

## **MYSTERY TWO – WHY WERE THE PYRAMIDS BUILT?**

### *The Great Pyramid and the Pyramids of Giza*

Standing before the Great Pyramid one feels a sense of incredible awe. The raw power of its age alone dwarfs the imagination. The conclusion is clear: the pyramids were built to last forever, and they have.

The mystery of the Great Pyramid has fascinated generations, and out of that fascination has come every kind of theory as to how and why it was built. The conservative Egyptologist tells us it was a tomb. The intellectual tells us it was a temple where the privileged were initiated into the secrets of Egyptian religion. The engineer tells us it has secret chambers yet to be discovered that hold the answer to its riddle. Who to believe?

The pyramid itself seems to be an impossible feat of architecture. That the Egyptians used only ropes and levers to construct this 450-foot tall monument with an estimated 2,300,000 blocks of limestone weighing an average of 2.5 tons each drives us to invent fantastic possibilities as to how it was done. The new agers even propose that this must have involved lost technologies of sonic levitation or even extraterrestrial assistance.

In spite of the magnitude of this feat, the most likely answer remains sheer human ingenuity and the hard work of the Pharaoh's followers. This is backed up by the best evidence we have, remains of ramps shored up by mud-brick walls that have been found dumped as backfill to the same limestone quarries that were used to cut the building blocks. These ramps would have been wrapped around the pyramid to a higher and higher level as course after course of stone blocks were laid down, then torn down level by level as the casing stones were polished and inscribed with their finishing touches.

It has been suggested that if one block were put in place every two to three minutes, it would have taken nearly 30 years of 12-hour workdays. And this is only one of the tremendous building projects of the pyramid age. There were no fewer than five large pyramids built over a period of less than 100 years. So as far as mysteries go, why these pyramids were built is a much more interesting subject than how.

Pharaoh Khufu, whose name was handed down to us by the Greeks as Cheops, is supposed to have built this pyramid around 2450 BC as his tomb. Unfortunately we are unable to neither confirm nor deny this claim because it is completely empty and there is no record of anything having ever been found inside of it. The only account we have of its virgin interior was left us by Caliph al-Mamun, an Arab who supervised the breaking open of the pyramid in 850 AD when the Moslem states finally overran Egypt and put the period at the end of 4000 years of history. He claimed that after a week of hammering their way inside, they found the pyramid completely empty. But if it had already been looted, why did they have to force their way in?

In any case, the same tenuous connection between builder and monument goes for Khufu's son, the Pharaoh Khafre. Written as Chephren by the Greeks, he is supposed to have built the second largest pyramid of Giza and, more importantly, the enigmatic Sphinx. And finally Khufu's grandson Menkaure, the Greek Mycerinus, is supposed to have built the third and smallest of the trio. Yet all were found empty and devoid of inscription, making the evidence we have that connects the pyramids with the Pharaohs all circumstantial. It is no wonder that the origin of these pyramids is held up for debate by those with differing theories.

In fact the debate about the age of the Sphinx rages on far from settled. Connected as it is by a limestone causeway to the central pyramid it appears to be fully a part of Khafre's pyramid complex, built together to form a single integrated monument. On the other hand when geologist Robert Schoch analyzed the weathering on the rock walls surrounding the Sphinx on three sides he concluded that it must have been constructed at least 7000 years ago. This places its creation 2500 years earlier than Khafre's pyramid and 2000 years before the formation of the Egyptian state, back when the natives of the land of the Nile were just learning to make pottery and build huts of mud and reeds.

A tribe of primitive farmers or nomads could have certainly found the means to hack such a monument out of solid rock, but even if they had primitive tools and organization there is no archaeological evidence for the ideology. The Sphinx itself would be the only work of art of its kind until Pharaonic times. This conflict of opinion cannot be resolved by scientific testing because the date a rock was carved cannot be tested.

### *Herodotus and Egyptian History*

Why do these puzzles persevere? Because the Egyptians left us no history book. That is not to say one wasn't written, but what was written has not survived. In 500 BC an Egyptian priest whose name has been passed down to us as Manetho wrote a complete history of Egypt. The original work is lost and all we have are fragments passed down to us from the Greek historians Josephus, Africanus and Eusebius. There is also a personal account of Egypt written by the Greek historian Herodotus, who claimed to have visited Egypt and included his experience there as part of his history and survey of the world as of 300 BC.

Herodotus tells us of the pyramids that,

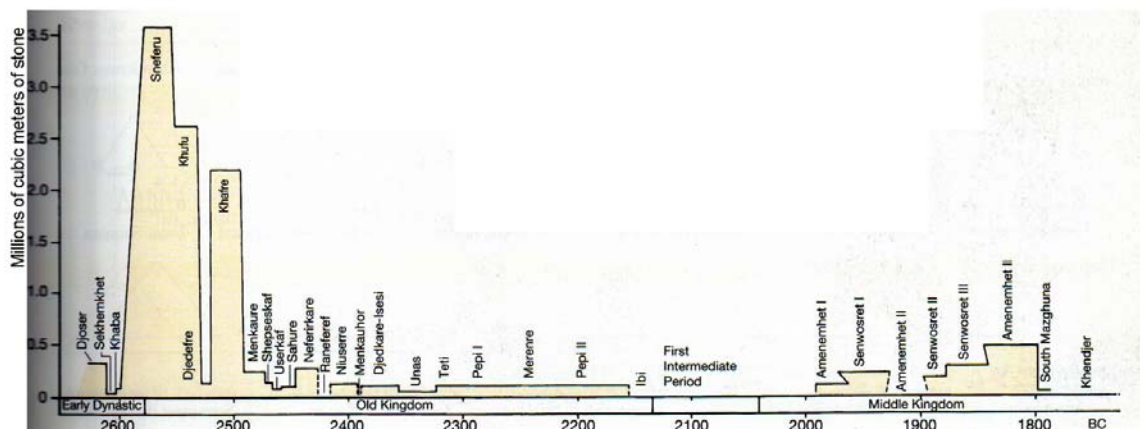
“The work went on in three-monthly shifts, a hundred thousand men in a shift. It took ten years of this oppressive slave labor to build the track along which the blocks were hauled - a work, in my opinion, of hardly less magnitude than the pyramid itself, for it is five furlongs in length, sixty feet wide, forty-eight feet high at its highest point, and constructed of polished stone blocks decorated with carvings of animals. To build it took, as I said, ten years - including the underground sepulchral chambers on the hill where the pyramids stand; a cut was made from the Nile, so that the water from it turned the site of these into an island. To build the pyramid itself took twenty years; it is square at the base,

its height equal to the length of each side; it is of polished stone blocks beautifully fitted, none of the blocks being less than thirty feet long. The method employed was to build it in steps, or, as some call them, krossai or platforms. When the base was complete, the blocks for the first tier above it were lifted from ground level by contrivances made of short timbers; on this first tier there was another, which raised the blocks a stage higher, then yet another which raised them higher still. Each tier, or story, had its set of levers, or it may be that they used the same one, which, being easy to carry, they shifted up from stage to stage as soon as its load was dropped into place. Both methods are mentioned, so I give them both here. The finishing-off of the pyramid was begun at the top and continued downwards, ending with the lowest parts nearest the ground.”

Herodotus goes on to tell an Egyptian folk story about how Khufu’s own daughter helped pay for its construction, one block at a time, by working in a brothel. It is an odd truth that this is some of the best evidence we have for connecting Khufu with the Great Pyramid. But realize also that even in the time of Herodotus this tale would have been two thousand years old and certainly does not tell a very pure truth.

*Pyramids and Egyptian History*

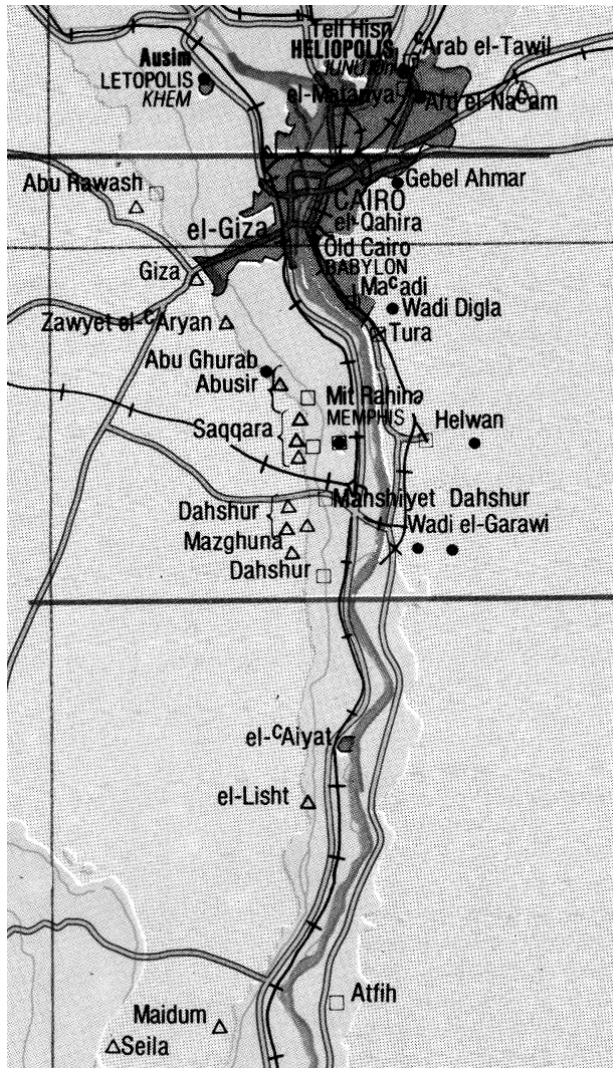
It is not so well known that the pyramids of Khufu’s dynasty represent a sharp spike in the quality of pyramid architecture. Pyramids built both before and after do not hold a candle to their sheer volume.



*Illustration from The Complete Pyramids by Mark Lehner*

In terms of quantity the Pharaoh Sneferu, Khufu’s father, wins hands down. Not one but *three* pyramids are attributed to his command. These are the step pyramid at Maidum, the Bent Pyramid and Red Pyramid both at Dahshur, a few miles south of Giza. Why he would have built three pyramids is not apparent, because before him only one pyramid is known to have ever been built. That one is Pharaoh Djoser’s stepped pyramid complex in Saqqara. This complex includes the pyramid, several buildings, a temple and large open courtyards all surrounded by a wall all in amazingly good condition for being 4700 years

old. Beneath the complex there is not one but *two* underground tombs and 11 separate shafts each with its own chamber. In contrast to Snefru's three separate pyramids, this looks more like several tombs combined (or simply built over the top of) and there is evidence that this may be the case.



Travelling south along the east bank of the Nile starting just south of Cairo one finds all of the early pyramids. Giza itself is located next door and just a stone's throw from Nazlet Al-Simman, the southeastern most village of the Cairo metropolis. Then just south of Giza is Abusir and Saqqara, just south of Saqqara is Dahshur and a little further south of Dahshur is Mmaidum. From there the cliffs of the Nile become narrow and steep until the valley again relaxes a few hundred miles farther south.

Modern civilization is in the process of displacing much of Egypt's ancient heritage. Indeed, the most religious city of ancient Egypt, Heliopolis, is now buried beneath Cairo. In the south of Egypt, growing numbers of farmers threaten to overrun one of the most ancient of sites at Hierakonpolis, where there is still decades of work to be done, with irrigation canals, utilities and roads. In fact in this day and age one can travel almost door to door from pyramid to pyramid on paved roads.

Although today the pyramids are surrounded by desert, one did not always have to walk down to the lush Nile to be amongst the trees and water. In ancient times what is now the desert was once savannah, moist with grass and palms decorating the gardens of the Pharaohs. What turned the grassland to desert? There is a theory that the pyramid builders burned so many trees to fuel the fires of the workers that the entire north of Egypt was stripped of erosion-preventing roots.

The fact that all the big pyramids were built in the same general area in the same time period is sometimes lost to the fact that the pyramid shape was a popular building theme

all through Egyptian history. Pyramids in one form or another were built all the way up to Roman times. So the pyramids were not unique to the Old Kingdom. Nevertheless, the way they were built in the Old Kingdom certainly was unique. The part of the above chart that represents the golden age of Pyramid building shows an unparalleled quantity of construction between about 2650 and 2450 BC.

In spite of the unusual volume of Old Kingdom pyramids, we must realize that they do not represent a different ideology than any other age. But they do certainly seem to represent the most extreme approach to that ideology. So we get to the core of the mystery that begs to be answered, why pyramids?

The answer that question lies in the way the Egyptian burial customs changed over the centuries. This is because pyramids were not by any means the only type of burial, nor were they the original type of burial. But they were by far the biggest and just as you've got to learn to walk before you can run, it helps to understand the little one before you aim for the big one.

The good news is we don't have to go forward in time from the pyramid age; we only have to go back. It is the Early Dynastic and Pre-dynastic periods that hold the keys to the formation of Egyptian ideology and culture. So beginning with the very earliest tombs to be found under the sands of Egypt let us take a look at the burial customs of early and pre-dynastic Egypt. Our journey begins in the south end of Egypt, two hundred miles south of Giza.

### *The Two Lands*

The Egyptians had many names for their country. One of them was "the two lands" and by this they meant that Egypt consisted of two lands that were united into a single country. These lands were known as Lower Egypt and Upper Egypt. Lower Egypt consisted of the lowlands of the Nile Delta, extending south to Giza and the capital city of Memphis. Upper Egypt consisted of everything else extending down the Nile valley as far south as the first cataract, an area where the Nile descends through an impassable rocky decline on its way to the Mediterranean Sea.

Before the beginning of Egyptian history there is evidence for the presence of several thriving towns in Upper Egypt. These are, heading south, Thinis, Abydos, Naqada, and the twin towns of Nekheb and Nekhen. It is in this area that the prehistory of Egypt fades into the most ancient past, where the most ancient artifacts are found, and where the most ancient burials are located.

Unlike the tremendous pyramids of later times, these very early burials found in Naqada are not only very simple but also very much the same. The body was buried in a pit dug in the sand with a few pots and other personal items such as a comb. These burials were not in any way protected, and the only reason they remain intact after the incredibly long time span of 7000 years is that the desert sand was so dry that the body dried out leaving

the bones in place until modern times. And there are not just a few of them to be found, but thousands and thousands of them. But what is most unusual about these burials is not their age nor their quantity, but that the body was very carefully positioned the same way in almost every one of them, crouched in the fetal position on the left side with head to the south and face to the west.

The symbolism here, which is widely agreed upon, is that the dead are positioned for rebirth in the afterlife in the land where the sun goes after it sinks below the horizon. But was this just symbolic or did the Egyptians really feel they knew where the dead were going? Was this concept of rebirth one of being reincarnated in the flesh or of going to an abstract place ruled by an abstract god?

We find a helpful clue in the Egyptian language. Far from being a primitive tongue or the language of a primitive people, the Egyptian language was quite the opposite. It was full of wordplays and puns as much, or even more so, than our language today. And so whenever we take a closer look at one of the key concepts of the Egyptian people we almost always find some kind of word play on its meaning. This also applies to the meaning of “the two lands”.

First we have its obvious meaning, Upper Egypt and Lower Egypt. But there was another Egyptian saying, “as above, so below”. This reflects on the second meaning of the two lands, which is the land of the living and the land of the dead. The point here is that the dead were buried in a specific way and not for any practical reason but based on an abstract idea about the future of the human spirit. But just where were the dead going to be reborn? It is not yet clear. Perhaps they would be reincarnated in the flesh, perhaps in another world as abstract as the spirit which they could not see. But one thing is clear, the dead had a future in one of the two lands.

### *The First Burials*

The Egyptians must have returned to visit their dead at some point because they found that the preservation of the body in these early burials was either incidental or inferior and they decided to change their burial procedure to improve it. How do we know this? Looking back at 4000 years of mummification the progress can be easily seen, and what can also be seen is that where these techniques began to change was in the Naqada cemeteries.

Why did they do it? If the dead were moving on to another existence then the condition of the body would certainly not seem to be important. Perhaps even before Egyptian civilization officially began, their beliefs in the afterlife were already changing from a spiritual or abstract immortality to a dependence on survival of the physical form. Why this was is a different mystery, one that we cannot solve from the burials alone. But in any case we do know that physical immortality is not a realistic endeavor and would seem to signal a departure from a spiritual philosophy towards a more materialistic form of belief.

Whatever the reason was behind their choice to take this path, the Naqadan Egyptians began to take steps to make the body appear more comfortable and to protect it against the elements. Burials began to include the placement a mat of woven reeds below the body, sometimes a pillow under the head, and the wrapping of a mat of animal skin or reeds around the body. It is possible that some of these early graves were actually constructed as small rooms with roofing to keep the burial chamber intact. But it turns out that although this procedure may have protected the body, the increased depth of the burials and isolation from the elements also kept the body from the dry sand that so effectively dried out and preserved the flesh. The solution to this new problem was the real genesis of the art and science of mummification.

The first evidence of wrapping the skin with cloth is found in burials of women whose hands and head were padded and wrapped with linen. In some cases this wrapping was so well done that we actually have preserved hair with the braids still intact and henna coloring still visible. It is curious that at first the face was not covered, only the base of the skull, the neck, the jaw and the forehead. And it has further been found that sometime after burial someone dug down straight to the location of the head and cut a slit through the neck wrappings, most likely to remove a copper amulet. The reason for this sequence of events is not clear and, since this is a recent discovery of the late 1990's, no theories have yet been advanced.

It has been proposed as regards early mummification in general that since isolation of the body from the elements prevented its preservation, that this practice was actually intended not to prevent but to accelerate its decay. But this makes less sense in light of recent discoveries where bodies were found only partially wrapped. On another note, later mummies were decorated with the face of the deceased so the dead could recognize their body to return to after the sun sank below the horizon. Leaving the face unwrapped would certainly facilitate this as well, but the same question arises, why wrap only part of the head?

Perhaps there is a better explanation. It is assumed based on later burial customs where bodies were extensively wrapped for burial, that bodies were wrapped the same purpose in these earlier customs. There is a Buddhist sect in Tibet in modern times that, after death of a monk, does not prepare the body for burial right away but keeps it around the house for a few days. The recently deceased is not kept out of sight and mind nor in some form of resting place, but as a silent participant in group activities during the day, whether at the dinner table, in conversation, or whatever else is ongoing. The purpose for this is to keep the attention of the spirit whose body has died on the task at hand until they are certain that it has left the body. This task is the practice of their religion, which is not only practiced during life, but which extends into the time after death.

So, as far as the Naqadans were concerned, if it makes no sense that the head would be only partially wrapped for burial, then perhaps it makes sense that it would be so wrapped if not for the same exact reason as our modern day monks, maybe then for some reason

involving pre-burial activities, whether religious or ceremonial. If nothing else the wrappings may have done no more than help keep the head and hands properly positioned and well mannered.

This step was the first towards what became the most sophisticated burial science of all time, and so this was only the beginning. With the specialized wrapping of the bodies came larger graves and more grave goods. The most striking change is not that some bodies are wrapped and some are not, but that there is suddenly a difference in quality. The best wrappings and the most grave goods are reserved for the few, not the many, and the better quality we find the fewer we find who appear to have qualified.

### *The Primeval Mound*

Based on later practices one of the attributes of these graves that is likely, but not entirely provable for this time period, is the covering of the grave with a small mound of earth. The mound of earth is a symbol that stands for the primeval mound, the first piece of ground that Egyptian legends say rose out of the primeval waters. The mound of earth was without question used to cover later burials and has been found within and beneath temples built in predynastic times. The mound takes the symbolism of the burial one step further by creating a parallel of the ascension of the dead from their place of burial with the creation of the world.

At first, graves were simply covered with a small mound of earth made from rock mixed with sand. But with the beginning of pharaonic Egypt there was a major change in the way people were buried. This change also began in the Naqadan cemeteries but, at least from the evidence we have, it was not until the first king of the two lands was officially crowned that there was a dramatic change in the way royalty was buried.

### *The Royal Burials*

It was Manetho, the Egyptian historian mentioned earlier, who originally organized all the kings of Egypt into 31 dynasties. The first dynasty began around 3150 B.C. with a king named Menes. It has been since discovered that his real name was Narmer, and his burial site, or at least one of them, has been found.

It is thought that the very first royal burials of anonymous predynastic kings found in Naqada can be identified by symbols of power, such as a mace or scepter, found amongst the grave goods. The Egyptian mace, at least the ceremonial version, was a slender rod carved of stone or ivory that flared out to a pear shaped ball on the business end, and this symbol occurs in many early dynastic scenes. Another feature that marks the earliest royal burials is the presence of multiple rooms, thought to serve as a palatial home for the deceased, and collections of pots filled with offerings, such as food and drink for the deceased.

The earliest royal burials that we can attribute to identifiable rulers occur at Abydos, which has turned out to be the most remarkable burial site in southern Egypt. Here we find royal burials beginning in predynastic times and extending in one continuous stretch of land all the way to the end of the first dynasty.

The earliest tomb found with such features was found in Abydos Cemetery U and was labeled Tomb J. Hence it's designation as Tomb U-J. This tomb contains a dozen rooms, an ivory scepter and a host of pots with some of the earliest hieroglyphs yet found. These symbols occur on small tags carved from ivory or bone that were attached to the pots, most likely marking their place of origin. No remains were found inside but markings found on the pots allow us to attribute this tomb to a king named Scorpion, a predynastic ruler of whom we know nothing more about.

The tombs of the next few kings are unremarkable. Even Narmer's tomb is a small affair with only two rooms. But the tombs of his wife and his son are something more.

The tomb of queen Neith-Hotep is the first known above ground tomb, called a mastaba, from the Arabic word for mud-brick building. It is also the first royal tomb to be attributed to a queen alone, a rare occurrence.

The tombs of Narmer's successor, king Hor-Aha, hold many firsts. Hor-Aha was the first ruler with one tomb found at Abydos, in the south of Egypt, and one tomb found in Saqqara, in the north of Egypt. His Abydos tomb is the first known multiple room tomb with subsidiary burials, accompanying the king's burial, holding those who appear to be his retainers. His mastaba at Saqqara is the first royal tomb found in Lower Egypt. And last but not least, it is the first tomb to be accompanied by the burial of a boat.

These changes in tomb building signal a very dramatic change in burial custom and, unless we are missing evidence of some very important earlier developments in burial customs, this must have been motivated by a significant change in beliefs. What kind of change remains to be seen but it seems to be motivated by an increased slant towards materialism and dependence on survival of the physical body after death in the same direction as predynastic burials.

### *Tombs of the First Dynasty*

Major advances in what can be called royal mortuary architecture marked each dynasty of the Old Kingdom, and the advances of the first dynasty were most phenomenal because they were also unprecedented.

All nine of the kings of the first dynasty except for Narmer had two tombs, an underground tomb at Abydos and an above ground mastaba at Saqqara. The pattern is so consistent that it is thought that Narmer's mastaba tomb must exist and simply has yet to be found either in Saqqara or Naqada. The reason Naqada is considered as a possibility is that the mastaba of Narmer's queen, Neith-Hotep, is found at Naqada and was originally

thought to belong to Narmer but later confirmed as the queen's. Further, all of the kings starting with Djer, the 3<sup>rd</sup> king of the dynasty, had some kind of courtyard built in another area about a mile away whose purpose is not yet clear, but assumed to have had a funerary function such as a temple used for preparation and ceremony.

It is not known why each ruler had two tombs, nor which one was the original burial and which may have been no more than a cenotaph, or empty tomb built for ceremonial reasons. It is considered most likely that the Abydos tomb was the real burial place since the bodies of retainers have been found in the subsidiary rooms attached to the central room meant for the ruler. But that doesn't really answer the question of why a second tomb was built in such a deliberate and complicated manner.

How do we know what tombs belong to what kings and queens? Although the bodies of the owners of these tombs are long gone, whether destroyed by thieves or moved to a more protected location by later rulers, it has been discovered that every tomb contains offering jars and other objects with the name of the individual for whom the tomb was built. This pattern has also been found to be so consistent that it is considered to be a totally reliable indicator. The only difficulty with applying this is overcoming the effects of grave robbers and 19<sup>th</sup> century archaeologists. Both dug quickly and furiously in their search for valuable artifacts. It is a credit to the careful excavation (and re-excavation) of later archaeologists that the original state of the tomb can be reconstructed. This standard has been painstakingly executed on every tomb found in Egypt.

At the outset of the first dynasty the king's underground tomb at Abydos was a small affair that most likely had a temple of wood and reeds built over the top of it, as evidenced by the remains of post-holes. With each ruler the underground tomb became larger and deeper, with more and more retainer burials, until the middle of the first dynasty when the largest underground tombs were built at Abydos. The leader is king Den, the 5<sup>th</sup> king of the first dynasty, who was buried 20 feet underground with 331 retainers. Finally, the tombs of the last two kings slack off at the end with tombs similar in construction to the larger tombs but on a much smaller scale.

On the other hand the mastabas begin with a running start and improve constantly throughout the dynasty until the mastaba of the last king, Qaa, whose tomb is not only the largest but whose rock-cut underground chambers actually serve as a precursor to second dynasty tomb structure.

### *First Dynasty Mastabas*

The very first mastaba, belonging to Queen Neith-Hotep, appears to have been a very sudden development. It had no underground chambers but was still enormous and either set the pattern for all later mastabas or followed an earlier model that is lost to us. There is no smaller precedent for its construction, it just springs up fully formed at over 175 feet long and 85 feet wide.

All of the mastabas were built with the walls shaped in palace-façade fashion with complex patterns painted on the outside. As the mastaba evolved it did not grow in size as much as it did in complexity. It gained more internal chambers growing from Neith-Hotep's 21 to Den's 45. Its burial chambers were dug deeper, eventually requiring a staircase for access. It gained a protective wall built around the outside.

Last but possibly most important, an earthen mound came to be built over the burial chamber, protected by its construction completely within the walls of the mastaba itself. Queen Mer-Neith's mastaba has the remains of an earthen mound built over the burial chamber but still inside the palace façade wall. King Anedjib's mastaba contains the remains of a stepped ring of bricks also built around the burial chamber and inside the wall. So it is likely that all of the mastabas featured an earthen mound that evolved into a stepped mud-brick mound.

One of the most interesting features occurs only in the mastaba of king Djet, 4<sup>th</sup> king of the first dynasty. 300 pairs of real bull's horns are mounted on bull's heads made of clay and arranged all the way around the base of Djet's mastaba.

This leaves us at the end of the first dynasty with a series of monuments to its deceased kings and queens, featuring multiple rooms for burial offerings, boats and retainers buried with their masters. At least one of these was surrounded by rows of bull's heads against a palace façade wall. A symbolic primeval mound covered most or all over an ever-deepening underground chamber. The symbolism behind the practice behind the philosophy that governed this evolution will be examined later, as the evolution of the first dynasty burial is not complete without also examining the underground tombs at Abydos.

*Mastaba statistics (chronological)*

King (Queen)	Saqqara tomb #	Size (in meters)	Magazines	Underground Chambers	Unique Features
Narmer	n/a				No mastaba yet found
(Neith-Hotep)	n/a	53.4x26.7	21	None	All above ground
Aha	3357	48.2x22	27	5	Boat grave
Djer	3471	41.3x15.15	29	7	Deeper underground chamber
(Mer-Neith)	3503	42.6x16	23	3	Subsidiary burials
Djet	3504	56.45x25.45	43	5	300 bulls heads
Den	3035	57.3x26	45	3	Staircase
Anedjib	3038	37x13.85	Complex	1	Two stairways Stepped structure
Semerkhet					No Saqqara tomb found
Qaa	3505	65x37	Complex	Complex	Rock-cut underground chamber

*First Dynasty Tombs at Abydos*

As mentioned earlier, the only tomb yet attributable to Narmer is a simple two-room affair. That belonging to his son, Aha, is a dramatic departure from this simple structure.

Three main chambers are trailed by three rows of eleven burial pits, making Aha the first king to be accompanied by sacrificial burials. What is unusual about these burials is that they all seem to be young men under the age of 25, and these burials in turn are followed by a single pit containing the remains of young lions.

Following Aha came a surge in the quantity of retainer burials. His successor, king Djer, leads the dynasty with 338, although his successor Djet's total for all three locations reaches almost 400. That these burials were for retainers has been ascertained by the discovery of stone inscriptions and objects in many of the pits that give their name and profession. But we are uncertain as to how these people met their final fate. Their deaths do not appear violent and where their burials have not been robbed they are accompanied by beautiful jewelry and offerings. Yet it is apparent that they died before their time. The number of these burials decreases with each ruler until the end of the dynasty when king Qaa takes only 26 with him.

By this time it is evident that all were buried together. Beginning with Djer, the central burial chambers of all these tombs were most likely covered by an earthen mound. In fact, beginning with Djer, the tomb complexes at Abydos were covered by two mounds. One mound was built over the central burial chamber and was completely below ground level, ensuring that the king was buried under a mound that could not ever be disturbed. The other was above ground right over the top of the first mound. The mounds of Semerkhet and Qaa were found to have covered the entire complex, meaning they must have been built shortly after the king's death, and that all was in place at that time.

As the dynasty progresses we see the retainer burials grow dramatically, with two rulers possessing retainer burials at all three funerary locations. The magnitude of these then diminishes and the size of the tomb also shrinks proportionate to the number of retainers. At the same time there is a constant improvement in the quality of construction and depth of the tomb and a slight shift in orientation of two features regarding construction.

Each tomb beginning with Djer was built with the retainer burials surrounding the main burial chamber on all sides except for one corner. This corner was consistently pointed southwest, towards an opening in the hills leading to the western desert. It is thought that this was to allow all of the deceased access to the land of the dead in the west.

Then, each tomb beginning with Den had a staircase whose orientation shifted from east to north. It is thought that this opening was to allow the deceased king to meet the rising sun and later to rise to the stars at the northern pole. Perhaps at first the king was meant to join the sun god in the morning as he rose from the land below, sail with him across the sky during the day, and return to his tomb from the land of the dead at night. Then later, there was a change towards the northern stars, arising from the belief that since it seemed the entire universe physically revolved around the nexus at the center of rotation of the stars, that was the home of the gods and so was where the king belonged.

The presence of temple courtyards separate from the underground tombs beginning with Djer is a practice for which we have little to compare, especially in view of the more serious features which imitate the burial such as boats and subsidiary burials. Perhaps this was a temple both in life and in death, where the royal guards of the tomb lived their lives for the reward of burial in the king’s temple after death.

Finally, many of these first dynasty tombs and mastabas have evidence of significant fire damage from the same time period in which they were built. Further, it seems that this damage was not only deliberate but done in some sort of official capacity. As fire was a part of the legend of Isis and Osiris, this may somehow have been integrated into the burial ritual, but unfortunately we may never know in what way.

*Abydos Tomb statistics (chronological)*

<b>King (Queen)</b>	<b>Abydos Retainers</b>	<b>Saqqara Retainers</b>	<b>Funerary (temple yard) Retainers</b>	<b>Staircase Orientation</b>	<b>Opening Orientation</b>
Narmer	0	0	0	n/a	n/a
Aha	34	0	0	n/a	n/a
Djer	338	0	0	n/a	southwest
(Mer-Neith)	41	20	77	n/a	southwest
Djet	174	62	161	n/a	southwest
Den	136	0	0	east	southwest
Anedjib	64	0	0	two to the east	southwest
Semerket	83	0	0	east	southwest
Qaa	26	0	0	north	N/a

*Tombs of the Second Dynasty*

All of the elements of first dynasty tombs contributed in the evolution towards the fully mature pyramid complex. But something changed, and changed in a big way at the end of the first dynasty. This early golden age of tomb building with its beautiful mastabas and glorified sacrifices was over. The second dynasty must have been a very chaotic period because it left us with precious few remains of its history. Of the five or more rulers of the dynasty tombs have been located for only the last two, and neither is very remarkable and both are located right alongside the first dynasty tombs of Abydos.

As far as the other rulers, all that has been found of them are clay jar seals bearing their names excavated from deep chambers cut from the rock beneath Saqqara. These chambers were likely associated with the tombs of second dynasty kings, but no above ground structures remain, no other artifacts have been found below ground, and because these chambers are extremely dangerous no further exploration has been done.

If impressive tombs and temples were built for these kings then these must have been plundered for all they had to offer by later kings who found them to be a convenient and unprotected resource. Further discoveries may someday yet reveal an intact tomb but for now we have little to go on.

There is, however, one remarkable legacy from this dynasty. The last king, Khasekhemwy, left us not only his Abydos tomb but also two amazing above ground structures in the same form as the Abydos temple courtyards of the first dynasty. One is at Abydos and, like his tomb, stands among the first dynasty structures. The other is at Hierakonpolis and stands completely alone and unique.

Khasekhemwy's Abydos temple is impressive because not only because of its size, about 400 feet by 200 feet, but also because of the fact that, after nearly 5000 years, what are left of its walls still stand nearly 66 feet high. This is mostly due to their sturdy construction, measuring 16 feet thick at the base. At the center of the monument are the remains of a funeral mound. Another interesting feature is the twelve boat burials found outside the walls. These are no small boats, measuring from 65 to 95 feet in length.

His Hierakonpolis structure, called the fort, is the oldest freestanding mud brick structure anywhere. Not quite the size of the Abydos temple, it is still about 200 feet square and its walls stand nearly 30 feet high.

Unfortunately, no remains and few artifacts have been found from these monuments and there are few good clues as to what their burial practices did or did not dictate. But as far as the evolution of the burial goes we can tell one thing, and this is that the progress of change moved ahead sure and steady. This is proved out by the tombs of the third dynasty whose size, structure and features as if there was a constant growth that continued without any break from the end of the first dynasty. In fact the link is so direct that we can almost reconstruct what the tombs of the second dynasty must have been like by looking at the state of tomb building at the end of the first dynasty and the beginning of the third dynasty, and filling in the middle. This is greatly helped by the dramatic debut of the first tomb of the third dynasty.

### *Tombs of the Third Dynasty*

There were only five kings in the third dynasty and the first king, Djoser, was the builder of the very first pyramid. Located just outside the mastaba field of the first dynasty, at Saqqara, his tremendous funeral complex is thought to have combined all three of the elements of the first and possibly second dynasty burials into one, including the above ground mastaba, the underground tomb and temple courtyard. Djoser's integrated monument covers an area of 37 acres and is enclosed by a wall over a mile long.

One of the most striking features of Djoser's legacy is that the elements of earlier tombs that were rendered in mud brick, wood and reeds now appear in finely sculpted stone. A 34 foot high limestone wall carved in palace façade style surrounds the entire complex. Columns of stone carved to resemble bundles of reeds flank the entrance. In the pyramid itself the bricks of mud were replaced by bricks of stone, probably once covered by a shiny white exterior and surrounded by a lush royal garden.

The pyramid is a six-tiered structure most likely built in several stages. It appears that the first stage of construction was a large mastaba and then, whether by original design or raw ambition, it was built up as a four-tier structure and then again built up to a six-tier structure. Its final form still towers 200 feet above the countryside.

Archaeologists currently excavating the surrounding area in search of other tombs have begun to wonder whether Djoser's pyramid was built using materials from other complexes that appear to have been started but of which nothing remains. Below ground it has been found that Djoser's complex was built over the top of other burial structures and was probably purposely designed to incorporate their features. Aside from the thousands of feet of rock-cut tunnels built directly beneath the pyramid for the king's tomb, there is a series of eleven separate shafts whose openings were originally outside Djoser's mastaba but that are now covered by the second stage of pyramid construction.

Another interesting feature is a second tomb built as deep as the first but which lies underneath the south end of the pyramid complex. This tomb would be in every way a parallel to the first tomb if it were not much smaller, too small even to be used for a human burial. Finally, beneath the western courtyard, there are several more sets of underground rooms, numbering in the hundreds, either built for Djoser or appropriated for his use.

But it is the set of eleven underground shafts that are most interesting. Many of them contain artifacts bearing the names of prior kings of the first and second dynasties, and a sample of remains found dates to generations earlier. This leaves us with the question, what kind of site was this before Djoser built his monument? It is well known that Egyptians were notorious for reusing the building materials of temples to rebuild new temples over the top of earlier temples. It seems more likely that the site of the pyramid complex before Djoser's time was a holy location where earlier rulers built, rather than these chambers being a historical tribute he built for them.

Does this make him a callous usurper or a respectful descendant? In any case, it seems that Djoser's designs on immortality were a jump ahead of his predecessors. His courtyard was a virtual city in itself. His storage areas would have held an army and his underground tomb was a palace, built deep in the rock, 90 feet underground. It is not a difficult task to prove that this monument belonged to king Djoser. Finely carved images of the king are framed by beautiful blue tiles decorating the underground halls of both underground tombs. His burial chamber in the main tomb, directly under the pyramid, was a small limestone vault carved with a pattern of five point stars on the top and bottom of the ceiling beams. A 3.5-ton granite plug kept the lid on the king's burial chamber. Although fragments of remains were found inside, evidently they were not his, dating to hundreds of years later. Perhaps Djoser was not the only one to reuse an earlier tomb.

It seems to be an inescapable conclusion that the seven steps of Djoser's pyramid were designed by the man likely to be his architect, Imhotep, as a bigger than life improvement

on the hidden steps found in the mastabas of the first dynasty. It would also seem that their enclosure within the palace façade walls of the greater complex would qualify the whole area as a gigantic mastaba itself. Perhaps there is yet a stepped mound to be found inside the original mastaba now buried under his step pyramid, that the second stage four tier version serves as another mound covering the mastaba, and that the step pyramid serves as a final mound covering the numerous mounds beneath.

This amazing burial complex, although impressive to explore and fascinating to study, only shows us that the materialistic slant of the Egyptian rulers had reached ever increased heights during the second dynasty. Did Djoser, likely the son of the last ruler of the second dynasty, begin a newer, bolder tradition in burial customs so impressive that they marked the beginning of a new dynasty? Or were his practices such a drastic departure from tradition that he was forced to break with his forebears?

In any case, the remaining kings of the third dynasty were not as successful as Djoser in building surviving monuments. Two complexes found near Djoser's contain extensive underground galleries, but these were found to be completely empty. Above ground we find only rubble and the remains of beautiful palace façade walls, but no structures. We do not know whether these complexes were built and destroyed, or simply abandoned before completion.

There is still some controversy over the last pyramid of the third dynasty. It is not entirely certain as to whether king Huni built it, the last king of the third dynasty, or king Sneferu, the first king of the fourth dynasty. This pyramid was built as a three-tier structure of stone just over 300 feet high. The pile of dirt that now surrounds it shows that the stepped structure was originally encased in sand shored up by a shell of mud brick whose purpose was likely to give it a smooth pyramid shape. Unfortunately this has been long since torn to pieces. Little was found inside the pyramid and it lends no new insight to its design or the thought behind it, leaving Djoser's pyramid the primary representative of third dynasty ideology.

His pyramid complex must have functioned as a very strong reinforcement of the symbolism behind Egyptian theology. But even though it was a stupendous advance in tomb building, it only sets the stage for the final incredible surge in pyramid construction of the fourth dynasty.

### *The Step Pyramid Complex*

It would seem a waste of resources if all of this incredible effort was meant only to give shelter, even if a timeless shelter, to a small body wrapped and buried deep below the ground in a place no one would ever again see. And truly this was not the only purpose of the pyramid complex.

Djoser's complex is actually the best surviving of any of the pyramid complexes, including those of the fourth dynasty. Looking only at the above ground facilities, it was

the size of a small town, containing many buildings, courtyards, above ground passageways and even an entryway, located on the east side of the southeast corner.

This complex, both before and after the king's burial, would have easily served as a center for religious practices by priest and peasant alike. The heavy symbolism built into every last piece would have made the complex a place of reverence, a retreat, and a temple all at once. The king himself would have been worshipped as one of the gods themselves, although the word worship is not quite the best fit.

At this point in the evolution of the Egyptian belief system, it seems the Egyptians had made the change first from a spiritual and equal to a material and ranked system of privileges. Along with this, the highest ranked priests had become deserving first of extra, and by now of unlimited privilege, and the king was the highest of all. He was likely granted these privileges because he was expected to join the gods after death and so, as the caretaker of mankind, would see to it that his subjects were treated fairly when they came to join him.

An Egyptian would certainly not have prayed to the king, or even to the gods. He or she would have made a token offering to the king's spirit and showed that he was remembered and respected. After all, someday even a peasant would be on their way to the afterlife and would need all of the help they could get to make it to a good place and their kings, as high priest and earthly representative of their gods, would be the best candidate to help mediate the interaction between the spirit of man and god.

So the pyramid complex would have served as a religious center, at least throughout the Old Kingdom. It is likely that the first intermediate period destabilized the country to the point where there was no central authority interested in maintaining these old temples. But as kingdoms came and went in Egypt, many rulers initiated campaigns to restore the monuments of the past. Perhaps that is how the remains of another came to be found under Djoser's pyramid.

With the passing of the third dynasty it seems the benevolent link between king and subjects may have been strained or even broken. Absolutely no remains or artifacts of any kind were found in any fourth dynasty pyramid. This would indicate either that their maintenance was badly ignored or that their treasures were so valuable that over the ages they were stripped clean of anything that could be moved. In either case one gets the idea that the effort to construct these monuments was viewed by the Egyptian people as something that could only be repaid by taking back what was put into them.

#### *Tombs of the Fourth Dynasty*

If the third dynasty marked the advancement of the above ground tomb structure from mastaba to crude pyramid, then the fourth dynasty marked the advancement of the pyramid from crude to magnificent.

It is uncertain as to whether the step pyramid at Meidum should be credited to the last king of the third dynasty, Huni, or the first king of the fourth dynasty, Sneferu. But the remaining pyramids are not in doubt. Two more are credited to King Sneferu and this gives us the first reason to doubt the first one at Meidum. If it was not incredible enough for a king to have had one pyramid, and barely believable that he had two, then for a king to have had three seems at best unlikely. If Sneferu in fact did build all three, then the total mass of all his pyramids actually exceeds the mass of the Great Pyramid.

Limiting our examination of the pyramids of the fourth dynasty to those of Sneferu and those on the Giza plateau, these pyramids all seem simpler and less interesting than the step pyramid of Djoser, with the possible exception of the Great Pyramid of Khufu. All have one, two or three internal chambers, except for the Great Pyramid, which has four if you consider the Great Gallery a room. None contained any artifacts or remains from the fourth dynasty, except for Menkaure's pyramid, which held an empty sarcophagus. All have their internal chambers built at or near ground level, again excepting the Great Pyramid. The outsides are featureless, or were before the casing stones were stripped and the entrances blown open. What is most interesting is what little we know of their history and construction.

### *Sneferu's Pyramids*

The step pyramid at Meidum was built as an eight-tier structure 300 feet high with blocks more tightly laid than Djoser's pyramid. Although the core of the pyramid has survived very well, what was meant to be its external face has not. Evidently the builders of this pyramid intended to change the shape of the outside from step pyramid to true pyramid by using mud-brick filler held in place by a limestone façade. Unfortunately the stone from this façade was found to be very useful by others resulting in its removal followed by the complete collapse of the filler. Today this pyramid is little more than a core of stepped limestone half-buried in a tremendous pile of sand.

Although it is felt most likely that this pyramid belonged to Sneferu, all of the evidence is circumstantial. Even the assumption that Sneferu expanded the outside of the pyramid is a guess. It is possible that this pyramid was, as were so many of the tombs of Egypt, appropriated and expanded by a later ruler. That does not lessen the fact that this pyramid presents us with the first great mystery of the fourth dynasty. The one internal chamber of this pyramid is built in a corbelled fashion that has no precedent. Somehow the Egyptians built a chamber that sits at the bottom of three hundred feet of limestone blocks and that has not collapsed in over 45 centuries. This style was copied in all of the pyramids of the fourth dynasty and in fact a collapsed chamber has not been found in any of these pyramids.

The next pyramid built is called the Bent Pyramid. This is because the bottom half of this pyramid, built in true pyramid shape, rises at a steep angle of 54 degrees and then 'bends' to a more shallow 43 degrees. The story told is that Sneferu tried to build a pyramid that

was too steep and so when the pyramid was half finished the builders changed their mind and backed off the slope.

There is no historical evidence that the builders of this pyramid did anything other than follow their original design. We have no history book from this period, so it is just as likely that the builders of the “Bent pyramid” felt that this shape more closely resembled a mound. In fact, if Djoser’s third dynasty pyramid was meant to be a mound built over the top of a mastaba, then the pyramids of the fourth dynasty may also have been meant to be mounds built over the top of mastabas. The internal structure of the pyramids has not been even close to fully explored.

It is interesting that Sneferu’s pair of pyramids at Dahshur, the Bent and the Red, may in fact reflect the dual nature of the crown of the two lands, the northern pyramid being red and the southern pyramid being white. Further, the western side of the southern pyramid was built in a direct line with the eastern side of the northern pyramid. Were these designed as a pair from the beginning? And why have been no subsidiary burials or other underground chambers been found? Aside from the mastaba field at Giza, no such provision has been found for fourth dynasty pyramids, unlike the vast underground chambers of the third dynasty and similar such provisions for earlier dynasties.

If the pyramids were meant to represent the primeval mound in such a way that the deceased king could emerge into the world as the gods emerged at the beginning of time, it would make sense that the king was buried at the base of or below the level of the mound. This is the case for all but the Great Pyramid, which actually makes a case for finding chambers that have not yet been found in this tremendous structure. In fact, there may yet be chambers to be found even in Sneferu’s pyramids, as the source of an unexplained wind inside the Bent Pyramid has never been found.

### *The Pyramids of Giza*

It can be seen by now that although Khufu’s pyramid gets the most attention, it is not alone in its mystery. It tops the list, perhaps, because of several mysterious points.

- Although Sneferu may top Khufu in terms of pyramid building volume, Khufu’s pyramid is the largest.
- The interior of this pyramid, including the Grand Gallery, King’s Chamber and airshafts, top the list of architectural achievements for interior construction. Why was this pyramid so uniquely designed?
- The shafts, which ascend from the King’s and Queen’s chambers, are unique to any pyramid. (The terms King and Queen are not necessarily correct as the Queen’s chamber may have been an alternative burial chamber for the King, or built for another unknown purpose and never intended for the Queen.) Further, a robot sent up one of the shafts discovered what may be a removable plug at its end. What was the purpose of these shafts, and is there a hidden chamber at the end of one?

- The underground chamber appears never to have been finished and may have been another alternate burial chamber, or possibly leading to other corridors yet to be found.
- The pyramid itself was built over the top of a rock outcropping and the construction of its interior is largely unknown, including how much of it was filled with sand, and what else may be inside.

Then there is Khafre's pyramid, which is not any more mysterious in itself but for the company of the Sphinx. The Sphinx has many mysteries that surround it. In fact, the Sphinx defines the word mystery.

- All other monuments are built as tombs, but no entrance has been found to any chamber that may be found within or below the Sphinx. Why was it built?
- Halfway along the causeway from Khafre's pyramid, which runs by the Sphinx, there is a shaft that leads to two levels of underground chambers, the lower of which bears a huge sarcophagus 90 feet below ground. Who was this sarcophagus for?
- Geologist Robert Schoch's analysis of the weathering patterns of its enclosure indicates an age of over 7000 years. It is argued that there was no culture existing that could have built such a monument in 5000 BC, yet even if the Sphinx was built after 2500 BC, it was still unique in its own time for its tremendous size as a carved statue, even if dwarfed by the Giza pyramids. When was it really built?
- Its face does not resemble that of its supposed builder, Khafre, and its head is 25% smaller in proportion than its body. Was it really built as part of his pyramid complex or was he doing honor to his ancestors by incorporating it? If it is not Khafre, then whom was it carved to resemble, and was it carved more than once?
- Edgar Cayce, a psychic with documented results in the area of remote viewing, said there was a chamber beneath the Sphinx containing the history of Giza and Egypt as a whole. Soundings have revealed a chamber but it is not known if it is natural or artificial.
- The Valley temple contains stones that weigh as much as 600 tons and contains features as deep as 52 feet below today's ground level. How were these moved, and was this temple really built by Khafre?

One thing we can be certain of as regards the Giza plateau, is that its history did not begin with the pyramid building frenzy of the fourth dynasty. Egyptians were known for building new temples on top of old temples, and the pyramid complexes were the greatest temples ever built. What was there before the pyramids may never be known.

### *Eternal Mysteries*

All of the other pyramids of the fourth dynasty and of later dynasties lie in ruins, their above ground structures disintegrated with many unrecognizable as ever having been of pyramid shape. It is evident that the pyramids that did survive were different in that they were built as uncompromising representations of the ideology that drove their construction, and so that is why only these have been examined and analyzed.

Although ideologies change and much research in the areas of archaeology and history has been done and verified, there are many mysteries that yet surround the construction and circumstance of these pyramids. Was the mastaba theme of the first three dynasties still combined with the primeval mound theme in the fourth dynasty? What happened to the retainer burials and underground provisions of the first three dynasties? Are there hidden chambers inside or underneath the pyramids and Sphinx?

Perhaps the best answer to this is whether or not such constructions were supported by the beliefs that motivated their builders. The emergence of the king as a child of the gods and ruler of man, who was to ascend from his tomb as the gods ascended from the primeval mound of creation, so that he could assume his position amongst them and guide mankind to eternal life, was what motivated the Egyptians to build to such extremes.

Perhaps the Egyptians' understanding of the original beliefs that described the journey of the spirit in the afterlife became, over the centuries, gradually more and more misunderstood. This eventually led to an obsession with preservation of the physical body of the king in a mistaken effort to preserve the spirit of all. Their physical interpretation of what was originally a purely spiritual message, especially because it became more ritualistic and extreme as time went on, leaves us with the task of evaluating behavior that is at best difficult to understand.

For a ruler, who was yet a man, to achieve immortality should not have required a million tons of rock, or the labor of a hundred thousand men for decade after decade. And certainly his survival in the afterlife did not ensure the benefit of all. In view of the fact that even though the pyramids still stand, their occupants did not survive the centuries, unless they remain hidden in unknown chambers. Yet the Egyptians labored ceaselessly, if not tirelessly, if only to achieve the hope of what they were promised.

That promise was to somehow achieve immortality. To become Osiris.