



ANCIENT TECHNOLOGY AND A DILEMMA FOR SECULAR ARCHAEOLOGY

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INTRODUCTION

In our last Dove program on January 5, 2016, we considered the topic of extraterrestrial life (ET) and unidentified flying objects (UFO's) from a secular and biblical perspective. During that discussion, we examined three primary viewpoints as follows:

- To date, there has been a lack of tangible evidence for ET life and/or UFO's
- A secular belief in alien life is primarily a result of an evolutionary worldview that is fundamentally based on a belief in evolution instead of God's Word. This ideology is derived from the premise that if life accidentally started here on earth (evolution) then it is not unreasonable to assume that life could also have accidentally evolved somewhere else in the far reaches of space, given the size of the universe, the millions of planets and the right conditions that might be present on other planets. Therefore, ET life is almost inevitable in an evolutionary worldview
- Contrary to the secular evolutionary ET/UFO worldview is a biblical perspective that does not address the question of some form(s) of life elsewhere in the universe but does address the sin and redemption of mankind only on this earth

Even though the admiration for the ET/UFO philosophy may often seem to be *outside the box* of the challenges of everyday life, it has, nonetheless, created a monumental dilemma for the secular scientific field of archaeology that replace the biblical account of creation with a belief in Darwinian evolution. As a result, when the debate between evolution and the biblical historical account of mankind is considered, there is one specific item of interest that is occasionally discussed but is typically approached from two divergent viewpoints. That subject is the level of intelligence and capabilities of ancient man. A basic premise of evolution states that man has evolved from an animal with minimal intelligence to modern man with an advanced level of intelligence. Contrary to this viewpoint is the biblical account of mankind that clearly states Adam and Eve were created with a high level of intelligence in order to subdue and rule over the earth (Genesis 1:28).

These divergent viewpoints present an interesting dilemma to archaeologists. Either man has evolved from an animal and has slowly acquired a high level of intelligence over many thousands of alleged years, or man was *originally* created with a high level of intelligence that should be evident to archaeological examination. However, if we do find evidence of advanced levels of intelligence thousands of years ago, does this support evolutionary ideology or biblical creationism (Figure 1)?

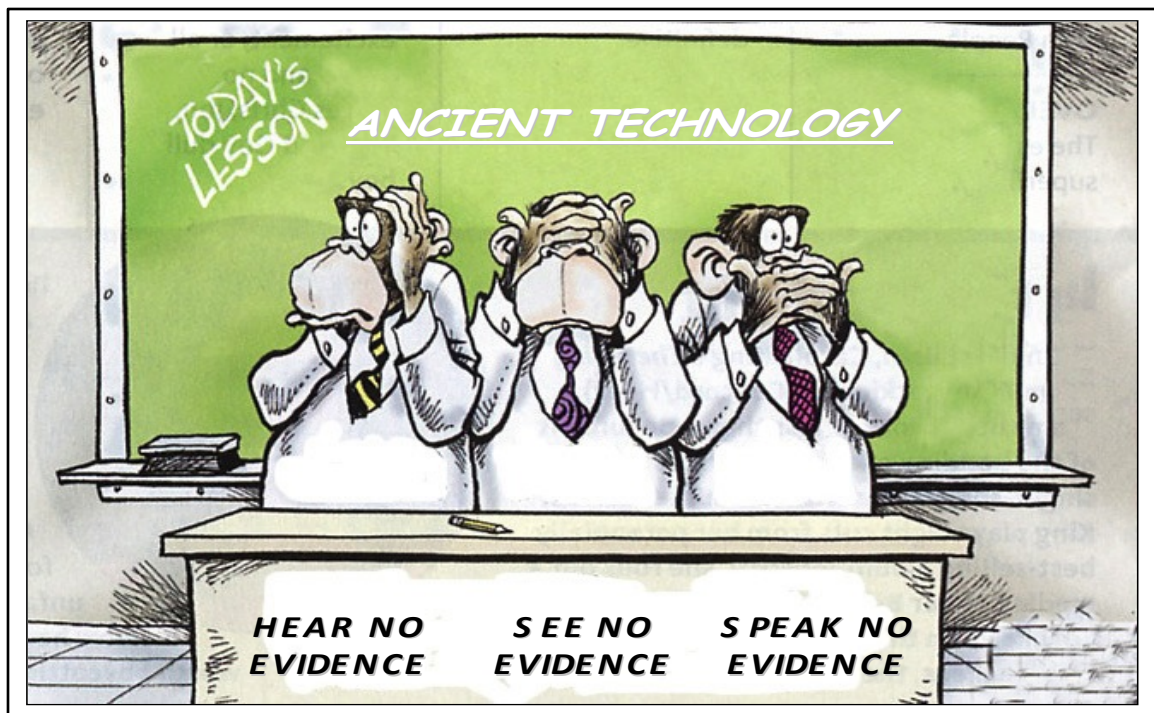


Figure 1. The historical evidence of ancient technology does not support evolutionary ideology

To solve this problem, we can investigate ancient history and look for evolutionary evidence of obscurity slowly evolving to a level of high intelligence in modern mankind, or look for an *initial level* of high intelligence that has in some cases exceeded the level of intelligence of modern times. Not surprisingly, if we examine ancient historical evidence with an unbiased mind, we find there is something inconsistent about our past. Instead of finding a lack of advanced intelligence and technology, we find clear evidence of incredible technical feats that existed in the past, some of which cannot be duplicated today!

If ancient evidence of advanced human intelligence is carefully analyzed without the modern dogma of "*ancient means primitive*" then a different picture of ancient man and intelligence as opposed to primitive evolutionary ideology begins to emerge. However, is this possible? If we approach this question from a biblical perspective, the solution becomes more understandable if we consider that man was created with a high degree of intelligence and did not need the assistance of intelligent alien life as modern archaeology commonly alleges.

Before we look at some prime examples of ancient intelligence that modern secular archaeology must ignore to validate evolutionary ideology, let's briefly review four relevant questions that are commonly asked about this subject.

COMMON QUESTIONS

WHY ISN'T THIS SUBJECT COMMON KNOWLEDGE?

The answer to this question is relatively straightforward. Much of the advanced level of technology developed by ancient civilizations on this earth is known, but the majority of this technology is simply ignored or labeled "*amazing,*" "*mysterious,*" "*unexplained,*" "*an anomaly,*" "*mystic places,*" etc. Why? Because if there was advanced technology thousands of years ago, then the concept of evolution as applied to mankind would present a question that would be difficult for evolutionary theory and secular archaeologists to answer. It is a fact the amount of evidence regarding ancient technology is not only substantial, but is also credible enough that modern archaeologists have coined a specific phrase that applies to this subject. That phrase is **OOPARTS** that stands for "*out of place artifacts!*" Not surprisingly, one of the most popular current explanations for OOPARTS is they are "*the result of alien visitors.*" This is graphically illustrated by numerous books such as *Finger Prints Of The Gods* (Hancock) that is illustrated in Figure 2, *Chariots Of The Gods* (Von Daniken), *Secrets Of The Lost Races* (Noorbergen), *Magicians Of the Gods* (Hancock), and *Technology Of The Gods – The Incredible Sciences Of The Ancients* (Childress). Notice the title of all

these books implies that ancient intelligence and technology is the result of “*alien visitors.*”

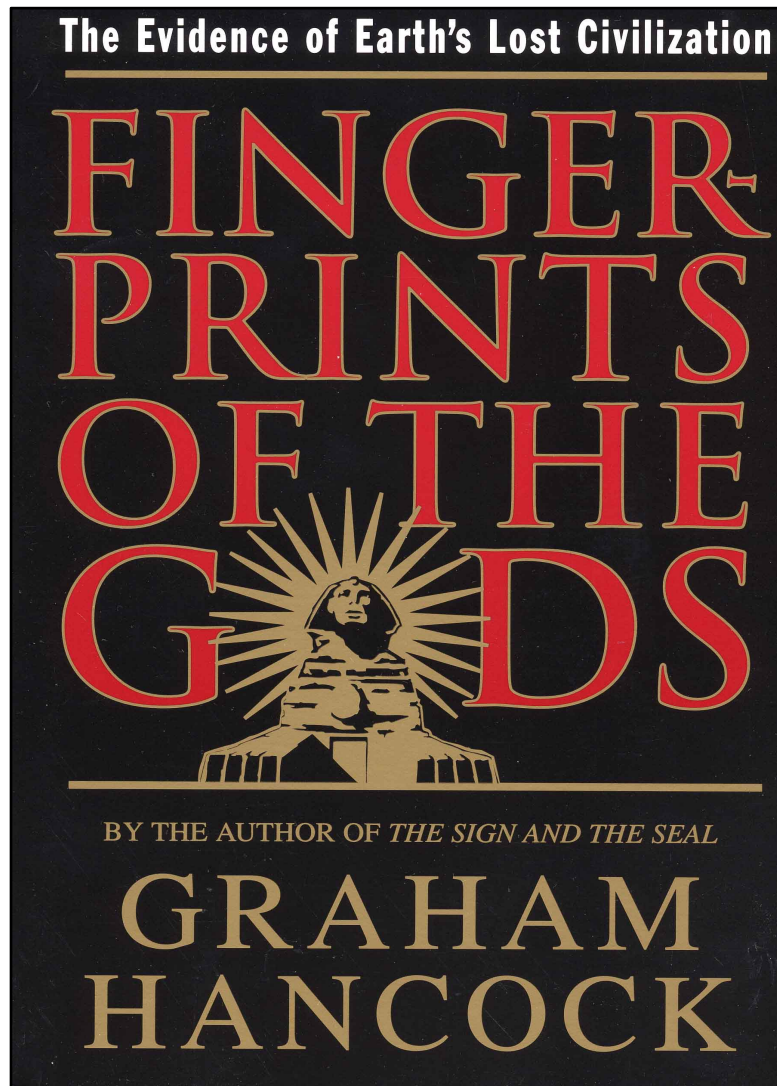


Figure 2. A secular approach to ancient technology

IS THIS SUBJECT RELEVANT TO MODERN TIMES?

Depending on your viewpoint of the origin of mankind and the universe, this subject has the capability to underscore your future! If you believe the universe and mankind evolved from random chance over billions and millions of years, then you are just an evolving animal with no future or purpose. However, if you believe that God created the universe, mankind, and has a purpose for your life, then the creator offers you a future with a purpose.

This subject is also relevant from the perspective of accuracy. If mankind has evolved from animals, then ancient technology should be absent until

modern times. However, if God created Adam and Eve with the knowledge necessary to rule and subdue the world, then ancient technology should be evident today and support the fact the Bible is accurate in its description of the creation of the universe, the earth, and mankind. Additionally, the evidence of ancient technology should also give a believer another reason to believe that science and archaeology support the biblical account of creation as an alternative to every *new finding* that modern science uses to dilute the accuracy of scripture.

HOW OLD IS ANCIENT?

Let's begin by looking at the definition of ancient as found in Webster's Dictionary which is as follows; "*of times long past, very old, having lived or existed for a long time,*" and "*designating the earlier or earliest form of something.*" If we apply these definitions to the words ancient and old, we must consider two different definitions from the perspective of evolution and biblical creation.

Evolution states that the universe is about 13.8 billion years old, the earth is approximately 4.5 billion years old, and man appeared after evolving from apes about 1 million years ago. During the alleged evolution of man, he progressed from an ape-like creature to modern man, and also evolved from animal-like intelligence to cave men, the stone age, bronze age, and so on to the pinnacle of evolution which is modern man with an advanced level of technical knowledge that has only been apparent during the past 50 to 100 years. So when the definition of ancient is applied to the evolution of man, the definition normally includes hundreds of thousands of years.

However, when the definition of ancient is applied to biblical creation, the definition of ancient is suddenly reduced to thousands of years. As delineated in Genesis, the universe and earth are only about 6,000 to 7,000 years old, and mankind who was created on the sixth day of creation is also about 6,000 to 7,000 years old. Before we continue, let's take a brief look at how the Bible delineates a time frame of 6,000 to 7,000 years of age for the universe and mankind.

First, the book of Genesis repeatedly uses the word "day." But, what is the definition of a biblical day? The Hebrew word for day is "*Yom*" which can be defined as various periods of time. However, when the word Yom is preceded by a numeric, or associated with evening and morning, or associated with night, it **always** means a 24-hour day! Interestingly, the account of creation as outlined in the first two chapters of Genesis always uses the word day (Yom) with a numeric, evening and morning, and/or night. So Genesis begins with the definition of a "*day*" as 24 hours (also see Exodus 20:11)!

Secondly, if the seven days of creation are seven 24-hour days, how long ago did creation take place? The answer is **about** 6,194 years ago. The word *about* is used because the exact time frame for the Egyptian Sojourn and the Israelite Monarchy is not known (although they are likely in the hundreds of years, if at all). So the biblical chronology for the approximate date of creation is figured as follows (going backwards):

- 2016 years since the present to BC/AD
- 2,170 years from BC/AD to Abraham
- 352 years from Abraham to the flood
- 1,656 years from the flood to creation
- A total of *about* 6,194 years

Therefore, the definition of ancient as applied to the biblical account of creation yields a definition that dates back about 6,000 to 7,000 years ago! Interestingly, when the dates of ancient technology (that have been discovered) are studied, most of the dates fall into the time range of about 6,000 years ago to about the third century A.D.! So, when we apply the question of *"how old is ancient"* to the biblical account of mankind, we will primarily focus on the time frame between the creation of man and approximately the third century A.D. for an approximate total of 4,378 years.

HOW COULD ANCIENT CIVILIZATIONS HAVE DEVELOPED A HIGH DEGREE OF TECHNOLOGY?

To answer this question, let's look at the first book of the Bible, Genesis. When Adam and Eve were created, God commanded them to *"rule over the fish of the sea and the birds of the air and every creature that moves on the ground."* Additionally, God commanded Adam and Eve in Genesis 1:28 to *"fill the earth and subdue it."* In the Hebrew, this means, *"to harness its potential and use its resources to their benefit."* In order for Adam and Eve to carry out these commands, God equipped them with the necessary intelligence to rule the world! Continuing thru Genesis, we find that approximately 1656 years elapsed from Adam and Eve to the Noahic global flood. At the time of the flood, it is estimated there were 3 to 7 billion people on the earth and they all spoke the same language with the same vocabulary (Genesis 11:1). Additionally, if the genealogy in the first eleven chapters of Genesis is closely examined, the average age of a person prior to the flood was about 912 years.

During this time in history, one should contemplate what level of technology could be attained in 1656 years with millions of people working together, speaking the same language, and with an average life span of 912 years! To put this statement in the proper perspective, remember that Columbus sailed

the ocean in a simple wooden boat on a world that was considered flat, and discovered America in 1492. So, in approximately a little over 500 years, we have progressed from Columbus and his discovery of America to advanced space exploration!

Continuing with biblical history, the sixth chapter of Genesis goes on to say that after the flood the population (some estimates have placed the time frame at 100 years after the flood and about 30,000 to 33,000 people) were willfully disobeying God and were attempting to build a tower to the heavens to display their achievements. However, after reviewing the construction of the Tower of Babel, the LORD made the following comment in Genesis 6:10; *"If as one people all sharing a common language they have begun to do this, then **nothing** they plan to do will be beyond them."* So, when God changed a single language into numerous languages approximately 1756 years after Adam and Eve, it is logical to assume the population of the world at the time of the Tower of Babel would have developed an appreciably higher level of intelligence than the intelligence of Adam and Eve.

6 EXAMPLES OF ANCIENT TECHNOLOGY

With continuous discoveries by archaeologists, it is difficult to not be aware of the megaliths at Stonehenge, the statues on Easter Island, ancient metallurgical factories, the use of aluminum dated to about 265 AD, Roman construction innovations that are used in modern construction methods, as well as many other examples. Even though there is clear evidence of popular advanced ancient technology, there are numerous other examples that are not common knowledge because they are not reported or are specifically ignored. As an example, you commonly see programs on the History and Discovery Channel about the Egyptian pyramids and the intricate gold artifacts found in the tomb of King Tutankhamen, but do you recall any similar programs on the level of advanced knowledge attained by the Parthian civilization before the time of Christ?

With these thoughts in mind let's look at just six examples of ancient intelligence/technology that rivals modern technology, and in the last four cases, cannot easily and/or economically be duplicated today.

THE ATIKYTHERIA MECHANISM

One of the most complex and sophisticated *instruments* constructed before modern times is also one of the earliest known. In 1900, Greek sponge divers found an old shipwreck off the island of Antikythera (between Crete and Kythera). The wreck was loaded with marble and bronze statues and sunk about

87 B.C. Within the numerous items on the sunken vessel, a corroded lump was discovered that proved to be extremely remarkable (Figure 3). The item was made from bronze with circles, inscriptions, cogwheels, movable pointers, complicated scales or dials, and metal plates with writing.

After 20 years of research, Professor Derek de Solla Price of Yale University has produced convincing proof the device is a geared calendar of astonishing complexity. The gears, all of bronze with teeth cut to equilateral triangles, were mounted on either side of a bronze plate. The general plan of all the gearing is also shown in Figure 3. An interesting part of the mechanism is a differential turntable that may have been used to produce a function of the Metonic cycle. In effect, the Antikythera Mechanism is considered to be a mechanical computer!

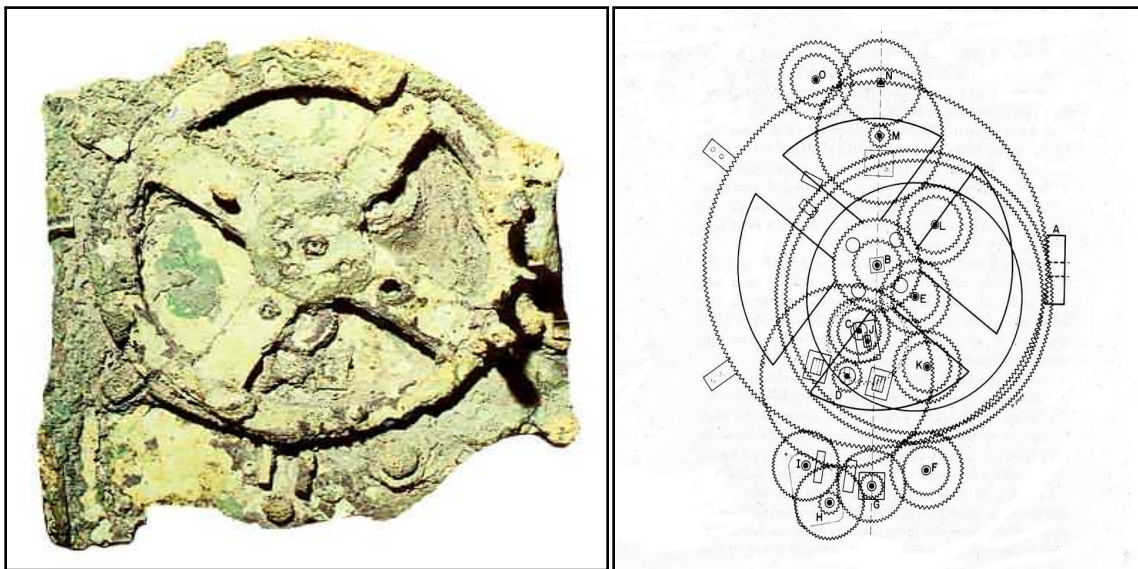


Figure 3: The Antikythera Mechanism

To quote Professor Price ... "requires us to completely rethink our attitudes toward ancient Greek technology. Men who could build this could have built almost any mechanical device they wanted to. The Greeks cannot now be regarded as great brains that disdained manual labor or rejected technology because of their slave society. The technology was there, and it has just not survived like the great marble buildings, statuary, and the constantly recopied literary works of high culture."

ASTRONOMY

History records that in 1610, Galileo used the first telescope and was the first person to observe the changing phases of Venus. He allegedly was also the first to see the 4 major moons of Jupiter, and the first to see the rings of Saturn. In 1600 A.D., Kepler was given credit for stating the earth rotates in an oblique axis

around the sun while it rotates at the same time around its own axis. However, ancient history paints a far different picture:

- The ancient Babylonians observed the 4 moons of Jupiter and 7 satellites of Saturn and recorded it in their writings
- The ancient Assyrians pictured the God Jupiter with 11 satellites going around the planet. In modern astronomy, the 10th satellite was discovered in 1966, and the 11th was discovered in 1979 by Pioneer 11
- The ancient Hindus of India picture 7 distinct bodies in the heavens (Sun, Moon, Venus, Jupiter, Mercury, Mars, Saturn with a ring), and then they show 2 shadowy planets on the outer fringes. We now know these planets are Uranus (discovered in 1781) and Neptune (discovered in 1846). The ancient Hindu texts also states *"the earth is a globe in space, everywhere men think they are on top"*
- The Greek Orphic Hymn, 1850 B.C., speaks of the mountains on the moon and the apparent motion of the stars caused by the earth's rotation axis. Arstarkus in 200 B.C. stated *"the earth rotates in an oblique axis around the sun while it rotates at the same time about its own axis"*
- In the ruins of Tiauanaco, Peru, there is a large stone named Gateway to the Sun. At the top of the stone is carved a strange calendar. In 1962, it was determined that it was a very highly advanced Venezuelan Calendar, which is a calendar of the planet Venus. How did they know the rotation rate of the planet Venus as this was only determined recently by radio telescopes and confirmed by a satellite in the vicinity of Venus

STONE TECHNOLOGY

Although the two preceding examples of ancient technology are thought provoking, *let's significantly raise the bar* and look at three additional examples that continue to mystify modern scientists and archaeologists from the perspective of *"how could simple ancient civilizations do that"* as this assessment raises numerous questions, all of which are based on the premise of ancient is typically defined as primitive. The following examples of quarrying, transporting, shaping (to exacting tolerances), lifting and the precise fitting of megalithic (large stones) granite stones of hundreds and/or thousands of tons was based on a worldwide technology that is unknown today and in most cases, cannot be practically duplicated even with modern technology. This lost technology can be found in most areas of the world such as Latin America, the Middle East, and Europe. Some examples are:

- Western Stone in Jerusalem that weighs 570 tons
- The 3 Trilithon/Temple Stones of Baal-beck, Lebanon that weigh 870 tons each
- Ramesseum Statue in Thebes, Egypt, that weighs over 1,000 tons

To keep the transportation and placement of the aforementioned weights in perspective, consider the recent quarry, transportation and placement of the *Levitated Mass* as follows:

- In 2012, a large-scale sculpture by Michael Heizer was developed for an elevated display at the Los Angeles County Museum of Art
- The granite boulder was quarried in Riverside, California, by the Stone Valley Materials Quarry
- The granite boulder was 21.5-feet tall and weighed 340 tons
- Movement of the boulder from the quarry to the Art Museum 100 miles away required a special crane that was capable of lifting 700 tons, and an exclusive 295-foot long transporter with 206 wheels and with over 2,400 horsepower
- As an additional point of reference, the Phoenicians/Canaanites were capable of moving megalithic granite stones of over 1,200 tons (Stone of the South) and the Egyptians were also capable of moving granite megaliths that weighed over 1,200 tons (Aswan Quarry, Egypt, 137' long Unfinished Obelisk)

Although it is easy to focus on the fact that ancient granite megalithic stones of immense weight were regularly quarried, moved noteworthy distances (the quarry in Aswan Egypt was 500 miles away from the pyramids), and elevated to incredible heights (the great Egyptian pyramid is almost 500' high), it is even more remarkable that no subsequent civilizations have reproduced these remarkable accomplishments. Even in modern times and using *state of the art technology* to construct the Great Pyramid in Egypt would prove to be an extremely difficult and expensive task as building on such a huge scale and with some of the hardest rock known to man is not a simple task regardless of any epoch since these ancient construction feats were accomplished. And yet we are supposed to believe that a civilization that had recently emerged from the Stone Age with simple tools were able to accomplish this?

Using ancient Egypt as a prime example, there are seven characteristics of remaining ancient technological evidence that must be addressed in a straightforward manner:

1. The magnitude of construction was colossal as were the stones used in a diversity of construction
2. Granite is one of the hardest rocks known, one of the most difficult materials to work with, and typically requires diamond tipped tools for cutting, shaping, etc
3. The obvious precision of the construction, even by today's standards, indicates that *machine tools* were used in the construction process



Figure 4. Machine saw marks



Figure 5. Clear evidence of machine feed marks

4. Machine tool marks are evident on numerous artifacts and cannot be explained by the use of simple hand tools. As an example, the granite block in Figure 4 is clear evidence of *machine saw marks* (as are many other blocks on the Giza Plateau), and numerous machine cuts in granite display the characteristic *feed lines* of a tool cutting granite in Figure 5

5. Numerous engineers agree that what was created in Egypt (and also other parts of the world) is advanced enough to severely challenge modern capabilities. Many advanced engineers familiar with modern tools and technology gape in unbelief at what the ancient Egyptians accomplished
6. It seems that such genius could also be capable of the design, building and implementation of tools that were capable of producing works of unbelievable magnificence
7. The most important characteristic/question that must be addressed for this discussion is did the ancient Egyptian stonemasons derive their technology from alien visitors or from technology that began with Adam and Eve and increased in succeeding years

With the preceding thoughts in mind, let's look at the technology and resultant capabilities of the civilization that inhabited Tiahuanaco and Pumapunku on the border of Bolivia and Peru in the Andes Mountains and then the ancient Egyptians.

TIAHUANACO – LAKE TITICACA – PUMAPUNKU

High in the Andes Mountains on the border of Peru and Bolivia are three areas of immense interest that has become a perplexing dilemma to modern secular archaeology and archaeologists, but appears to validate the biblical account of ancient intelligence and the lasting influences of the global flood of Noah. Although these three areas are in the same general area, we will look at their individual characteristics as they individually – and collectively – defy common logic from a modern archaeological perspective.

Tiahuanaco (Tiwanaku)

- On the shores of Lake Titicaca are the remains of a city called Tiahuanaco (also known as Tiwanaku) that predates any records the Inca's have of Indians
- Debatably, the city of Tiahuanaco is often called the world's oldest city by secular archaeologists and is alleged to be older than Jericho based on secular dating methods
- Located at an elevation of 12,580-feet where the atmospheric pressure is 8psi (with a similarly small oxygen content) instead of the normal 14.7psi. Because of the high altitude, most people can only spend a short time at this elevation before feeling quite ill in the rarefied air
- There is evidence the city was once a *seaport* having extensive docks/wharves positioned on an earlier shoreline. One of the wharves is large enough to accommodate hundreds of *ocean going ships*

- Many of Tiahuanaco's buildings were finished with massive finished stones of many tons in weight (Figure 6), some of which are in the range of hundreds of tons
- Many large finished stones were placed in such a manner that only people with advanced engineering methods could have designed and transported them



Figure 6. Some of the remains of Tiahuanaco

- Numerous stones are comprised of Andesite (only diamonds are harder) and were transported from a quarry 50 miles away in the mountains
- In 2015, the Bolivian government announced that by using ground penetrating radar, an underground pyramid (and other underground anomalies) has been discovered. Bolivia is preparing to begin excavations in 2016
- Along with the ability to cut, transport, and precisely finish Andesite stones of immense weight (over 200 tons), Tiahuanacan scientists utilized modular building techniques (cutting edge today) and also knew the earth was a globe that rotated on its axis. Additionally, they were able to calculate the exact time of eclipses in the opposite hemisphere, and were familiar with Pi (3.46) and its correct ratio of 22/7
- Incan legends state, *"the area had been destroyed in a great deluge"*

Lake Titicaca

- The highest navigable lake in the world
- The lake covers an area of 3200 square miles being 70 miles wide and 138 miles long
- Its shoreline once extended to Tiahuanaco
- There is a significant amount of evidence that lake Titicaca was once at sea level and was pushed upward with the Andes Mountains from tectonic plate movement that trapped part of the sea among the suddenly rising peaks, forming Lake Titicaca. Observable factors of this upheaval are:
 - The enormous rock slabs, some weighing hundreds of tons, show evidence of a violent upheaval
 - Water lines on adjacent mountains indicate the sea was once located there
 - Its shoreline is littered with millions of fossilized seashells. Today, the lake is slightly saline
 - The marine fishes and seahorses in the lake are all oceanic types found only in salt water as opposed to freshwater marine life
 - Evidence of ancient large-scaled corn fields adjacent to the area show ancient cultivation. However, corn will not germinate and grow at this present altitude
- Research scientists believe that the lake and associated ruins once lay at sea level and some devastating cataclysmic event occurred to lift the lake to its present elevation

Pumapunku

Pumapunku is part of a large temple complex that is an integral part of the Tiahuanaco Site near Tiahuanaco, Bolivia. Although there is excavated proof of advanced water conduits, revetments, residential compounds, and pavements in addition to the obvious ability to transport megalithic blocks of stone over many miles from distant quarries, the numerous stone blocks with evidence of precision machining that litter the complex (Figure 7) have been the focus of archaeological astonishment and bewilderment. An example of complete archaeological perplexity is enhanced by the use of granite blocks that were quarried from Andesite that is exceedingly heavy and only exceeded in hardness by diamonds. This means that diamond tipped machines and/or tools were necessary to cut and shape the blocks in addition to the rapid and extreme *wear rate* of the machines/tools that were employed yet keeping the cuts perfectly accurate.

In assembling the walls of Pumapunku (and other facets of their construction), each granite block was finely cut to interlock with the surrounding

blocks so they fit together like a puzzle, forming load-bearing joints without the use of mortar as follows:

- Some blocks were cut at a specific angle to allow the placement of another block with the same angle on top of it. These cuts show precision machined cuts that created flush joints that were so accurate and precise that not even a razor blade will fit between the stones (even after thousands of years) but also was also indicative of a thorough understanding of descriptive geometry



Figure 7. Evidence of precision machining in Andesite

With the preceding overview of Tihuanaco, Lake Titicaca, and Pumapunku, let's connect some dots and attempt to summarize this ancient historical archaeological evidence as follows:

- Although the exact age of the site is unknown, it is generally agreed it is very old
- There is evidence the city was once a *seaport* having extensive docks/wharves positioned on an earlier shoreline. One of the wharves is large enough to accommodate hundreds of *ocean going ships*
- There is a significant amount of evidence that Lake Titicaca was once at sea level and was pushed upward with the Andes Mountains from tectonic plate movement that trapped part of the sea among the suddenly rising peaks.

- Research scientists believe that the lake and associated ruins once lay at sea level and some devastating cataclysmic event occurred to lift the lake to its present elevation
- According to Incan legends, *“the area had been destroyed in a great deluge”*
- **Combining the previous 6 items, it is *likely* that these ruins are remains of a pre-flood civilization that was originally located on the ocean. During the global flood of Noah, tectonic plate activity likely raised a portion of the then sea to its present location at Tihuanaco at 12,580-feet**

RAMESSES HALL AT LUXOR

The Ramesses Hall at Luxor (also known as the Ramesseum and/or the Temple of Amun Mut Khonsu) is the memorial temple of Pharaoh Ramses II (1279-1213 BC) and is located in Upper Egypt across the river Nile from the city of Luxor. The temple is comprised of an outer and inner courtyard with numerous large granite statues of Ramses II and a 48-column hypostyle hall (large room with columns) surrounding the inner courtyard. One particular item of interest is the remaining fragments of the entrance statue of Ramses II that was originally 62-feet high, weighed over 1,000 tons, and the fact the granite statue was transported 170 miles over land. Figure 8 illustrates the scale and magnitude of a portion of the remaining temple and the Ramses II entrance statue in relation to visitors.

The Ramesses Hall at Luxor is often referred to as the world’s greatest open-air museum – and for good reason. Although there are many exceptional examples of Egyptian art, hieroglyphics, precise engineering and construction methodologies, and an advanced granite stone technology with clear evidence of *machining granite*, we will just briefly focus on how the statues of Ramses II at Luxor challenge the Giza pyramids as the most perfectly engineered artifacts of ancient Egypt – and perhaps all of human history.

To better clarify the advanced brilliance of the ancient Egyptians and their ability to *mass-produce* precise works of art in granite (one of the world’s hardest rocks), it must be remembered that:

- The preciseness of their technology only became recently evident and understandable through the use of modern technology known as Metrology (the science of measurement)
- The sheer volume of granite and diorite that was precisely cut into statues around Luxor demonstrates the ancient Egyptians mastery of their craft and is even the more surprising as it is known that the ancient Greeks and Romans did not sculpt statues in granite rock



Figure 8. Visitors to the Ramesses Hall at Luxor

To attempt to illustrate the level of their ability and accomplishments, let's primarily consider the statues of Ramses and specifically his head and face, remembering that the technology we will be considering was only clarified when digital pictures were taken of Ramses statues and then brought back to America and placed into modern CAD (Computer Aided Design) programs on specific computers. This allowed – for the first time – the ability to observe and evaluate the degree of accuracy and geometric perfection that was commonplace to the Egyptian craftsmen of that time:

- Initially, it must be stated that to achieve geometric perfection by hand (as simple hand tools are often characterized by the History and Nat Geo channels) would involve an inordinate amount of grinding and polishing, yet there are no scratches that would normally be associated with grinding and polishing. Additionally, grinding and polishing would not achieve the same level of perfection in each statue
- When a digital picture of the face of Ramses was imported into a computerized CAD program, it was discovered that the left and right side of the face was a *mirror image*, or, there was no variation between the left and right side. This incredible accomplishment is graphically displayed in Figure 9 with respective measurements for clarity

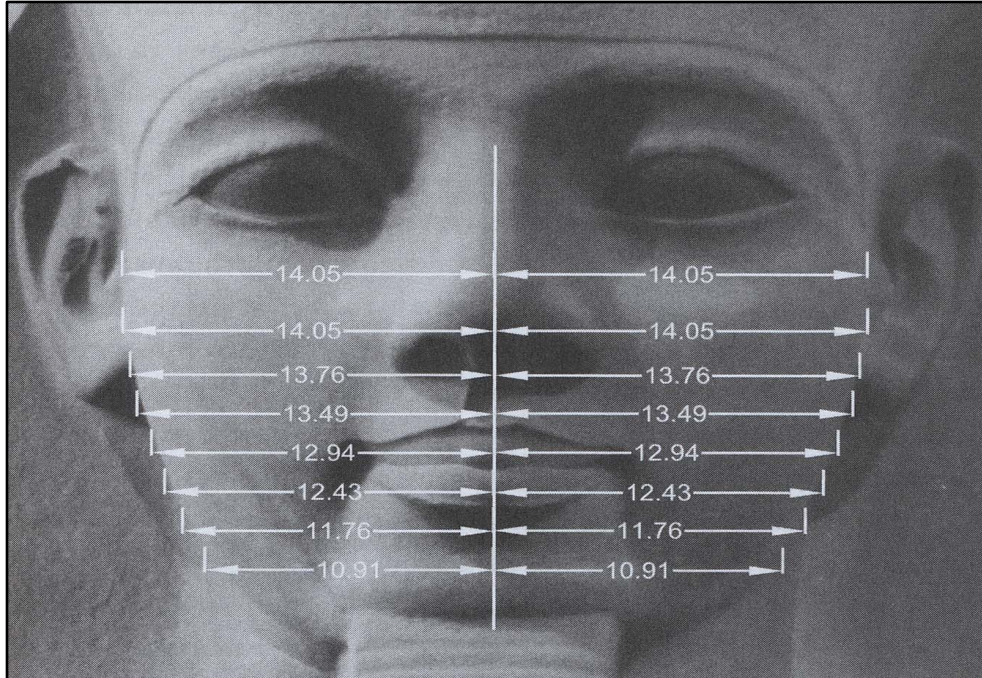


Figure 9. Mirror image of Ramses face

- In looking at the face of Ramses in Figure 9, notice the smooth blending of the contoured surfaces (cheeks, nose, lips, etc). Today, these surfaces are regularly created with computer algorithms that are known as *non-uniform rational B splines* (NURBS) that allow designers to smoothly morph one shape into another with perfection. In addition to Figure 9, the ancient Egyptians were also able to achieve the identical results over and over again throughout the Egyptian Empire
- Figure 10 shows a different view of Ramses face to illustrate another example of circular geometric perfection
- The statues of Ramses are not the only statues of a Pharaoh with perfect symmetry. Pharaoh Amenhotep and most other Egyptian statues are also crafted to an astonishing symmetry and precision
- Figures 9 and 10 dismiss the concept of ancient sculptors using stone balls, hammers and/or copper chisels
- There are over 100 known statues of Ramses in Egypt. However, there are also more than 250 statues of Amenhotep (a Pharaoh during the 18th dynasty) in Egypt that also display the same level of meticulous precision in granite. When contemplating the creation of over 350 of these statues in granite, one must imagine that the execution of these statues across all of Egypt implies that a standardized system of measure and production-line manufacturing must have existed and that it would not be out of place in modern manufacturing plants

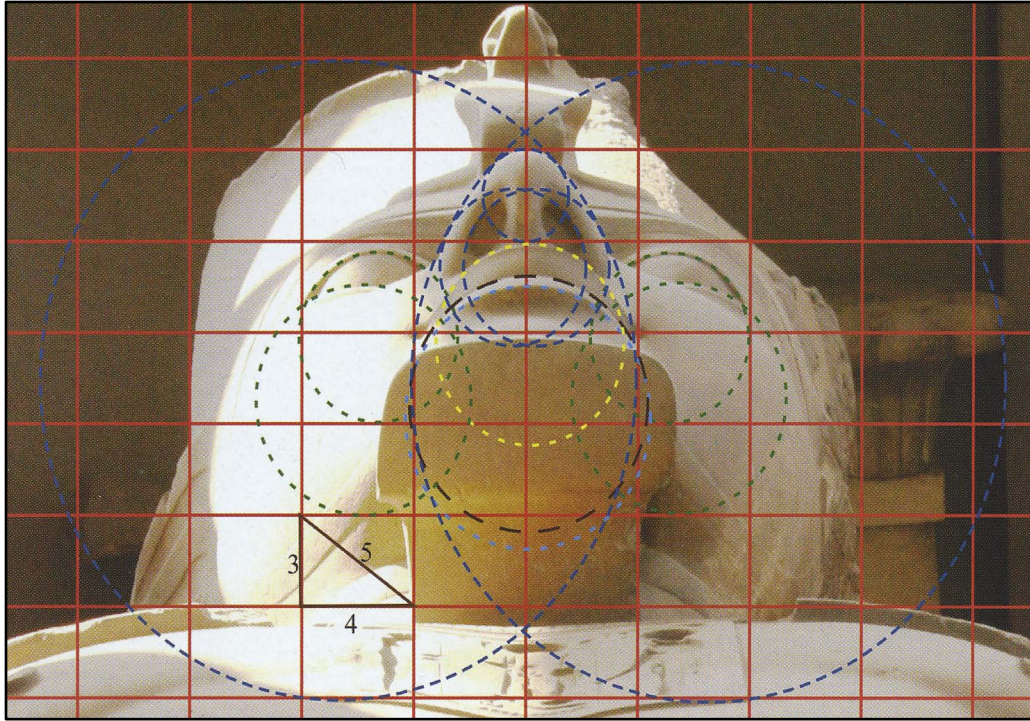


Figure 10. Precision circular geometry in granite

*Note: Additional information on the lost technology of Ancient Egypt and their ability to craft precision works of art in granite, andesite and diorite can be found in the excellent book by Christopher Dunn, *Lost Technologies of Ancient Egypt*, and is highly recommended for an expanded viewpoint on the technology of ancient Egypt. Christopher Dunn is a manufacturing engineer with 50 years of experience and has worked primarily in aerospace with an emphasis on precision and laser application.*

ABU ROASH

Abu Roash (also spelled Abu Rawash) is about 5 miles North of Giza and is the site of Egypt's most northerly Pyramid, the mostly ruined Pyramid of Djedefre (also known as the lost Pyramid) that sits atop the plateau of Abu Roash. For purposes of this discussion, the focus is not on the Pyramid of Djedefre but on a granite stone that presents a challenge to modern engineers as using any of the methodology proposed by conventional archaeological wisdom would be insufficient by a large margin.

Although the granite stone initially appears to be rather large but otherwise unimpressive, a closer inspection quickly reveals that the top surface is concave instead of flat (Figure 11) and also appears to be machined. From the



Figure 11. Granite stone at Abu Roash

perspective of what methodology would be necessary to create this granite stone in its present configuration, let's briefly summarize why it is so noteworthy:

- The stone exhibits two machined steps of different heights
- The concave surface is *true* to the segment of a cylinder (curved)
- A close inspection of the concave surface reveals visible feed striations (Figure 5) that are indicative of *machine feed marks* from a machine tool
- The only feasible explanation of this stone is that it was machined by a large circular saw capable of creating two machined steps
- It has been computed that to accomplish the concave surface with two machined steps of different heights, a circular saw of 37.5-feet in diameter would have been necessary
- This stone provides evidence that circular machine tools were used on the Giza Plateau


Note: The following section on the Pyramids will be covered on the March 4, 2016 program as they were not discussed on the February program.

THE GREAT PYRAMID OF CHEOPS (Kufu)

Of all the megaliths on earth, the most well known are the giant pyramids in Egypt, and although about 4,500 years old, still remain in fairly good condition today. The great pyramid of Cheops/Kufu was inspired and built by Pharaoh Khufu, and was supposedly constructed by *"a simple farming community that did*

not have the wheel or pulley and used simple farming tools”(as stated in Figures 12 and 13).

THE PENGUIN HISTORICAL ATLAS OF ANCIENT CIVILIZATIONS



Excavations of Jericho, identified as Tell es-Sultan in Palestine, revealed the remains of this round tower which dates to 8000 BC. Jericho is one of the oldest known settlements in the world, dating back more than 10,000 years. Although Jericho is often mentioned in the Bible, archaeological evidence does not support the biblical chronology of events.

organization. The characteristics of any society can be compared objectively to this list, which is free of value judgements. We would not expect bands or segmentary societies to display more than a couple of these characteristics; a chiefdom might display around half of them, but a civilization should display all, or at least most, of those characteristics. We would then be justified in describing a society as a civilization, no matter how unpleasant we may find its values.

Many theories have been advanced to try to explain the emergence of civilization, some of which can readily be dismissed. Civilization did not arise because of any mental or physical evolutionary changes in humans themselves.

Physically modern humans evolved between 120,000 and 100,000 years ago and such changes as have occurred since are superficial adaptations to climate or are the result of changes in nutrition and lifestyle – and are potentially reversible. Early farming peoples around the world were always much shorter and less robust than their hunter-gatherer forebears. This was the result of arrested growth during childhood, resulting from malnutrition during periodic harvest failures. Improved diet in modern industrialized countries reversed this shrinking tendency, and in the 20th century each generation was taller than the last.

Mentally fully modern humans probably evolved between 50,000 and 40,000 years ago, when art, body ornaments and other material evidence of symbolic thought begin to appear in the archaeological record. The immense scientific and technological accomplishments of the present day are not, however, evidence that human mental capacities have gone on evolving. Present day hunter-gatherers or people who live in surviving stone-age farming societies, for example in the New Guinea Highlands, are not less intelligent than people who live in industrialized, high technology societies. In fact, there is some evidence that the reverse may be true: modern industrialized societies promote the development of narrowly specialized skills above general intelligence.

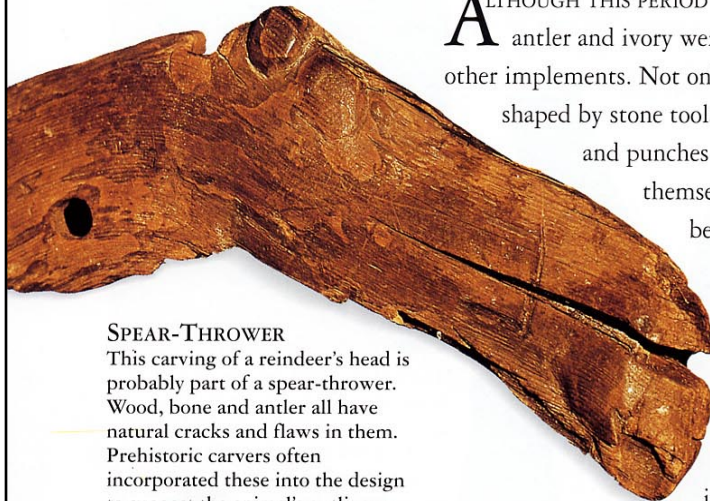
Perhaps surprisingly, technological innovation does not seem to have been a critical factor in the emergence of civilization. Most of the technology on which the Old World civilizations depended had been developed hundreds, or even thousands, of years earlier. Even advanced techniques, such as the lost-wax method of bronze-casting, iron-working and shipbuilding, were not the exclusive preserve of civilized societies. The civilization of ancient Egypt illustrates this point very clearly. The pyramids of the Old Kingdom Period (2649–2150 BC) were built without knowledge of pulleys or the wheel, using stone tools and soft copper chisels. Egypt's was essentially a stone-age civilization, dependent on technology that was no more advanced than that used by the contemporary small-scale farming societies of northwest Europe. Most of the early civilizations of the Americas were based on simpler technology still, as they lacked metal tools of any kind.

The Transition to Farming

The critical factor in the emergence of the first civilizations was the transition from hunting and gathering to the farming way of life, which allowed population increases and the accumulation of surpluses ('wealth'). The numbers of hunter-gatherers are limited by the productive capacity of the natural environment, and they need large territories to support them. Except in very rich environments, the Pacific coast of North America for example, settled life is impossible. As a rule, hunter-gatherer populations are dispersed and of low density. Estimates suggest that the maximum global population that could be supported by hunting and gathering might be less than ten million. Farming began to free humans from the constraints imposed by the natural environ-

Figure 12. The ancient Egyptians allegedly did not have the pulley or the wheel

Carving Wood and Bone



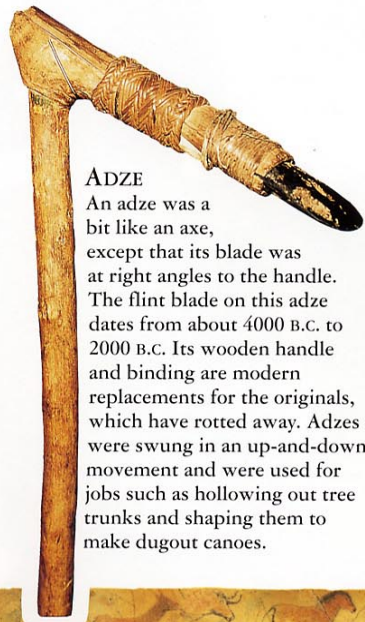
SPEAR-THROWER

This carving of a reindeer's head is probably part of a spear-thrower. Wood, bone and antler all have natural cracks and flaws in them. Prehistoric carvers often incorporated these into the design to suggest the animal's outline, as well as particular features, such as eyes, mouth and nostrils. Engraved, or carved, pictures in caves also often make use of the natural form of the rock.

ALTHOUGH THIS PERIOD is called the Stone Age, wood, bone, antler and ivory were just as important for making tools and other implements. Not only could these materials be carved and shaped by stone tools, but bone and antler hammers and punches were used to shape the stone tools themselves. By using these implements, better cutting edges and finer flakes of stone could be achieved.

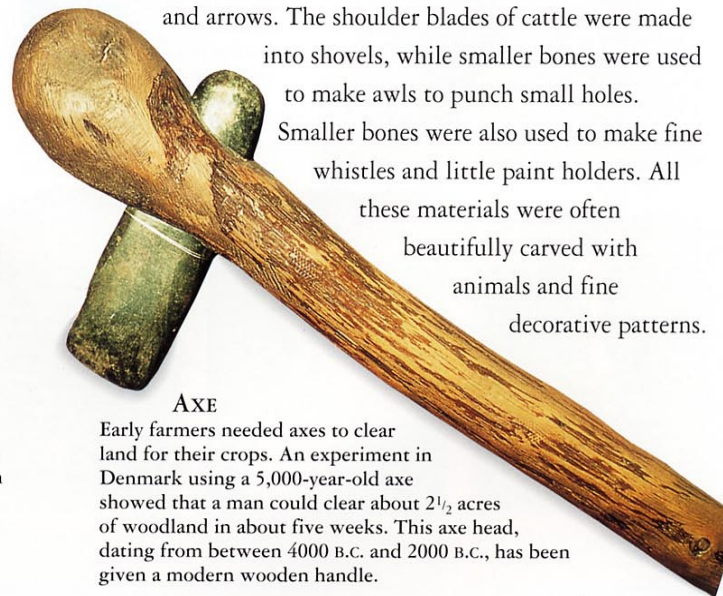
Antler, bone, wood and ivory had many different uses. Antler picks were used to dig up roots and chip out lumps of stone. Antlers and bones were carved into spear-throwers and, along with ivory, were used to make needles, fish hooks, harpoon heads and knives. Wood was used to make the handles and mounts for spears, harpoons, axes, sickles and adzes, which were tools used for shaping wood, as well as to make bows and arrows. The shoulder blades of cattle were made into shovels, while smaller bones were used to make awls to punch small holes.

Smaller bones were also used to make fine whistles and little paint holders. All these materials were often beautifully carved with animals and fine decorative patterns.



ADZE

An adze was a bit like an axe, except that its blade was at right angles to the handle. The flint blade on this adze dates from about 4000 B.C. to 2000 B.C. Its wooden handle and binding are modern replacements for the originals, which have rotted away. Adzes were swung in an up-and-down movement and were used for jobs such as hollowing out tree trunks and shaping them to make dugout canoes.



AXE

Early farmers needed axes to clear land for their crops. An experiment in Denmark using a 5,000-year-old axe showed that a man could clear about 2½ acres of woodland in about five weeks. This axe head, dating from between 4000 B.C. and 2000 B.C., has been given a modern wooden handle.

Figure 13. Simple tools allegedly used during the time of the ancient Egyptians

It is important to remember that the focus of Figures 12 and 13 is the emphasis that modern secular archaeology places on the perception of ancient means primitive, yet the archaeological remains of ancient technology in Egypt (and many other areas in the world) clearly refutes this ideology. Part of this problem among academics is a persistent barrier in their beliefs that has resulted in their unwillingness to consider ancient civilizations as being advanced.

To begin, let's briefly consider two primary realities that should require careful thought and analysis as applied to the giant pyramid of Cheops, considering that conventional history has always believed that the pyramids were used as burial edifices for pharaohs and they were constructed by a simple farming community. Then we will overview the technology of the giant pyramid:

Tombs

It is assumed that Cheops and the other pyramids were tombs for the pharaohs but the current evidence is against this assumption. Surprisingly, no Egyptian pharaoh has ever been found in a pyramid. In 1975, U.S. Egyptologist Dr. Mark Lehner stated, *"no burial has ever been found in any pyramid in Egypt."* Considering that more than 108 pyramids have been identified in Egypt, this fact alone practically negates the tomb theory. However, it is a fact that the burial location for Pharaohs was in The Valley Of The Kings, not the pyramids.

Accuracy

The Great Pyramid is the largest, most precisely built, and most accurately aligned building *ever* constructed in the world and the precision with which the Great Pyramid was built were clearly very advanced, even when compared to the efforts of modern technologies. As previously mentioned, remember that much of the accuracy used by the Egyptians was not realized until modern day technology (laser instrumentation, etc.) was employed. Respected builder and architect James Hagan (who designed Walt Disney Shopping Village in Florida, the Sanford Stadium in Atlanta, and the MARTA Five Points Central Station in Atlanta) has stated that *"it would be impossible to build the Great Pyramid today using modern building methods, and, therefore, impossible by primitive methods."*

This is why it is amusing when intelligent men and women (along with the History, Nat Geo, and PBS channels) propose that the pyramids and other ancient Egyptian artifacts were created using elementary hammers and copper chisels. Additionally, and in keeping within the central focus of this discussion, there is no evidence to support the speculation that a civilization, for one brief period of time, could produce work that is so advanced it would be considered brought from space (ET life) to the members of that society.

Technology

Now, let's take a brief look at some of the technology (in no particular order) that is displayed by the giant pyramid Cheops:

- The meridian running through the pyramid divides the continents and oceans into two equal halves
- The centerline of the pyramid lies at the center of gravity of the continents
- The area of the base of the pyramid divided by twice its height gives the mathematical figure of Pi (3.14)
- The northern face is perfectly aligned to true north, the eastern face perfectly to true east, the southern face perfectly to true south, and the western face perfectly to true west
- The error of the pyramid sides only deviate from true of less than 0.015 per cent, considered incredible accuracy for any building in any epoch
- There is a difference of less than 8-inches between the shortest and longest side of the pyramid, and an error of less than 1%
- The base of the pyramid covers 13 acres and is level to within 7/8 inch
- 2.3 million gigantic blocks were cut out of quarries, dressed, transported, and fitted together on the building site to within the nearest thousandth of an inch. Additionally, some type of cement was used between the blocks (which makes a bond stronger than the blocks) of which the composition is still unknown today
- The larger blocks of granite used for the *tomb area* within the pyramid weighed up to 70 tons each and came from a quarry in Aswan, 500 miles away. This granite has a high (over 55%) content of quartz crystal
- Egyptologists believe it took about 20 years to construct the pyramid. If there are 2.3 million blocks up to 15 to 18 tons each, and if masons worked ten hours a day, 365 days a year, they would have had to place 31 blocks per hour, or one block about every two minutes
- The pyramid contains more stone than that used in all the churches, cathedrals, and chapels built in England since the time of Christ
- It is commonly alleged that building the pyramid required ramps up the sides so blocks of stone could be dragged up the ramps and placed into position. However, the Egyptology department at Oxford University has calculated that to carry an inclined plane to the top of the pyramid at a gradient of 1 in 10 would have required a ramp 4,800 feet long and more than three times as massive as the pyramid itself

Even though the preceding facts are extraordinary – some of which are beyond the scope of modern construction methods – there are several more fascinating items that are unique to the giant pyramid of Cheops. In 820 A.D.,

Caliph Al Mamun constructed a passageway from the exterior of the pyramid to the interior. This passageway intersected one of the numerous hidden passageways in the interior of the pyramid. This finding has led to the additional discovery of numerous passageways and unexplained chambers within the interior that would not be used for funerary purposes (Figure 14).

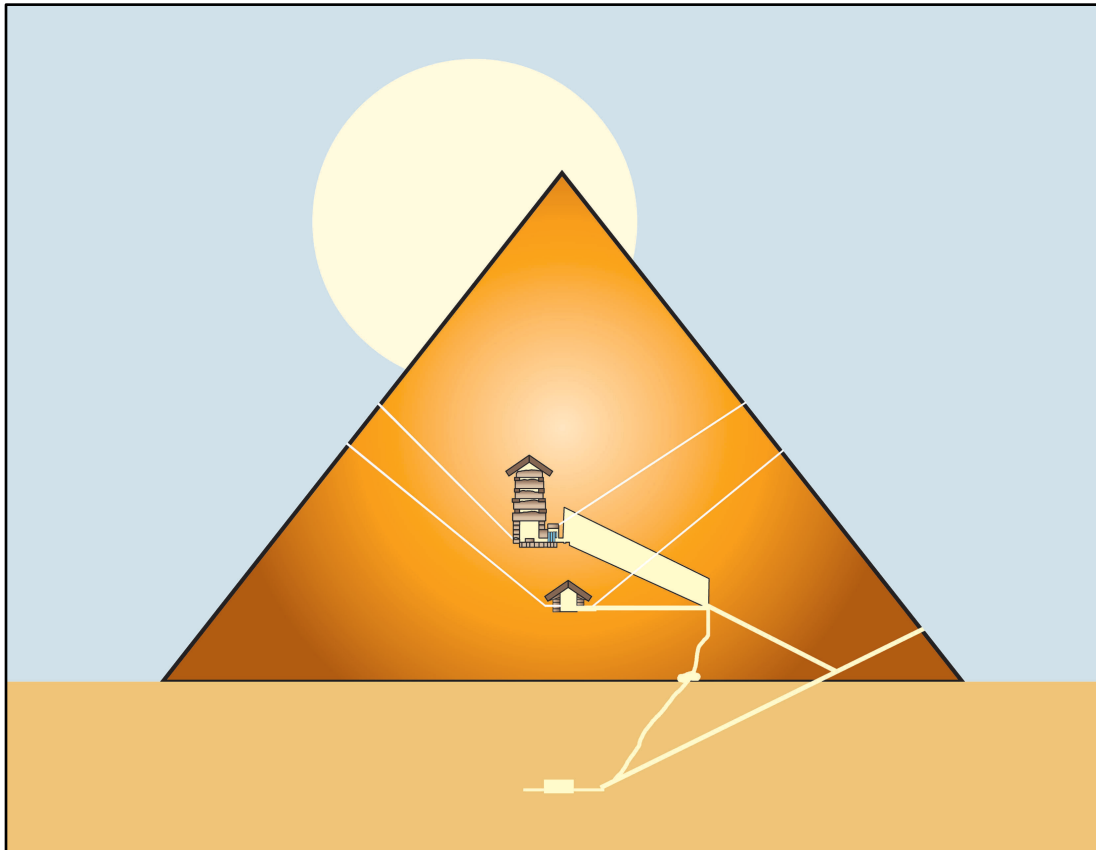


Figure 14. Unexplained interior chambers for a tomb

So, if the pyramids were not tombs as stated by Egyptologists Dr. Mark Lehner, and the Great Pyramid Cheops was constructed with an inordinate degree of precision and numerous unexplained chambers and passageways that far exceed the requirements of a tomb, what was their primary purpose? One theory is they were astronomical observatories, another is they were geodetic markers, and still another is they were for initiations. However, one of the more popular (although controversial) is the "*power plant theory*" which postulates Cheops was a geo-mechanical power plant that responded sympathetically with the vibrations of the earth and converted that energy into electricity. Interestingly, the word pyramid means, "*fire in the center.*" The following items give this theory some credibility when applied to the pyramid Cheops (Figure 15):

- The King's Chamber is constructed out of granite from Aswan quarries. This granite contains over 55% silicon quartz crystals. Quartz crystals have the ability to convert mechanical energy into electrical energy (piezoelectric effect). Crystal does not create energy, it just converts one kind of energy into another
- Above the King's Chamber are five rows of red granite beams for a total of 43 beams weighing up to 70 tons each! Each layer of beams is separated by a space that a person can crawl between

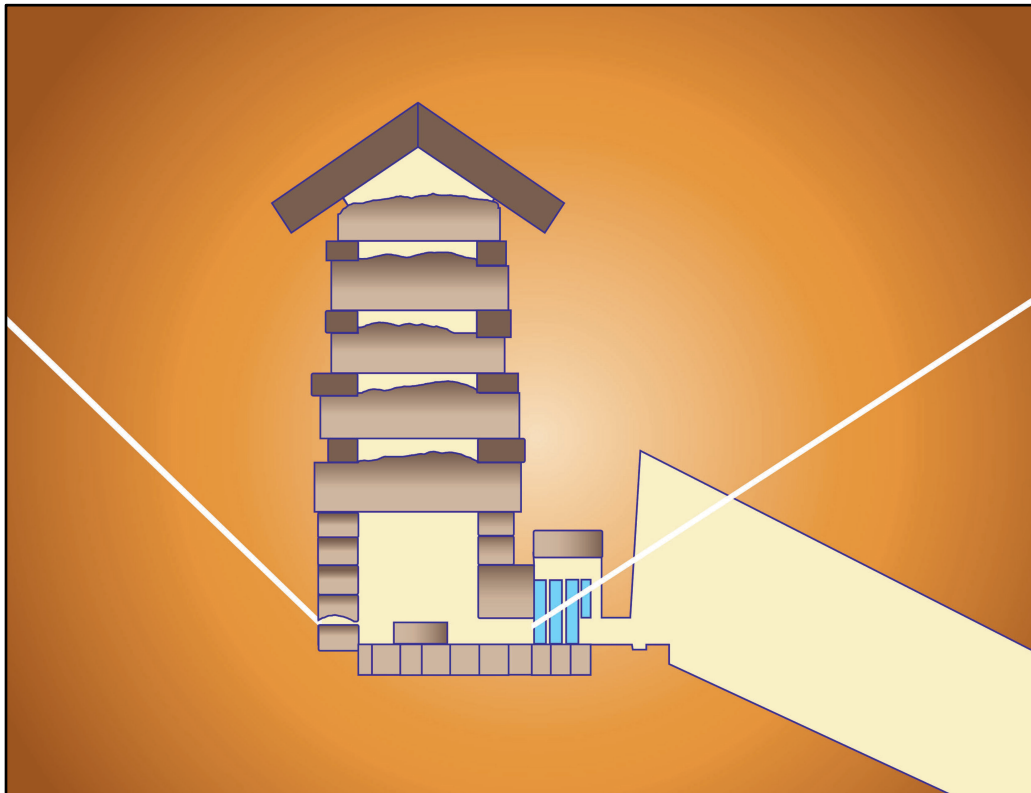


Figure 15. The area around the Kings Chamber

- The beams are not restricted from vibrating and can react to induced motion and freely vibrate
- Each beam has been hand carved to resonate at the same frequency. That frequency is the F# chord which is the same fundamental frequency of the earth (coupled oscillator effect)
- The room that is referred to as the King's Chamber is also made from red granite and is suspended on a corrugated base
- It is hypothesized the Grand Gallery (the large passageway that leads up to the King's Chamber) had resonators installed to convert the earth's vibrations into sound waves and direct them into the King's Chamber. Over a thousand basalt vases that could have been resonators have been found at Saqqara

- If sound waves were directed into the Kings Chamber, and up into the cavity with the aforementioned beams, and these sound waves were the same frequency as the resonate frequency of the beams, they would vibrate and cause the walls of the Kings Chamber to oscillate (upward and downward) enhancing the piezoelectric effect)
- This vibrational energy would have been converted into a type of microwave/electric energy that could have been used outside the pyramid

In summary, the precision and technology of the pyramid of Cheops equals or exceeds the technology of modern times and was not discovered until scientists were able to use sophisticated tools and equipment (lasers, sophisticated telemetry equipment, etc.) to measure the accuracy of the pyramid!

CONCLUSION

If you watch any current television program on history, open a history textbook, or walk into a museum, the past is always presented from the perspective of ancient is always associated with primitive in concert with an evolutionary past that has steadily progressed from a primitive beginning to the advanced culture of science and technological achievements of today. It is not an accident that virtually all of the artifacts that are preserved in geological and archaeological records and displays have been specifically arranged to fit within the secular archaeological view of evolution.

Yet, from the evidences that are plainly observed and known by modern archaeologists (a few of which are summarized in these notes), there is evidence of a different account of past history. This evidence is called "*out of place artifacts*" (OOPARTS) because they do not fit the established pattern of ancient evolutionary history. Instead, they direct attention to the existence of advanced technology, a very advanced technology that was present way before modern times. Though these discoveries are well documented, most secular historians would prefer to ignore, discount, or offer creative explanations for OOPART anomalies "*that should not be there – but are.*" As we discussed in our last program on January 5, 2016, modern science often uses the premise that alien life has previously visited this earth. This ideology has been adopted by secular archaeology to explain how evolving ancient civilizations could have built many of the OOPART artifacts and/or how alien life could have left the required technology here to be used by future generations.

If the dates of ancient technology are carefully examined, it readily becomes apparent that most of the dates are prior to the time of Christ! If the Bible is true, we should find evidences of technology in the past where there

should be none according to the evolutionary time scale. Not surprisingly, that is what we find, so accepting the biblical account of creation and history should be simplified. Unfortunately that is not the case as graphically outlined in Romans 1:18-23, *“For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of people who suppress the truth by their unrighteousness, because what can be known about God is plain to them, because God has made it plain to them. For since the creation of the world his invisible attributes-his eternal power and divine nature have been clearly seen, because they are understood through what has been made. So people are without excuse. For although they knew God, they did not glorify him as God or give him thanks, but they became futile in their thoughts and their senseless hearts were darkened. Although they claimed to be wise, they became fools.”*

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