live untouched by sorrow in the islands of the blessed along the shore of deep-swirling Ocean, happy heroes for whom the grain-giving earth bears honey-sweet fruit flourishing thrice a year, far from the deathless gods, and Cronos rules over them."

For most people, however, death left no hope of anything but continued existence as a disembodied soul. This dichotomy between the afterlife of

heros and that of ordinary people was an echo of early Egyptian belief in the afterlife the king enjoyed as opposed to that of the common person. As a counterpoint to the prevailing views of life after death, Epicurus taught that the soul was simply an insubstantial substance that dissipated at death, so there was no further existence, no afterlife for anyone, which is a belief they shared with early Judaism.

Herodotus traced many Greek religious practices to Egypt. Worship could be personal such as individual prayer accompanied by animal sacrifice at an altar, which might be in the open or in a temple dedicated to the particular god addressed. Most of the flesh was often eaten and the offal burnt as an offering to the gods. The Greeks kept the best for themselves and gave the dregs to the gods. The gods might or might not accept a sacrifice. For example, when Odysseus offered *Zeus* a sacrificial ram, he did so in vain. Perhaps if their gods failed to answer the Greek's pleas, the fault was not because the gods didn't exist but because inferior offerings were made. These rituals could be performed by the supplicant on his own; no priest was necessary although one often attended. Priests were not necessarily experts in theology; such expertise was entrusted to a separate official. Votive offerings such as food, drink, or precious objects could also be left at the altar.

That the practice of ritual sacrifice was widespread is evident in ancient Greek literature, especially in Homer's epics. Throughout the poems, ritual sacrifice is observed to gain the favor of the gods at banquets, in times of danger, or before some important endeavor. For example, in the *Iliad*, the princes begin every banquet or symposium with a sacrifice and prayer. A symposium was a gathering of aristocrats to debate, boast, celebrate victories in athletic and poetry contests, or simply to revel in one another's company. They were frequently held to celebrate the introduction of young men into aristocratic society, the equivalent of modern debutante balls.

Libation was the most common form of religious practice and one of the fundamental acts that defined piety in all ancient religions. It's a ritual pouring of a liquid refreshment onto something of religious significance, such as the earth or an altar, either as an offering to a god or spirit or in memory of those who have died. It's essentially a form of sacrifice. It was first recorded in ancient Egypt and continues in present times throughout the world. Wine or olive oil (or ghee, which is clarified butter, in India) are used most often, but honey, water, or milk could also be used.

Libations were part of daily life in all ancient cultures, and the pious might perform them every morning and evening or to begin meals. They were poured any time wine was to be drunk and the first to be poured from the wine jug. The gods always had priority. Libations usually accompanied prayer. The Greeks stood when they prayed, either with their arms uplifted or, when in the act of libation, with the right arm extended and holding the vessel from which the libation was poured. During animal sacrifice, wine was poured onto the victim as part of its ritual slaughter, into the flames, and onto the ash afterwards. This scene is commonly depicted in Greek art.

Worship could also be a group endeavor in the form of religious festivals, which often included athletic contests in the honor of a god, such as the Olympic Games in honor of *Zeus*. These religious festivals could also include intellectual activities such as poetry or musical contests because ancient Greeks considered both athletics and intellect equally important. Many festivals were specific only to a particular deity or city-state. For example, the Festival of Lycaea was an Arcadian celebration in honor of *Zeus*.

Ancient Greeks feared committing hubris. Although pride and vanity were not considered sins themselves, they became hubris when carried to extremes. Anything done to excess was considered improper. Pride was not evil until it became all-consuming or hurtful to others.

The pharmakos was a ritual in which a symbolic scapegoat such as a slave, a cripple, or a criminal was chosen to be expelled from the community in a time of hardship (famine, invasion, or plague). It was hoped that the ritual scapegoat would take the hardship with him or her thereby purifying the community and alleviating the hardship. This ritual was, in a sense, a parallel with normal prayer and supplication but was a community-wide response to a specific situation. It's noteworthy that the scapegoat need not be flawless as other religions required. In Athens, for example, a man and a woman who were considered ugly were selected as scapegoats each year during the agricultural festival of Thargelia. They were feasted, led around the town, beaten, and driven out or stoned. Once again, the Greeks made an inferior offering to the fates or to the gods.

Those who were not satisfied with traditional worship of the gods could turn to various mystery religions that were open only to members who had been initiated. Once initiated into its secrets, they could find a mystical awakening, a systematic doctrine, a key to the afterlife, communal worship, and spiritual fellowship. Some of these mysteries were ancient and local, such as that on the island of Samothrace or the Eleusinian Mysteries at the town of Eleusis for the cult of *Demeter* and *Persephone*. Others were spread from place to place, like the mysteries of *Dionysus*. The rites, ceremonies, and beliefs of the Eleusinian Mysteries were kept secret and preserved from antiquity.

The mainstream religion of the Greeks did not go unchallenged. Several notable philosophers criticized a belief in the gods. The earliest was Xenophanes, who chastised the human vices of the gods as well as their anthropomorphic depiction. Plato did not believe in polytheism, but instead believed that the "Form of the Good" is the ultimate principle, which can be equated to what most people consider to be God. Plato's disciple, Aristotle, also disagreed that polytheistic deities existed, because he could not find enough empirical evidence for them. He believed in a Prime Mover that had set creation going but was not connected to or interested in it.

In the preface to his *Bibliotheca Historica*, the Greek historian Diodorus Siculus wrote that Hades is fictitious:

"For if it be true that the myths which are related about Hades, in spite of the fact that their subject-matter is fictitious, contribute

greatly to fostering piety and justice among men, how much more must we assume that history, the prophetess of truth, she who is, as it were, the mother-city of philosophy as a whole, is still more potent to equip men's characters for noble living!"

Diodorus Siculus assembled a history of North Africa and ancient Egypt, Mesopotamia, India, Greece, and Rome to Julius Caesar's Gallic Wars from the works of others and from his own observations.

One of the challengers to the prevailing religion, Socrates, paid the ultimate price for apostasy. In an indictment brought by Meletus, Socrates was accused of "refusing to recognize the gods recognized by the state, and of introducing new divinities." He was also accused of corrupting the youth. The penalty demanded was death. A death sentence for apostasy is revived by Islam. When given the choice between death and banishment, Socrates chose death rather than be separated from Athens.

These criticisms by intellectuals and philosophers may or may not reflect the views of the populace at large, and it is difficult to believe from the wealth of archaeological and written records that religion was anything other than a vital part of life for the inhabitants of the Hellenistic world.

Rome

The history of Rome is much shorter than those of Egypt, Mesopotamia, and Greece. Ancient Rome was like a sky rocket, burning brightly with many colors but briefly. In the beginning, Rome was just that: Rome, the city. Before the beginning there were Etruscans, Latins, and Sabines each composed of a number of independent city-states. Like Egypt, Mesopotamia, and Greece, they all warred among themselves for supremacy, booty, and slaves. History describes many men, from Narmer to Ho Chi Minh, who have sufficient alpha drive (what civilization calls 'ambition') and, unfortunately, enough charisma to drag their people (doubtless some of them kicking and screaming) into wars of conquest.

Little is known, but much is supposed, of Rome before the beginning of the Republic because barbarians from Gaul came and sacked Rome around 395, and historical records joined the human toll as casualties of war. To supplement archeology, we are left with legend and myth, which always have a few grains of truth hidden somewhere in their fanciful stories, but just where in these fanciful stories lies the truth is always a source of argument.

Archeology tells us that the Etruscans liked to build their towns on a hill, the steeper, the better. Apparently, defense in the event of war was a prime consideration. No one knows whether the Etruscans were indigenous or came from somewhere else; their language was unique and only loosely related to central European tongues of the time. Genetic studies have suggested both scenarios. It might be instructive to separate culture from people and hypothesize that a small group of foreigners appeared in the land of the Etruscans (and those of the Latins and the Sabines) bringing



An Etruscan Settlement

Founded by Etruscans, Civita di Bagnoregio is located atop a plateau of easily crumbled volcanic tuff overlooking the Tiber river valley about 120 kilometers north of Rome. It is being slowly destroyed as the edges of the plateau crumble away.

with them a superior culture and new gods. These foreigners were probably Greeks because Greece was establishing colonies in the western Mediterranean at that time; the Romans called the Greek colonies in Italy Magna Graecia. In Book I of *Roman Antiquities*, Dionysius of Halicarnassus wrote, "But the most learned of the Roman historians, among whom is Porcius Cato, who compiled with the greatest care the 'origins' of the Italian cities, Gaius Sempronius [Gaius Sempronius Tuditanus] and a great many others say that they [the natives] were Greeks, part of those who once dwelt in Achaia, and that they migrated many generations before the Trojan war. But they do not name the Greek tribe or city they belonged to, or the date or the leader of the colony, or what made them leave their mother country. Though they follow a Greek legend, they cite no Greek historian as their authority. It is uncertain, therefore, what the truth of the matter is." Rather than adopt the newcomer's culture wholesale, the indigenous peoples improved their own cultures, echoing that of the newcomers. Regardless of what their history might be, the Etruscans were the dominant power in the peninsula by 800.

One myth of the founding of Rome is described by Publius Vergilius Maro, commonly known as Virgil, in the national epic, *The Aeneid*. *The Aeneid* is a great narrative describing the flight of a Trojan hero, Aeneas, to Latium where he defeated his rival for the hand of the princess and established a new line of kings. *The Aeneid* is sometimes woven into the myth that Rome was founded by twins named Romulus and Remus by saying that Romulus and Remus were descendants of Aeneas.

The dominant myth of Rome's founding is that Romulus built its first walls on the Palatine hill and became the first king. Numa Pompilius, a Sabine, was the legendary second king, succeeding Romulus, and many of Rome's most important religious and political institutions are attributed to

him. Legend further claims that the Pomponii, Pinarii, Calpurnii, Aemilii, and Pompilii patrician families of ancient times traced their ancestry to five sons of Numa Pompilius.

Regardless of myth, the Latins built Rome on the Palatine Hill sometime around the late ninth or early eighth century before the current era, perhaps because the Tiber River was an easily defended buffer between them and the Etruscans. Certainly the malarial swamps in the area made the location less than ideal for settling at first, but once the swamps were drained and the land converted to farms, Rome became an attractive place. It lured those Etruscans, Sabines, and Latins who had the ambition and drive to seek their fortune in a new place, and like many new places, Rome was the beneficiary of the best and brightest from elsewhere.

The most influential of these immigrants formed themselves into a governing body, a senate, to manage the affairs of the city. Members of this senate were the richer, land owning aristocracy, or patricians, and the cadre of common people, the less well to do peasants, merchants, and artisans, composed the plebeians, although some plebeians eventually became as wealthy as the patricians. Because senators were not paid in those early times and, thus, even these most influential politicians needed to be free of municipal responsibilities to work their land, they voted one of their number to be king for life according to Titus Livius Patavinus (known as Livy). Much of our understanding of early Rome comes from Livy's *History of Rome*. When the king died, power reverted back to the Senate which then voted on a replacement.

There is disagreement among historians of Rome whether the king was elected by the Senate or elected by a Curiate Assembly and verified by the Senate. Citizens of early Rome were organized into thirty curiae, ten for each of the three early tribes. Membership was based on clan and family affiliation. The chiefs of each curia were members of the Senate, and the remainder of each curia formed the Curiate Assembly. This two-assembly government structure is echoed in United States Congress. The Curiate Assembly was responsible for electing officials, passing laws, and passing judgement at trials. The Senate was advisor to the king, verified acts of the Curiate Assembly, and handled public money. Historians generally agree that this system was probably based on those the Romans had observed in the cities of Magna Graecia. Other than the necessity of electing a king, neither the Senate nor the Curiate Assembly could come into session unless called by the king or, later during the Republic, a consul, and they could consider only the issue put before it. They could only vote yea or nay.

The voting system of the Curiate Assembly was unique and probably was the model for the United States Electoral College. Each of the thirty curiae had one vote in the Assembly. The members of each curia would gather and vote on the proposition before the Assembly, and the majority of votes in each curia decided how the single vote of that curia would be cast in the Assembly. Thus, like the Electoral College, a small majority of one curia could possibly negate a large majority of another, and the decision of the Assembly might possibly not reflect the will of the majority of



The U.S. 'Mercury' Dime

The Roman god, Mercury, and the fasces, the symbol of a Roman lictor's authority, on the U.S. 'Mercury' dime is representative of the influence Rome has on the United States federal government. The three independent branches and bicameral legislature originated in the Roman Republic.

the people at large. Livy and some other historians wrote that Rome also had a Century Assembly that was a military-based assembly identical to the Curiate Assembly in all respects but organized by the military units of a hundred. The relationship between the two assemblies is unclear.

The last three kings were the Tarquiniius line originally from Etruria, the Etruscan region. The first Tarquin was elected by the Senate (or Curiate Assembly), but the last two seized the throne after their predecessor was assassinated. The seventh king of Rome, last of the Tarquin line, was Lucius Tarquiniius Superbus, whom the patricians of the Senate found to be so unendurable that they deposed him in 509, banished the Tarquins, and formed the Republic.

The Republic was led by two consuls elected by the Senate (or Curiate Assembly) for one year in office. Like the senators, the consuls were unpaid, but the law establishing the position automatically gave them the prestige of membership in the Senate at the end of their term. They alternated months as supreme leader, or holder of the fasces (an ax wrapped in rods that was the Roman symbol of authority), but one consul could veto the actions of the other. According to Livy, in times of war, one consul sometimes kept order in Rome while the other led the army in the field, and consuls were often chosen based on their military skills.

And war was a ceaseless activity of Rome. To Romans, war was always a defensive measure because they saw themselves as threatened on all sides by people who wished to destroy them; war was essentially crisis management. In Book I, section XVI (covering the year 715) of his *History of Rome* Livy wrote:

"Proculus Julius, a person whose testimony, as we are told, deserved respect in any case, even of the greatest importance, while the public were full of grief for the king, and of displeasure against the senators, came out into an assembly of the people, and said, 'Romans, yesterday at the dawn of day, Romulus, the parent of this, our city, descending suddenly from heaven, appeared before me; and when, seized with horror, I stood in a worshiping posture

and addressed him with prayers that I might be allowed to behold him without being guilty of impiety, 'Go,' said he, 'tell the Romans that it is the will of the gods that my Rome should be the metropolis of the world. Let them therefore cultivate the arts of war; and be assured, and hand this assurance down to posterity, that no human power is able to withstand the Roman arms.' After these words, he went up, and vanished from my sight."

This is surely a myth (Livy tended to put fanciful speeches into the mouths of historical people), but it illustrates the importance of war to the Romans. Much of the identity of ancient Rome and its people centered around the army.

In the first sixty years of the Republic, Rome fought with Sabines, Latins, and a coalition of Etruscan cities and disaffected Roman exiles led by Tarquinius Superbus. To cope with these emergencies, the Senate twice temporarily suspended civil liberties and elected a dictator for a term of one year with authority superior to that of the consuls. This was a strategy that Rome would adopt several times during the life of the Republic in the face of grave circumstances. The first ten years according to Livy:

503 BCE—"The next consuls were Marcus Valerius and Publius Postumius. During this year, war was carried on, with success, against the Sabines, and the Consuls had the honor of a triumph."
[a great public celebration honoring the conquering general]

502 BCE—subdued the Sabines.

501 BCE—fought the Auruncians with great slaughter.

500 BCE—fought the Auruncians again, defeated, then triumphed in the third battle, destroyed the town, and sold the people and land at auction.

499 BCE—under threat of attack by Sabines and a coalition of cities led by Tarquinius Superbus, Titus Lartius elected dictator.

498 BCE—still under threat, Aulus Postumius elected dictator; battle ensued with Tarquinius, Latins, and disaffected Roman exiles; Rome prevailed after considerable doubt as to the outcome.

Only Roman citizens who held property could serve in the army, which was not a standing force during the monarchy and early Republic, but closer to what is called a militia. Soldiers were called to duty only when necessary, were unpaid, and supplied themselves with armor and weapons. Rank was given according to wealth under the assumption that those with the most to lose should have the greatest authority. The wealthiest supplied themselves with their own horses and formed the cavalry while others served as infantry. The army was organized according to curiae into centuries of 80 soldiers and 20 officers of various rank each, and during major conflict in the early years of the Republic, the army center was formed into phalanx in the Greek hoplite fashion, which was a standard military formation of that time. The left and right wings were composed of the least wealthy soldiers bearing swords and shields or simply slings. The organization into centuries sometimes permitted greater maneuverability than the

Greek phalanx and were more flexible for small raids. A Legion was composed of 30 centuries of infantry and 10 of cavalry.

Because soldiers of the early Republic were unpaid and plunder often sparse, plebeian soldiers frequently accrued debt during their absence while at war and suffered the punishment of debtors. This created an intense disagreement between the plebeian debtors and patrician debt holders. In 494, while the city was threatened by war with two neighbors, plebeian soldiers seceded to the Sacred Mount, a hill outside of Rome, and refused to march against the enemy. The patrician Senate resolved the impasse by passing a law that gave the plebeians the right to elect their own officials, called 'tribunes of the people' (different from the military rank of tribune), to protect the interests of the plebeians. The people then went back to war. The freedom of Roman commoners to successfully engage in such confrontations with the ruling class is partly what made Roman citizenship so precious.

The law's key provisions that convinced the plebeians to return to war was the power and authority given to the tribunes. Citizens could appeal the decisions of magistrates to any tribune of the people, who would then be obliged to determine the legality of the action before a magistrate could proceed. This power also allowed the tribunes to forbid, or veto, any act of the senate or other assembly. Only a dictator was exempt from the tribunes' powers. Tribunes were sacrosanct (not to be physically harmed), and the entire body of the plebeians were pledged to protect the tribunes against any interference in their duties or assault on their persons during their terms of office. Anyone who violated the sacrosanctity of the tribunes could be killed without penalty. The tribunes of the plebs had the power to convene a plebeian assembly and propose legislation before it. Only one of the tribunes at a time could preside over this assembly, which initially had the power to pass laws affecting only the plebeians. After 287, the decrees of the plebeian assembly had the effect of law over all Roman citizens. Eventually, the plebeian tribunes could also convene and propose legislation before the Senate.

Because tribunes, like other officials, were not paid, they usually came from wealthy plebeian families just as other government officials usually came from wealthy patrician families. Slowly, as centuries passed, the tribunes became more aligned with the patricians than the plebeians because tribunes and patricians shared an interest in wealth.

For the first sixty years after its birth, the Republic faced almost constant threats to its existence from the neighboring city-states until the Battle of Corbione in 446 gave them respite. Then for 50 years, Rome experienced a relative peace that was interrupted only by brief skirmishes. This brief peace ended with the Roman defeat by the Gauls at the Battle of Allia sometime during the period between 390 and 387, the exact date unknown. The Gauls went on to sack the city. Rome would not be sacked again until the Visigoth Alaric entered it in 410 CE. During the 350 years after the Battle of Allia, the Republic subdued those hostile to it either

through force of arms or by alliance until it became master of Italy by 270, of Spain by 190, Greece by 140, and much of north Africa by 70.

Sometimes Rome lost battles, but they were undeterred. For example, when the Greek colonies in southern Italy felt threatened by Rome in 281, the colonies asked for help from Pyrrhus of Epirus, a territory separating modern Greece and Albania. Pyrrhus came to their aid and won several battles, but Rome was relentless in spite of defeat, inflicting such heavy losses on Pyrrhus that he eventually gave up on the campaign. This is the source of the term 'Pyrrhic victory', one in which the victor suffers so grievously that it can no longer continue the war. Pyrrhic victories occur when a tactically capable commander incorrectly estimates either his own strategic capacity to wage war or the willingness of his adversaries to sustain casualties. Hannibal would face the same intractable Rome a hundred years later. Perhaps part of Rome's success was derived from the power and freedom the commoners held that made them feel so strongly for their city.

After Pyrrhus, the only impediment to Rome's domination of the known world was the master tactician Hannibal the Carthaginian. Hannibal crossed the Alps and entered Roman Italy in 218. An early minor victory at Ticinus encouraged the Gauls and Ligurians in the area to join him. He then inflicted major defeats on consuls Tiberius Sempronius Longus at Trebia (218), Gaius Flaminus at Lake Trasimenus (217), and on consuls Gaius Terentius Varro and Lucius Aemilius Paullus at Cannae (215), which was one of the bloodiest battles in all of human history in terms of the number of lives lost in a single day. After Cannae, Hannibal's cavalry commander, Maharbal, urged him to press on to Rome, but Hannibal chose not to because his army was exhausted and he had no siege engines. Apparently, he had no engineers in his army capable of building any. His reluctance to press on to Rome prompted Maharbal to famously say, "Hannibal, you know how to gain a victory, but not how to use one." The quotation is certainly another of Livy's fabrications, although history tells us that, though tactically gifted, Hannibal was not as gifted with the capacity for strategic thought. After Cannae, the Romans declined to meet Hannibal in another pitched battle, opting instead for a strategy of harassment and guerilla warfare, perhaps the first in recorded history.

In 208, the Carthaginian government sent Hannibal's brother, Hasdrubal Barca, to reinforce Hannibal in Italy, but the Roman consuls Claudius Nero and Marcus Livius defeated Hasdrubal at Metaurus. Claudius Nero had Hasdrubal's head severed, taken south, and thrown into Hannibal's camp as a token of Roman defiance. Unfortunately, the only way to prevail against such a defiant, obdurate foe such as the Romans is to slay them to the last man, which is a distasteful, uncivilized prospect. In 204, Publius Cornelius Scipio Africanus sailed to Africa and threatened Carthage, which brought Hannibal back from Italy. In 202, Scipio defeated Hannibal at Zama, near the north African coast, thus ending the last major obstacle to Roman ascendancy.

In 107 Gaius Marius was elected consul for his first of an unprecedented seven times. Since its founding, Rome had drawn its soldiers from only the

Temple of Saturn

The ruins of the temple stand at the foot of the Capitoline Hill in the western end of the Forum Romanum.



land-holding citizenry. However, Marius was in the position of needing more soldiers than this historic source enabled, so he simply ignored the requirement for land ownership and opened recruitment to the unlanded poor. He also used public funds to pay the soldiers and to equip his new recruits because the poor could not afford to supply themselves with armament. The poor were required to serve for 16 years (later, 20 years) instead of the previous tradition of a short term that encompassed only the current threat as is common for a militia. Thus, the army was transformed into a paid, professional, standing force and became a way for the poor to find long-term employment. After their term of enlistment was over, these professional soldiers were given a pension and a plot of land in a conquered province for their retirement. Allies who served this term of enlistment were also given full Roman citizenship.

These reforms created a professional, standing army that served Rome well for hundreds of years. However, they also created an army that was less faithful to Rome than to its commander who could lead it to victory and booty. The military reforms of Marius made dissolution of the Republic and rise of the Empire inevitable because there would surely come a time when a consul would refuse to yield his power and, backed by an army faithful to him alone, would declare himself consul for life essentially, emperor. Such a consul was Gaius Julius Caesar.

As mentioned before, Rome was intimately associated with ancient Greece because Greeks had settled among the peoples who raised the city out of the swamps of the Tiber. Like the Greeks, Romans had twelve major deities (the Dii Consentes) each of which corresponded to one of the twelve major Greek deities; only the names were different. The Romans regarded *Jupiter* to be king of the gods and considered him the equivalent of the Greek *Zeus*. Both had the lightening bolt as their symbol. *Juno* was *Jupiter*'s sister and wife just as *Hera* was sister and wife of *Zeus*. And so the equivalences continued throughout the Roman and Greek pantheons (e.g., *Jupiter/Zeus*, *Juno/Hera*, *Neptune/Poseidon*, *Minerva/Athena*, *Mars/Ares*, *Venus/Aphrodite*, *Apollo/Apollo*, *Diana/Artemis*, *Vulcan/Hephaestus*, *Vesta/Hestia*, *Mercury/Hermes*, *Ceres/Demeter*). Like the Greeks, Romans viewed their gods as fully human in appearance.

Temple of Vesta

Legend says that Numa Pompilius built the original temple. It was reconstructed twice after major fires in the city destroyed it. Romans believed that the Sacred fire of Vesta was closely tied to the fortunes of the city and viewed its extinction as a portent of disaster. In 1549 of the current era the building was completely demolished and its marble reused in churches and papal palaces. The section standing today was reconstructed in the 1930s.



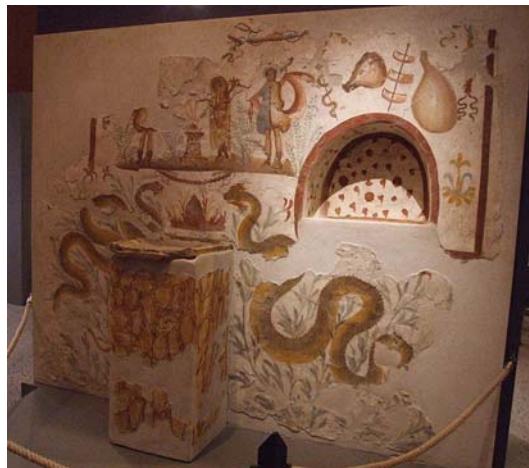
Rome had other gods besides the “big twelve” of the Dii Consentes, although the degree to which they were actually worshiped is unknown. Some, such as *Caelus*, were specific Roman counterparts to Greek gods, *Caelus* being *Uranus*’ counterpart. *Tellus*, or *Terra Mater* (‘Mother Earth’), was a goddess of the earth whose Greek counterpart was *Gaea*; to the Etruscans she was *Cel*.

Saturn was sometimes equated to *Cronus*, and the Greek myth about *Cronus* and *Zeus* was adapted to *Saturn* and *Jupiter*. One myth of his early persona regarded him as an immigrant from Greece where he had been usurped by his son *Jupiter* and expelled from Greece, bringing agriculture and civilization to Latium, for which he was rewarded by *Janus* with a share of the kingdom. This obviously combines the myth of *Cronus* and *Zeus* with that of *Aeneas*. A temple to *Saturn* was consecrated at the base of the Capitoline Hill, called *Saturnius Mons* at the time, in 497, and eight columns of the last rebuilding of the god’s dwelling still stand. Sacrifices to *Saturn* were performed with the head uncovered in the Greek manner, in contrast to those of other major Roman deities, which were performed with the head covered. The major religious festival of *Saturnalia* was associated with *Saturn*. This festival ran from December 17 to December 23 and celebrated, among other things, sowing and the harvest.

Vesta, the goddess of the hearth, home, and family, was probably the most assiduously worshiped deity in the Roman pantheon. Her presence was symbolized by the sacred fire that burned at the hearth at her temple. Dionysius of Halicarnassus wrote that Romans considered *Vesta*’s sacred fire as symbolic of Rome itself, and tragedy would come to Rome if it ever went out: “There are many indications, it seems, when a priestess is not performing her holy functions with purity, but the principal one is the extinction of the fire, which the Romans dread above all misfortunes, looking upon it, from whatever cause it proceeds, as an omen that portends the destruction of the city;”

Lararium at the House of the Vettii, Pompeii

Two figures representing lares, each holding a rhyton drinking flask, flank an ancestor genius of the household who holds a libation bowl and incense box, his head covered as if for sacrifice. A snake, associated with the land's fertility and, thus, prosperity, approaches a low, laden altar.



Vesta was the only deity with a full-time priesthood; six priestesses (originally four) were dedicated to her worship and to tending the eternal, sacred fire. These priestesses were virgins and had to remain so for their thirty years of service. Again, Dionysius wrote: "And they very reasonably argue that the custody of the fire was committed to virgins, rather than to men, because fire is incorrupt and a virgin is undefiled, and the most chaste of mortal things must be agreeable to the purest of those that are divine." Chaste priestesses who devote their lives to worship has been revived by modern Hindu and Catholic nuns. Vestal virgins who allowed themselves to be defiled were sealed alive in an underground chamber amid a funerary ritual and left to die of thirst. The people regularly worshiped *Vesta* at meal times by throwing bits of food into the fire in the household hearth, which is a ritual echoed in Hinduism.

Janus was the god of beginnings and transitions and, thereby, of gates, doors, doorways, passages, and endings. He is usually symbolized as having two faces looking in opposite directions, because he looks both to the future and to the past. His patronage over beginnings made observations of *Janus* the first ritual during worship of nearly all other gods. Because he guarded the doorway and, by extension, the home, *Janus* was a popular household god. The Romans named the month of January in his honor.

Lares, or *Lases*, were guardian deities whose origin is uncertain, although an Etruscan influence is possible. They were believed to protect everything within the boundaries of their location. *Lares* statues were at the table during family meals, their presence and blessing sought at all important family events. Thus, they are sometimes categorized as household gods, although the city of Rome was protected by a *Lar* that was housed in a shrine on the City's ancient, sacred boundary. Offerings to domestic *Lares* could include incense, honey cakes, honeycombs, fruits, wine, and garlands of grain.

The *Penates* guarded the household's food, wine, oil, and other supplies. As with *Vesta*, the family threw a bit of food into the fire on the hearth for the *Penates* when they had a meal.

Just as the Akkadians and Assyrians had adopted Sumerian myths, substituting Akkadian/Assyrian names for the Sumerian gods, so the Romans adopted a few Greek myths, substituting Roman names for the gods. For example, the Greek myth of the abduction of *Demeter*'s daughter, *Persephone*, by *Hades* was adopted in its entirety into Roman mythology with the names changed to *Pluto*, *Ceres*, and her daughter, *Proserpina*. Roman myths also included stories of Rome's founding.

Many Romans considered their myths to be historical narratives even when they had miraculous or supernatural aspects. The stories were often concerned with politics and morality and how personal integrity relates to responsibility to the community or Roman state. Even stories of religious practices were concerned more with ritual, augury, and institutions than with theology. Like the Greeks, heroism was an important theme in Roman myth.

Unlike other ancient cultures, speculations on cosmology are absent from the religion of ancient Rome. Although they considered themselves to be quite religious and attributed their success to their good relationship with the gods, Romans were apparently more interested in how religion could guide and assist them with the practical matters of law and war than in esoteric matters of ultimate beginning or of good and evil. Roman philosophers in general and religious philosophers in particular followed one of the Greek schools of philosophy or translated Greek philosophers into Latin, often expanding on Greek thought as they did so.

No great original philosopher in the Greek manner appeared among the Romans until Marcus Tullius Cicero in 106 BCE, but even Cicero was concerned more with politics than the abstract themes of good and evil. After all, he lived during the time when the Republic he so cherished was in swift decline. In Cicero's time, philosophy, the soul of civilization, and science (including mathematics), the heart of civilization, as expounded by the Greeks were still preeminent, so he studied Greek schools of philosophy and applied them to politics. It's partly through Cicero that Greek philosophy was passed down to Europe of the Middle Ages because he was widely read in those times and much of the original Greek works had been lost.

Though religious philosophy itself was not a central theme in his writings, Cicero understood through his study of Greek Stoic philosophy that the gods existed, loved human beings, and rewarded or punished them according to their conduct in life. The gods have provided human beings with the gift of reason, which humans alone have in common with the gods, so the best, most virtuous, and most divine life is one lived according to reason. Thus, human beings are all meant to follow the natural law of good conduct as they perceived it (which is different from the laws of nature that control how space, time, energy, and matter interact with one another) which arises from reason. This natural law is also the source of all properly made human laws and communities. Because human beings share reason and the natural law with one another, humanity as a whole can be thought of as a kind of community, and because each of us is part of a group of

human beings with shared human laws, each of us is also part of a political community.

Thus, Roman religion was more practical than spiritual. It depended on knowledge and the correct practice of prayer, ritual, and sacrifice rather than on faith or dogma. An error in observing the proper form of a ritual would mean that a sacrifice had to be offered to *Janus* to properly end the ritual, and the ritual begun afresh. This strict observance of form is also present in early Hinduism. Romans who sought a more spiritual relationship with the gods could find it in the various Greek mystery religions.

The state religion was administered by a college of pontiffs, which was composed of the chief priest, or pontifex maximus; fifteen priests, or *flamen*, each of which was devoted exclusively to the worship of one deity; the *rex sacrorum*; and the *vestels*. The primary duty of the priests, as elsewhere in the ancient world, was to perform the rituals of sacrifice to the gods. The pontifex maximus was the chief of all the religious officials. Chosen by the pontifex maximus, the *rex sacrorum* was a patrician who performed rites that had been the tasks of the king during the regal period. Thus, the *rex sacrorum* was a prestigious position, although it had little power.

Like religions the world over have all done ever since religion was first devised, Romans placed great importance on maintaining good relations with the gods. They tried to discern the will of the gods through auspices such as augury, which is the practice of interpreting omens from the observed flight of birds. Augury was already an ancient practice in Greek and Roman times; for example, Amarna letter number EA35, which was written around 1350 BCE from the king of Alisia, or Alashiya (modern Cyprus), to the King of Egypt, mentions needing an 'eagle-conjurer'. Romans had no dedicated augurs. The same men who were elected public officials, such as Cicero (who was an augur) and Julius Caesar (who was pontifex maximus before he was elected consul), also served as augurs and priests. However, specialists such as haruspices (people who read omens in the liver of sacrifices) and oracles were available for consultation.

Offerings to the gods were made to obtain their good will, a practice that has been an integral part of religion since the ancients first conceived of the spirit world. The most potent offering was an animal sacrifice such as cattle, sheep, or pigs. As was common for sacrifices throughout the world, each had to be the best specimen of its kind. For minor occasions or routine worship, a simple libation might be offered.

Officially, the Romans considered human sacrifice loathsome. However, after the Roman defeat at Cannae two Gauls and two Greeks were buried alive in a stone chamber under the Forum Boarium, a cattle market place. Perhaps the Romans could believe that this was not human sacrifice because their subsequent deaths could be attributed to the gods; human beings can rationalize anything that might give them an advantage. Some modern researchers suggest that gladiatorial combat was a form of human sacrifice because the events were sometimes dedicated to a god.

Romans divined the auspices before every event such as a meeting of the Senate or a battle to determine if it was an auspicious time to act. An

anecdote recorded by Valerius Maximus, Suetonius, and Cicero describes the dire consequences of disregarding an unfavorable omen. In 249 BCE, the early days of Rome's war against Carthage, consul Publius Claudius Pulcher launched a sea campaign even though the sacred chickens would not eat their offered feed when he took the auspices. Claudius threw them into the sea in defiance of the omen "saying that they might drink, since they would not eat". He was soundly defeated in the naval battle. Whether or not Claudius actually defied the auspice, its place in Roman legend illustrates the high regard they held for the practice. Livy stresses the importance of the augurs: "Who does not know that this city was founded only after taking the auspices, that everything in war and in peace, at home and abroad, was done only after taking the auspices?"

The primary thrust of the religion of ancient Rome was the acquisition of advantage over their enemies by gaining favor of the gods. Of course, throughout the history of the human race, people have often turned to the gods to gain advantage in the fight to survive, but few have pursued the favor of the gods for such obvious self interest as vigorously as the Romans. There's really nothing wrong with this practice; it's simply an expression of the instinct for self preservation.

The Americas

Much less is known about the culture of ancient native Americans than those of the Mediterranean peoples. Native North Americans never developed a written language, and the Olmec, Zapotec, and Maya of Mesoamerica (Central America) devised indigenous writing systems only during the last centuries before the current era. Mesoamerica is one of only four places on Earth (the others being Egypt, Mesopotamia, and China) where writing systems developed without the concept of writing being imported from elsewhere. But Mesoamericans didn't develop portable writing media to record knowledge of their civilization for others or for posterity; their writing was done mainly on caves, stelae, and temples. However, they did make accordion-folded books from tree bark and placed them in royal tombs like the Egyptians of earlier eons had. Unfortunately, many of these books did not survive the humidity of the tropics or the invasion of the Spanish, who regarded the symbolic writing as the work of the devil.

Between 45,000 and 12,000, extensive glaciation locked vast amounts of water in ice sheets on land, which lowered the sea level to such an extent that a land bridge, called Beringia, existed between Siberia and Alaska, allowing animals and humans to pass from Eurasia to the Americas. Neither the date nor number of people involved in the migration are known with any degree of certainty, but paleontologists generally understand that the migration began around 25,000 and that the number of immigrants must have been sufficient for a stable gene pool to exist. They slowly spread throughout North and South America, reaching Monte Verde in southern Chile by around 12,800.

Considerable uncertainty exists concerning the route by which the emigrants moved south from Beringia. One route is inland along a corridor



Mesoamerica before the Spanish

Native homelands and some prominent cities of Mesoamerica before the Spanish arrived.

between the Cordilleran ice sheet, which lay between the North American Continental Divide and the Pacific Ocean, and the vast Laurentide ice sheet that covered the entire eastern portion of Canada down into northern United States. These two ice sheets plowing through the earth lifted up between them a region in southwestern Saskatchewan and southeastern Alberta known as Cypress Hills, creating a relatively ice-free corridor for a little way and a possible inland route southwards.

The other route is by water craft along the western coasts of the American continents. Discovery of the Arlington Springs Man, who is dated at approximately 11,000, on current-day Santa Rosa Island, California, lends support to the coastal migration route. The coastal route is also the best explanation for evidence of human habitation reaching as far south as Monte Verde in southern Chile by 12,800. One scenario suggests that two waves of emigration entered North America from Siberia: the first took the coastal route beginning around 17,000, and the second took the inland route sometime after 13,500. Both routes were probably used.

For thousands of years, these emigrants, like their contemporaries throughout the rest of the world, lived as hunter-gatherers, thriving largely on megafauna, such as the American mastodon (*Mammut americanum*), stagmoose (*Cervalces scotti*), and shrubox (*Euceratherium collinum*), that were indigenous or had migrated with them.

For reasons unknown, these 'indigenous' American cultures lagged behind Eurasians in the development of 'advanced' philosophy and technology such that, when Europeans landed on the shores of the New World, indigenous Americans were still essentially neolithic cultures. They had developed metalworking that relied on finding native metals (nuggets) of gold and copper, but they could not smelt metals from ores, which is a much more difficult process than simply purifying native metal, although

some ores are richer and more easily smelted than others. Thus, they could produce only small amounts of metal, and trinkets of gold and copper were reserved for the wealthy and powerful as symbols of their status. Nor had they discovered the wheel. Of course, depending on the criteria of goodness one chooses, the advanced Eurasian technologies have been either a great boon to *Homo sapiens*, an unmitigated world-wide disaster, or both.

North American natives never developed a written language, so our understanding of their early civilization is limited to what can be deduced from legends and archeology. Because Mesoamericans developed writing, we have a better understanding of their early civilizations.

Between 2000 and 400 the Olmecs inhabited the tropical gulf coast lowlands in what is now the Mexican states of Veracruz and Tabasco, developing the first complex civilization in Mesoamerica. This early civilization is generally considered to be the seed from which the Maya, Toltec, and Aztec cultures grew. Around 700, the Zapotecs built small farming villages in the central valleys of what is now the Pacific coast region of Oaxaca just west of and adjacent to the Olmec region. Except for the neighborhood around Tres Zapotes, where an Epi-Olmec culture remained to form the transition between Olmec and Mayan cultures, the Olmecs disappeared from history around 400 at which time their center of La Venta lay abandoned while the Zapotecs built their largest city, Monte Alban. Perhaps the Olmecs were subsumed both culturally and genetically into the Maya. During the Epi-Olmec period, Olmec population centers decreased but technological advances such as a calendar and a nascent writing system appeared. The Olmecs are credited with many Mesoamerican firsts, including bloodletting and, perhaps, human sacrifice; the number zero and the Mesoamerican calendar; rubber and the Mesoamerican ball game.

The Olmecs developed a set of symbols (dots and dashes) and a positional number system for counting that became common usage throughout Mesoamerica, although the Aztecs altered the system somewhat. They used this system, with slight modification, in their calendar to count the number of days that had passed since the world's mythical creation date, which corresponds to 11 August 3114 BCE in the Gregorian calendar.

Like all positional number systems, their system employed a number string that consisted of a number from the base group, (their base was 20; the Sumerians used 60), followed by a number that was the sum of the base groups in the tally, followed by a number that was the sum of super groups (groups of base groups), and so forth. In positional number systems, maintaining a precise position for the numbers in the string is vital to its accurate record of the tally. Modern Western societies count using the same positional system, but with a base of 10 (the decimal system). In the modern decimal system, for example, the number string 437 corresponds to a tally of things that totals seven in the base group position, plus a sum of three base groups of ten each, plus a sum of four super groups (ten groups of ten) of one hundred each. Because the position in the number string is vital to the correct tally, a symbol is needed as a place holder in the string if the tally included none of a particular group or super group. Mod-

$$\begin{array}{r}
 \times 8000 \quad \square \\
 \times 400 \quad \text{dots} \\
 \times 20 \quad \text{eye} \\
 \times 1 \quad \text{dot} \\
 \end{array}
 \left. \right\} = 4806$$

$$\begin{array}{r}
 \times 8000 \quad \bullet \\
 \times 400 \quad \text{dots} \\
 \times 20 \quad \text{eye} \\
 \times 1 \quad \text{dot} \\
 \end{array}
 \left. \right\} = 10651$$

$$\begin{array}{r}
 \times 8000 \quad \square \\
 \times 400 \quad \text{dash} \\
 \times 20 \quad \text{eye} \\
 \times 1 \quad \text{dot} \\
 \end{array}
 \left. \right\} = 2016$$

	•	••	•••	••••	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The Mayan Number System

The Maya adopted the Olmec base-20 number system, and the Aztec copied the Mayan system but deleted the dash symbol for groups of five. The sea shell was the symbol for zero. However, the counting system was altered slightly when used to calculate calendar dates: a maximum of eighteen base groups were used instead of twenty because a year has only 365 days, making counting beyond 365 (eighteen base groups) unnecessary.

ern Western societies use the symbol “0”, but the Meso-americans used a sea shell for that symbol.

Thus, the Olmecs independently discovered the concept of zero using the symbol of a sea shell to represent the concept of nothing. The Babylonians had used a symbol to represent nothing (zero) centuries earlier. It wasn't until several centuries into the current era that a mathematician in India recognized that the zero symbol is not only important as a place holder in positional number systems but is also significant in arithmetic calculations.

The Olmecs discovered that latex of the *Castilla elastica* tree, when mixed with the juice of a species of morning glory, would make rubber, from which they made balls. A dozen rubber balls were found in the Olmec El Manati sacrificial bog and dated to roughly 1600. A ball game that the Olmecs devised using these rubber balls and a long, narrow court became extraordinarily widespread throughout Mesoamerica and northern South America. The exact nature of the game is still unknown, although it involved passing a solid rubber ball approximately the size of a soccer ball back and forth with their hips.

Like most primitive religions, the Olmecs believed reality to be composed of a place in the sky where the gods lived; a physical realm where people, animals, and plants lived; and an underworld. They had priests and shamans who acted as intermediaries between the common people and their gods. Human bones (particularly of infants) have been found at some sites, suggesting they practiced human sacrifice, which was important and widespread among the later Maya, Aztec, and other Mesoamerican cultures.

Anthropologists generally agree that the ruler had an important part to play in religious rituals such as bloodletting in order to reinforce the notion that his rule was sanctioned by the gods. Unlike other ancient religions, Olmec gods were not pictured as strictly anthropomorphic; many, such as the bird monster and the feathered serpent, were rather fanciful. Certain natu-

ral and man-made places, such as caves, rivers, mountain tops, plazas, and ball courts, were considered sacred. Although no buildings easily identifiable as a temple have been found, several raised platforms that were probably temple bases have been discovered.

There is strong evidence that the Olmec had a shaman class. Later Mesoamerican cultures, which derived from the Olmec, had full-time priests who acted as intermediaries between the common people and the gods. Bones of toads with hallucinogenic properties have been found at Olmec sites, suggesting that mind altering drugs were used by shamans in various rituals. Olmec rulers probably served as shamans as well as rulers because they were considered to be divinely selected and, thus, have a special relationship with the gods.

For centuries throughout ancient Mesoamerica, bloodletting was a ritual that had religious and cultural significance to their societies, as opposed to its use as a medical procedure in ancient Egypt, Greece, Rome, and in medieval Europe and early America.

Anthropologists have proposed a Continuity Hypothesis, which suggests that, although the Olmecs themselves disappeared from history, their influence lives on in subsequent cultures such as the Maya, Zapotecs, and Aztecs, all of whom have living descendants. Currently living Maya descendants form sizable populations throughout the part of Mexico that was the Maya region of centuries ago, and they maintain a distinctive set of traditions and beliefs that reflect the merger of pre-Columbian ideas and culture with those of the post-conquest Spanish. Millions of people still speak Mayan languages, and many speak them exclusively. The Maya developed the only known fully written language of the ancient Americas as well as mathematical and astronomical systems, all based on Olmec precursors.

The Mayan civilization began in earnest during the Mesoamerican pre-classic period, which is defined to have run between 2000 BCE and 250 CE, although Maya occupation at Cuello, Belize has been carbon dated to around 2500 BCE. Thus, in its beginning, the Mayan culture overlapped that of the Olmecs. Like other places the world over, the earliest Maya were probably scattered bands of hunter gatherers who gradually developed a sedentary agrarian life style; theirs featured maize rather than wheat as its principle crop.

At first, the various bands probably kept in casual contact with one another and with the Olmecs, each learning from the others ways to survive and be successful such that, by 1000 BCE or so, they had established perhaps 40 or 50 villages and small cities throughout what is now Guatemala, Belize, and the Yucatan. Doubtless, like wherever else humans congregated the world over, their alpha drive then began to take over, and they warred with the Olmecs and among themselves for supremacy as evidenced by mass graves of decapitated individuals, assumed to be enemies. Treatment of captured warriors in Mesoamerica was harsh.

Several Mayan city-states in succession became locally dominant, La Blanca on the Pacific coast of Guatemala around 900 BCE and Kaminaljuyu,

which is within modern Guatemala City, around 400 BCE. During this period, the Olmec culture reached its zenith, centered around the capital of La Venta in modern day Tabasco near the early Maya centers in the Yucatan. The Maya adopted aspects of Olmec culture such as religion, writing, the ball game, and the calendar and developed them more fully, but whether this involved violent conquest or peaceful interaction remains a topic of debate. As is common in such situations, the relationship probably was a little of both. Excavations of the Mayan city-state of Kaminaljuyu have yielded stelae depicting rulers in warrior dress decapitating kneeling enemy.

Archeology has revealed a systematic decline in new construction and an abandonment of major Mayan cities such as Kaminaljuyu and El Mirador around 100 CE. This is usually called the preclassic collapse, although the term "collapse" is probably overstating the severity; "hiatus" might be a more descriptive term because many Maya cities reached their highest state of development during the classic period (which is defined to have run between 250 CE and 900 CE), after the Olmecs disappeared. During this period, Mayan population probably numbered in the millions. They created many kingdoms and small empires, built monumental palaces and temples, engaged in highly developed ceremonies, and developed an elaborate hieroglyphic writing system.

The number of new large building projects began to decline around 750 CE until, by 900 CE, no new ones at all were undertaken, and some population centers disappeared, although, independent Maya centers such as those at Chichén Itzá, Mayapán, and Uxmal continued after this decline. The Maya were never again the dominant Mesoamerican power they had been. However, they remained largely independent until 1697 CE when the Spanish finally conquered the last holdout, Nojpetén.

The cause of this final decline is unknown. Perhaps the most favored proximate cause is drought just as in the eastern Mediterranean terminal Bronze Age crisis of 1200 to 1000 BCE. Two articles published in 2014 issues of *Science* describe evidence of extensive drought that occurred in Mesoamerica around the 700 CE to 900 CE time frame, but whether the drought was caused by natural oscillations in el Niño, by overpopulation, or by extensive deforestation in favor of planted crops to support the large population is a topic of debate. Thus, the ultimate cause is still an open question. Doubtless, the Maya fought the drought by appeals to the rain god, *Chac*.

Mayan religion was characterized by the worship of nature gods (especially the gods of sun, rain, and corn), a priestly class, the importance of astronomy and astrology, sacrifice rituals, and the building of elaborate pyramid temples. What little we know of Mayan religion comes mainly from three codices (handwritten books) that had escaped both the ravages of the hot, humid climate and zealous Spanish Catholic priests, who burned most of them as works of the devil, and are stored in three museum libraries: Dresden, Madrid, and Paris. These three codices were written shortly before the Spanish arrived, long after the Mayan decline, and their content



Excerpt from the *Paris Codex*, Page 5

This excerpt contains several characters, technically called glyphs, of Mayan script. The script was exceptionally difficult to decipher because it was not consistent in the sense of having a single method of representing information. Some glyphs represent whole words whereas others represent syllables.

is brief. Thus, the completeness with which they describe Mayan religion of earlier times is speculative.

A significant portion of the three codices recorded studies on the motions of the Sun, Moon, and planets, but for the Maya, these astronomical observations simply supported astrological interpretations. They were used to predict lucky and unlucky days, the best time to plant crops, and the most favorable time to go to war. The *Dresden Codex* also includes prophecies for coming days and years and instructions on rituals, particularly those involving the Maya New Year, which was an important event in their religion. The *Madrid Codex* is the longest of the surviving Maya codices. It consists primarily of almanacs and horoscopes that helped priests in their ceremonies and divination rituals, and like the *Dresden Codex*, it contains astronomical tables, although fewer than in the other two surviving Maya codices. The *Paris Codex* contains information on astronomy, history, gods and spirits, weather, and cycles of the calendar, for the Maya believed that time was cyclical: what had happened in the past could be used to predict the future. The *Paris Codex* is unique among the surviving codices because it includes historical information and describes Maya astronomical constellations. Bruce Love, Director of Archaeological Research at the University of California Riverside, has done an exhaustive study of the *Paris Codex* and believes it was a 'handbook' for Maya priests, helping them interpret the interactions between celestial objects, gods, mankind, and the calendar.

The Maya kept several calendars, and many Maya still follow them. The two basic calendars are the solar-based Haab' of 365 days divided into 18

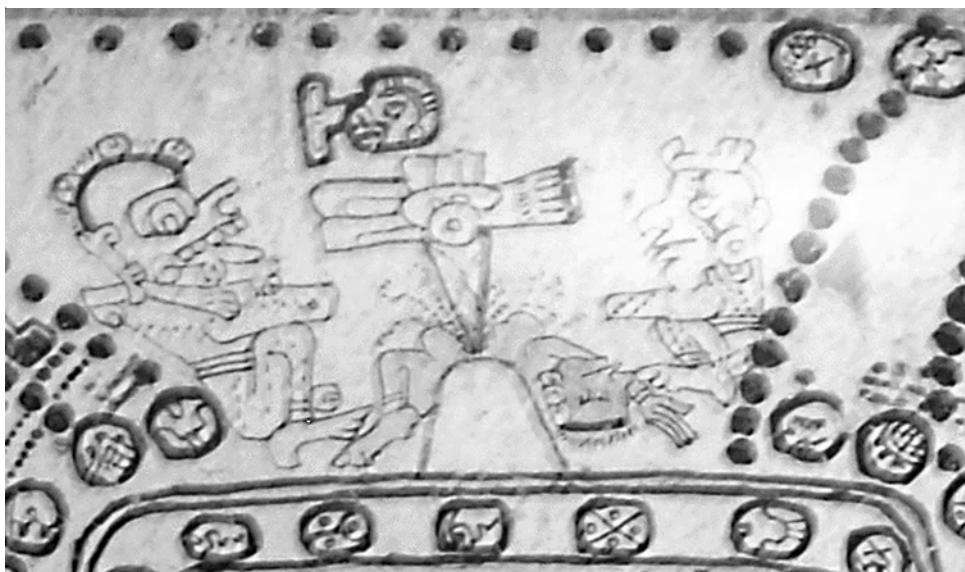
months of 20 days each plus an additional month of 5 days called the Wayeb', or Uayeb that were not part of the calendar. The second calendar was a 260-day sacred calendar divided into 13 months of 20 days each known to scholars as the Tzolkin (tonalpohualli in Aztec). Noted Maya anthropologist J. Eric Thompson wrote that the Maya knew of the drift between the Haab' and the solar year and that they made "calculations as to the rate at which the error accumulated, but these were merely noted as corrections; they were not used to change the calendar." The use of 20-day months is consistent with their base-20 counting system. The Haab' and Tzolkin are combined to form a Calendar Round which begins when the first day of both calendars fall on the same day. The cyclic Tzolkin then runs parallel with the cyclic Haab', and the Haab' and Tzolkin cycles grow out of sync making the Calendar Round months different combinations of Tzolkin and Haab' months. Because both the Haab' and Tzolkin months are 20 days long, the first day of each month in all three calendars always falls on the same day. The Haab' and Tzolkin cycles come back in sync after 18,980 days, or 52 Haab' years, at which time the calendar repeats. This, then, is the Calendar Round cycle.

The Maya also maintained a Long Count Calendar, which is a count of the number of days since the day of the current creation in the mythical "universal cycle". The Mayans believed that the universe is destroyed and then recreated at the start of each universal cycle. This is similar to the Hindu cycle of creation, maintenance, and destruction as represented by the Hindu gods Brahma, Vishnu, and Shiva, respectively. Each Mayan Long Count cycle lasts 2,880,000 days (about 7885 solar years). The creation date of the cycle in which the Maya live is equivalent to 11 August 3114 BCE in the Gregorian calendar, and that cycle ended on 21 December 2012 CE. Thus, the world should have been destroyed and recreated on that date.

Like other complex cultures, the Maya had a cadre of priests who were the intermediaries between the people and their gods and who performed rituals necessary for this mediation. Most information on Mayan religion addresses priestly rituals; little information exists on other duties priests might have such as advising the ruler or instructing the populace. The daily worship rituals of the common people are an almost complete mystery.

Like ancient cultures the world over, the Maya believed offering sacrifices to the gods helped to gain their favor, and animal sacrifice was the most common. However, human sacrifice became important for celebrating important joyous events such as the new year or the installation of a new ruler as well as for warding off calamitous events such as drought and famine. Human sacrifice probably became more common during the Mayan decline.

Blood was considered to be the most important part of any sacrifice, and ritual bloodletting from the living was an important part of Mayan life. After all, if infection and death can be avoided, the living are a never ending source of blood. The blood was often smeared on a representation of the



Sacrifice by Heart Extraction

An excerpt from page 76 of the *Madrid Codex* illustrating sacrifice by heart extraction. The Maya were probably the first to use the method, but the Aztecs used it much more frequently. The ritual was usually performed in a temple at the top of a pyramid in plain view of the people. The victim was held down on a convex rock table to give the priest easy access to the chest. In the Aztec ritual, the corpse was then thrown down the pyramid to assistant priests on the ground who flayed it so the head priest could wear the skin as he danced.

god. The three anatomical places commonly used for bloodletting were the ear, tongue, and foreskin of the penis. Travelers would sometimes ensure a safe and prosperous journey by nicking their ear and smearing the blood on shrines that were placed along the way. The most common instruments for drawing blood was a flint or obsidian blade or a stingray spine. David Joralemon of Yale University in a paper delivered during the 14-22 December 1973 conference in Chiapas on the art, iconography, and dynastic history of Palenque, Mexico, wrote, "Students of ancient Mexican religion have long recognized that the offering of human blood to gods and other supernatural beings was the central act of religious life of all Mesoamerican peoples." Joralemon went on to say, "It is virtually certain that blood drawn from the sexual organs was [considered by the Maya to be] more sacred and potent than blood drawn from any other part of the body."

Human sacrifice was performed by decapitation, shooting the sacrificial victim with arrows, casting the victim into a water-filled sacred sinkhole, and the infamous heart extraction in which a priest would cut open the chest of a living victim and pull out his still-beating heart. Heart extraction is illustrated in the *Madrid Codex* and on vases. Sometimes the heart extraction victim would be flayed, and the priest would wear the skin while performing a ritual dance. Faith has the power to silence reason and then

drag us to places we'd best not go, and with their reason mute, people who have fallen victim to the dark side of faith have no way to know their soul's peril.

Like other cultures that practiced human sacrifice, the Maya left no record of priests volunteering to be sacrificed.

As the Maya declined, the Toltecs, originally centered at Culhuacan, rose to replace them as the dominant Mesoamerican culture, although their supremacy lasted only between 900 CE and 1150 CE. During the ninth century CE, the Tolteca people migrated from the deserts of the northwest to Culhuacan in the Valley of Mexico, which is a highlands plateau containing modern Mexico City. The Valley of Mexico was originally the home of several local tribes who, like the Olmecs and Maya, had progressed from roving hunter gatherers to sedentary farmers such that, between 1700 BCE and 1250 BCE, several villages began to appear. By the time the Toltecs came into the area, numerous villages and small cities had grown up around five interconnected lakes in the valley, the largest being Lake Texcoco. Lake Texcoco and its interconnected lakes were shallow, endorheic lakes, which are ones that have no outflow to the oceans, their water loss being solely by evaporation. Consequently, the lakes gradually became brackish.

Nearly all we know about the Toltecs comes from Aztec legends. They're assumed to have spoken a Nahuatl language similar to that of the Aztecs (the *Encyclopedia Britannica* calls them a "Nahuatl speaking tribe") and, perhaps, to have had a written language, but nothing of their spoken or written language has survived. Thus, they left no record of themselves. The Aztecs considered them to be the epitome of civilized culture, respected them as "men of knowledge", and considered themselves related to the Toltecs. The word Toltec is said to come from the Nahuatl language of that area and means 'master builder' or 'artist'. The Toltecs were ingrained in the Aztec psyche almost to the point of myth, like some sort of Atlantis, although unlike Atlantis, the Toltecs left a small archeological legacy. They were thought to have been masters of nature, producing huge maize crops and cotton naturally colored red, yellow, green, and blue.

Images of recognizable deities at Tollan that would later appear in the Aztec pantheon include *Centeotl*, *Xochiquetzal*, *Tlahuizcalpantecuhtli*, and the feathered serpent identified with *Quetzalcoatl*.

However, after only 250 years, the season of the Toltecs came to an end when their final capital, Tollan (now called Tula), was systematically destroyed and the remaining Toltecs fled and resettled at Chapultepec on the west banks of Lake Texcoco. The cause of the Toltec culture's disintegration is unknown, but barbarous hunter gatherers, collectively called Chichimecas, probably were the instrument of their demise. Men of knowledge are often not men of war.

Several differing accounts of events between the decline of the Toltecs and the invasion of the Spanish exist in the literature. All are based on codices written shortly after the arrival of the Spanish, each of which tells its own story and relates its own legends. Although there's no way to find

Lake Texcoco Area Circa 1519

These lakes were in the Valley of Mexico, which is currently known as Mexico City and is surrounded by mountains. This was the home of the Aztec Empire. Although Tlacopan, Texcoco, and Tenochtitlan peoples joined into the triple alliance that formed the Empire, the Mexica city of Tenochtitlan was the Empire's capitol. The exact shoreline of the lakes is unknown.



an incontrovertible time line among the various accounts, they all share a few basic events. During a 200 year span after the Toltec decline, other tribes arrived in the Valley of Mexico, and some, such as the Tepanec, spoke the Nahuatl language like the Toltecs. Many came from the same northwestern deserts from whence the Toltecs had come. The last immigrants arrived sometime around 1250 CE.

This new tribe didn't call themselves 'Aztec'; they called themselves 'Mexica'. The *Encyclopedia Britannica* says, "The Aztec referred to themselves as Culhua Mexica, to link themselves with Colhuacan, the centre of the most civilized people of the Valley of Mexico." None of the various codices written by the natives or memoirs written by the Spanish at the time of the conquest use the term 'Aztec'. It was apparently first used by Francisco Javier Clavijero in his *La Historia Antigua de México* (Ancient History of Mexico), which was first published in 1780. According to Nahuatl legends, the Mexica had left a place to the northwest called Aztlan and came to what is now called the Valley of Mexico. The term 'Aztec' means 'someone from Aztlan'. The location of Aztlan has been lost to history, and the place might be mythical.

The Tepanec tribe was probably one of the first to arrive, as late as 1200 CE (dates vary in the references), and soon subjugated the surrounding city-states, forming a small empire of tributary provinces centered at the city of Tlacopan on the western shore of Lake Texcoco. Around 1325 CE, the Mexica built their city, Tenochtitlan, on a small island in the lake close to the western shore not far from Tlacopan. According to myth, the god, *Huitzilopochtli*, instructed the Mexica to found their city at a place where they saw an eagle with a snake in its talons sitting on a cactus. This scene is in the center of the current Mexican flag. The Mexica apparently

saw this vision on the small island where Tenochtitlan was founded. According to their own history, when the Mexica arrived, they were considered by the other groups as the least civilized.

Perhaps the Mexica had known the Toltecs in the northwestern deserts centuries earlier; were aware that the Toltecs had migrated to the Valley of Mexico; and lured by rumors of the magnificent culture the Toltecs had created, eventually decided to follow them. But that's sheer speculation based solely on the Aztec legend that they are descended from the Toltecs and on the facts that the two peoples spoke the same language and came from the same place. No documents support the speculation, although it helps explain the near reverence with which the Aztecs viewed anything Toltec.

After the Mexica came and built Tenochtitlan on the island, they formed an alliance with the Tepanecs and the Acolhua tribe of the city of Texcoco on the eastern shore of the lake. This alliance was probably designed to eliminate the continual warfare that had been going on between the three tribes. The collection of the three tribes is what is usually called the Aztecs, and the triple alliance called the Aztec Empire. The Aztec Empire was short-lived because the Spanish came in 1519. When the Spanish came, they were able to enlist the aid of the Tlaxalteca tribe to the east of the Valley of Mexico, which was probably vital to their defeat of the Aztecs, although European diseases such as small pox, to which Mesoamericans had no immunity, also played an important, perhaps even dominant, role in the Spanish victory.

At its maximum extent, just before the Spanish came, the empire stretched from the Pacific Ocean to the Gulf of Mexico, although it had yet to subjugate the Tlaxalteca kingdom, which lay within it. The Aztecs conducted ongoing "Flower Wars" (xochiyaoyotl) with the Tlaxalteca to capture prisoners for sacrificial offerings needed for the gods. The Spanish reported that they sacrificed captured Spaniards by heart extraction, flayed the corpses, and made ritual meals out of some of the flesh. Some accounts say that was a common fate of Aztec enemies. The Aztecs had also fought unsuccessfully with the Tarascans to their northwest. The Aztec empire bordered on Maya, Mixotec, and Zapotec lands to the south and the lands of the uncivilized Chichimecas to the north.

The empire was rather loosely governed. It didn't place garrisons in the conquered city-states, and their individual rulers retained their power as long as they paid a tribute to the alliance. This lax method of governing often led to revolts, especially when the empire's 'first speaker' died, resulting in a central leadership succession crisis. This is reminiscent of the difficulties that the Assyrian Empire in Mesopotamia had with their recalcitrant subject city-states.

Also like Mesopotamia, the several empires and city-states of Mesoamerica exchanged many religious beliefs and cultural proclivities, most of which dated back to the Maya and Olmecs. The Aztecs adopted the Mayan base twenty counting system but eliminated the dash that symbol-

ized groups of five, counting from one to nineteen strictly with dots, a small step backward. The Aztecs also adopted the Mayan 365-day solar and 260-day religious ritual calendars. Like the Maya, the solar calendar was divided into eighteen 'months' (veintena) of twenty days each plus a five-day, 'unlucky' period at the end. The ritual calendar was divided into 20 ritual 'weeks' (trecena) of 13 days each that was important for astrological purposes. This system is different from the 13 months of 20 days each that was the basis for the Mayan Calendar Round.

Most of Aztec religion was an echo of the Mayan. The multilevel view of reality, cyclic nature of the world, worship of nature gods, a cadre of priests, the importance of astronomy and astrology, the building of elaborate pyramid temples, and the concept of sacrifice rituals were all imports from the Maya, although some specific sacrifice rituals were uniquely Aztec.

Like other religions the world over ever since religion had been devised by ancient peoples, Aztecs believed offering sacrifices to the gods helped to gain their favor, and animal sacrifice was the most common. However, according to archeological evidence from mass burial sites, human sacrifice was much more common among the Aztecs than the Maya and anyone else in history. Again, like the Maya, blood was considered to be the most important part of any sacrifice and was usually collected and poured over an effigy of the god.

The Aztecs carried human sacrifice far, far beyond the Maya. In two months during the dry season, which is from mid-October to late May in the Valley of Mexico, they even sacrificed children to the rain god, *Tlaloc* one month at the temple in Tenochtitlan and one month on Mt. Tlaloc. If these children cried on the way to the shrines, their tears were viewed as signs of imminent and abundant rains. The Aztec religion was doubtless the most blood thirsty faith in the history of the human species.

Like most other cultures, Aztec mythology has several versions of creation that differ somewhat among themselves in detail but have certain aspects in common. Although they considered the world to be cyclic, it had begun with a first cycle. The current world (Nahui Ollin) is the fifth cycle, or age. Certain individual gods in their pantheon have had to sacrifice themselves to set each of the various ages in motion, and they continually require blood and hearts to keep the world in motion. In Aztec mythology, the gods sometimes sacrifice themselves for the benefit of the world and its people, which is similar to the self sacrifice Jesus Christ made for the remission of humankind's sins. Aztec rituals would often duplicate these sacrifices of the gods by dressing a person in the image of a god and sacrificing him or her. For example, according to the Smithsonian Institution, every autumnal equinox, a young girl representing *Chicomecoatl* (goddess of agriculture, nourishment, plenty, and corn) was sacrificed. The priests "decapitated the girl, collected her blood, and poured it over a figurine representing the goddess." The corpse was then flayed, and the skin was worn by a priest.

Most information on the Aztec religion describes rituals performed by priests; little information exists of the daily worship rituals of the common

people. However, the plethora of cheaply made images of the rain god, *Tlaloc*, that have been found suggests that households kept a *Tlaloc* image and probably observed some sort of ritual in obeisance to the god to help bring the life-saving rains. As one might expect in an area where rain is extremely important, the stature of *Tlaloc* was second only to *Huitzilopochtli*, the patron god of the Mexica. The great temple in Tenochtitlan had two shrines at its top: one to *Huitzilopochtli* and the other to *Tlaloc*.

As one would expect in an area where rain is virtually life-giving, the rain god, *Tlaloc* to the Aztecs, was extremely important. Mexico has pronounced wet and dry seasons. Most of the country experiences a rainy season from June to mid-October and significantly less rain during the remainder of the year. February and July generally are the driest and wettest months, respectively. The Valley of Mexico, now Mexico City, for example, receives an average of only 5 millimeters (0.2 inches) of rain during February but more than 160 millimeters (6.3 inches) in July.

As mentioned earlier, the Aztec religion was probably the most bloodthirsty in human history. On pages 46-51 of the April 1977 issue of *Natural History*, Michael Harner wrote, "No human society known to history approached that of the Aztecs in the quantities of people offered as religious sacrifices: 20,000 a year is a common estimate." Some estimates published in the literature are as high as thousands at a time. Most of these high estimates are probably exaggerations of natives who sought to merely impress the Spanish. Many words have been written in the literature about Aztec human sacrifice, and although the ritual was important to the Aztec religion, doubtless there were other, less bloodthirsty, aspects that were also important in their own way that have received scant attention, which is unfortunate and perhaps a disservice to the Aztec civilization. A similar focus on human sacrifice plagues our knowledge of the Inca civilization.

All that is known of the Inca has been from legend because they never developed a written language to record their history. They apparently began as nomadic herding people in the high plateau, now called the Altiplano, of the Andes Mountain range in modern Peru. The Altiplano's elevation averages 3750 meters (12,300 feet), which is slightly less than that of the Tibetan Plateau. However, unlike the Tibetan Plateau, the Altiplano is dominated by active volcanoes, although few eruptions are known to have occurred in the past thousand years. Over a dozen volcanoes lie to the west and north-northwest and are driven by the subduction of the Nazca Plate, which forms a small part of the Pacific Ocean floor, under the South American Plate along the Peru-Chile, or Atacama, Trench. The trench lies only 160 kilometers (100 miles) off South America's western shore. The Atacama Desert, one of the driest areas on the planet, lies to the southwest of the Altiplano; to the east lies the humid Amazon rainforest.

The Inca converted to a sedentary lifestyle, and around 1200 CE, under the leadership of Manco Capac, established a town called Cusco, or Cuzco, in the Altiplano. Cusco is the first archeological evidence of Inca existence. They used the term 'Inca', or 'Inka', to refer specifically to their ruler, Sapa

Inca; the Spanish used the term to refer to the entire empire. The town grew into the Kingdom of Cusco by convincing the people living in the immediate vicinity that the kingdom was a superior organization and they would be better off by joining it. In truth, they probably were.

If archeological remains are any measure, the Inca apparently stressed excellence in everything they did, which fosters pride and loyalty among the people. They built with stone that fit so precisely without mortar that nothing can be slid into the joints between the blocks; as in Rome, they build roads so durable that many are used to this day. This system of roads totaled almost 40,000 kilometers (roughly 24,800 miles), approximately the circumference of the Earth. They had a system of runners that could relay messages from one end of the empire to the other such that distances about 240 kilometers (150 miles) apart could be covered daily, a performance that the later Spanish colonial post couldn't match. This relay system was revived 600 years later in the American West as the Pony Express. They built their empire without the wheel, powerful draft animals, iron working, currency, or a writing system.

The Inca sometimes peacefully expanded the Kingdom of Cusco into an empire by convincing neighboring rulers that they would be wealthier if they joined the empire; other times, military force was required. The absence of written records leaves unanswered the question of whether the Inca were more successful at war with pitched battles or a siege strategy with accompanying show of military power sufficient to elicit capitulation. The capitol of the empire always remained at Cusco.

By 1532 CE, the time of the Spanish conquest, the empire's dominance extended from Quito, Ecuador, to the Río Maule, Chile, 3200 kilometers (nearly 2000 miles) south. It included modern Peru, much of Ecuador, a small part of southern Colombia, western and south central Bolivia, north and central Chile, and northwest Argentina, creating a state comparable in area to the historical empires of Eurasia. Spanish records of Inca oral history say that expansion of the Kingdom of Cusco into an empire was begun in earnest by the emperor Pachacuti, who reigned from 1438 to 1471 CE.

The Sapa Inca owned everything in the empire, although peasants could own a small parcel of land. No money-based economy existed; most people lived by bartering goods or by an exchange of labor (like barn-raising among the present-day Amish) instead of the exchange of tokens (money) that represented a labor or other debt owed to the recipient of the tokens.

A small amount of trade existed between outside regions and the empire, especially by an independent provincial trading class along the northern coast which apparently used bronze medallions as currency among themselves.

Male heads of household were required to pay taxes either in kind (crops or textiles, for example) or by unpaid labor in service of the state to erect public buildings or on agricultural projects such as aqueducts and terraces that increased productivity. In return, the state provided security, food in times of hardship through the supply of emergency resources, and occasional feasts. Military service was required of all males.

The Sapa Inca controlled all domestic production of food and goods through his ministers, who were all part of the royal family. Beneath the Sapa Inca sat the Inkap Rantin, who was an assistant to the Sapa Inca, perhaps what modern governments call a Prime Minister.

The Sapa Inca was a hereditary position that had passed from father to sons for ten generations before the Spanish came. Huayna Capac was the eleventh and final Sapa Inca before Pizzaro's arrival. His oldest son, Ninan Cuyochi, died of smallpox his first year on the throne, leading to a war of succession between two of Huayna Capac's other sons Huascar and Atahualpa just as the Spanish arrived. This internecine war weakened the Inca military and was partially instrumental in the Spanish triumph, which was doubtless inevitable anyway. Atahualpa defeated and slew Huascar before the Spanish captured him and held him for ransom. Payment of ransom notwithstanding, Pizzaro killed him anyway.

The Sapa Inca was head of the state religion and presided over ideologically important festivals. He was considered to be divine as "son of the sun", and both his right to rule and mission to conquer derived from his holy ancestor, *Inti*, the sun. His people were the children of the sun. The Willaq Umu, or Chief Priest, was the religious official second to the emperor. After outlying areas were incorporated into the empire, their local religious traditions were allowed to continue and in some instances, such as the Oracle at Pachacamac on the Peruvian coast, were officially venerated. Religious admonitions were both brief and pragmatic: do not steal, do not lie, and do not be lazy.

Death was thought to be a dangerous passage along a dark road to an after world of flower covered fields and snow capped mountains. It was important for the Inca to ensure that they didn't die as a result of burning or that the body of the deceased was not incinerated. Burning the body caused its vital force to disappear which threatened passage to the after world. Those who obeyed the Inca religious admonitions went to live in the Sun's warmth while others spent their eternal days in the cold earth.

Like all ancient religions, the Inca sacrificed to the gods in order to gain their favor. In times of celebration such as the birth of a royal son or in dire situations such as droughts or epidemics, they sometimes made human sacrifices, although the number never approached the excesses of the Aztec. The Inca sacrifices were often children and the ceremony known as capacocha. When a capacocha ceremony was to be held, reported the Spanish friar Bernabe Cobo in his *Historia del Nuevo Mundo*, the Inca sent a demand to the provinces for tribute payment of boys and girls between the ages of 4 and 16, selected, so the histories report, for physical perfection.

In 1999, three well preserved Inca mummies were found near the summit of Llullaillaco volcano in Argentina. The primary victim was a 13-year-old girl who was accompanied by a boy and girl who were approximately five or six. The mummies showed no evidence of head trauma as some other capacocha victims do and were not desiccated, but still had all the appearances of life. Chemical analyses of the 13-year-old's hair has been

able to reveal something of the capacocha ceremony. Approximately one year before the sacrifice, her diet suddenly changed from a simpler one to one that included more elite foods like maize and animal protein. She also began to consume coca and alcohol. The younger children's diet also changed, but to a lesser extent. It's unknown whether the chicha alcohol was part of the ceremony or used to somewhat sedate the children. Not only were the Inca human sacrifices less excessive than the Aztec, they were also less gruesome.

The Inca pantheon had an array of gods that included the creator god *Viracocha*, sun god *Inti*, thunder god *Illapa*, and earth mother goddess *Pachamama*, among others. There were also regional deities worshipped by people whom the Inca conquered. *Viracocha* was represented as a vaguely human image wearing the sun for a crown, with thunderbolts in his hands, and tears descending from his eyes as rain. According to a myth recorded by Juan de Betanzos, a Spaniard who had married the widow of the last Sapa Inca, Atahualpa, *Viracocha* rose from either Lake Titicaca or the cave of Paqariq Tampu, depending on the version of the myth, during a time of darkness to bring forth light. He created the universe, sun, moon, and stars, time (by commanding the sun to move over the sky), and civilization itself. He made mankind by breathing into stones. His first creations were brainless giants that displeased him, so he destroyed them with a flood and made new, better ones from smaller stones.

Ancient Religions

Carrying on their legacy from their prehistoric beginnings, the religions of ancient civilizations made gods of natural phenomena and were heavily oriented toward sacrifices of various sorts in order to gain the favor of the gods. Thankfully, all modern religions have eliminated the rituals of sacrifice, although early Hinduism and Judaism retained the practice for a brief while. If ancient religions were practiced for a long enough time, they all changed in some way or another over their course, such as the relative importance of their various gods. Ancient religions passed a few beliefs on to modern faiths. Perhaps the most ubiquitous of these is that the Supreme Being abruptly created the total Universe as it now exists. Humans are a part of that abrupt creation and stand at the apex of creation because we are created in God's image. We are, after all, telling the story. Because we are the apex of creation and are, thus, special to God, He speaks to us and advises us of His intentions and activities.