The Ancient Orient

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June 9, 2013

Abstract

We continue to track the emergence of geometry and algebra in prehistory and early historical artifacts. Here we look for surviving repeated patterns from the ancient Near East.

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1. Introduction

In tracking the evolution of the mathematical knowledge manifest in the Alhambra repeating patterns, we have followed traces from the shamanic caves of paleolithic Europe to the early settlements of neolithic Anatolia. We have seen traces still surviving in 19th century Siberia and Amazonia. We seek now to fill a gap in this trajectory with the earliest civilizations of the ancient Near East: Mesopotamia and Egypt.

The "ancient Near East" is an obsolete usage, but so familiar that we must use it. Its geographic compass coincides more-or-less with the modern Middle East: Turkey, Iran, Iraq, Syria, the Levant, Egypt, Malta, and the Arabian Peninsula. Within this area we locate neolithic Catal Huyuk at the top, Mesopotamia (Sumer, Babylonia, Akkad) in the center, and ancient Egypt at the bottom. We are proposing a circular arc trajectory of cultural diffusion from the paleolithic caves of Europe (32 KYA) to the neolithic villages of Anatolia (9 KYA), on to the ancient Near East (6 KYA), from top to bottom, leading eventually to the appearance of repeating patterns in early Islam (1.4 KYA), then around to Spain, and the Alhambra (0.7 KYA).

But we begin with a recent reconstruction of the prehistory of this region which has evolved from efforts to understand the genesis of the Ancient Egypt of the pharaohs.

2. Predynastic Egypt

As for the origins of dynastic Egypt, there are new findings and conjectures of some interest to the question of the shamanic origin of geometric thinking.¹

Alternative prehistory

During recent decades there has been a growing movement of *alternative history* which conflicts with orthodox archeology, especially regarding the question of the origins of prehistoric science, mathematics, and human culture generally. As far as Ancient Egypt is concerned, this has centered on the dating of the monuments. It all started with R. A. Schwaller de Lubicz, Alsation philosopher-Egyptologist, whose

¹See (Bauval and Brophy, 2011).

multi-volume work, Le Temple de l'Homme was published in 1957. This work began a new interpretation of the history and culture of the Ancient Egyptians, known as the symbolist movement. One of Schwaller's ideas concerned the antiquity of the Great Sphinx on the Giza Plateau. He believed it was substantially older than the great pyramids, and saw support for this conjecture in the severe erosion marks on the Sphinx. The difficulty with this theory was the lack of any pre-existing high culture, other than Plato's report of the lost civilization of Atlantis, that might have built the Sphinx before the unification of Ancient Egypt.

For two decades Schwaller's work created little impression, until it was discovered and popularized by John Anthony West in 1978. The discovery of a stonehenge in the Egyptian Sahara in 1997 suddenly catapulted the alternative theory to the foreground.

Some of the significant books developing this new tradition, in chronological order, are:

- West, John Anthony, Serpent in the Sky: The High Wisdom of Ancient Egypt, 1978/1993. This is the book that started it all, making a case for the Schwaller's theory on the Sphinx being older than the pyramids on the Giza Plateau. The second edition shocked further, by estimating its date as 10,000 BC.
- Robert Bauval and Adrian Gilbert, *The Orion Mystery: Unlocking the Secrets of the Pyramids*, 1994. The first book on the Bauval's Orion Correlation Theory (OCT), following his announcement in an article published in 1989.²
- Graham Hancock, *Fingerprints of the Gods: The Evidence of Earth's Lost Civilization*, 1995. Conjectures a cataclysm around 10,450 BC in which an advanced civilization was lost.
- Bauval and Hancock, *Keeper of Genesis: A Quest for the Hidden Legacy of Mankind*, 1996. American edition, *The Message of the Sphinx*. Proposing that the Great Sphinx of the Giza Plateau dates from 10,500 BC, beginning the astrological Age of Leo.
- Hancock and Santha Faiia, *Heaven's Mirror: Quest for the Lost Civilization*, 1999. Collection of evidence for the lost civilization theory.
- Bauval, Secret Chamber: The Quest for the Hall of Records, 1999. Connecting Atlantis to the Hermetic Tradition via the secret chambers within the Great

²This article, reproduced in (Bauval, 1999; App. 1), originally circulated in 1986. See (Bauval, 1994; p. 133).

Pyramid and under the Great Sphinx.

- Schoch, Robert M., with Robert Aquinas McNally, Voices of the Rocks: A Scientist Looks at Catastrophes and Ancient Civilizations, 1999. Redating the Great Sphinx, and searching for the lost civilization.³
- Oppenheimer, Stephen, *Eden in the East: The Drowned Continent of Southeast Asia*, 1999. Locating the lost civilization: the biblical flood and the real Atlantis.
- Thomas Brophy, *The Origin Map: Discovery of a Prehistoric, Megalithic, Astrophysical Map and Sculpture of the Universe*, 2002. Mapping Orion onto the oldest stonehenge, at Nabta Playa in the Egyptian Sahara, at 5,000 BC. Prehistory of the OCT.
- Bauval and Hancock, *Talisman: Sacred Cities, Secret Faith*, 2004. Global evidence for a master religion.
- Schoch and McNally, Voyages of the Pyramid Builders: The True Origins of the Pyramids from Lost Egypt to Ancient America, 2004. Presents a strong case, following (Oppenheimer, 1999), that Atlantis was actually Sundaland, which sunk under the South China Sea around 6,000 BC. The migrating Sundalanders carried with them the seeds of astronomical alignment, stonehenges, pyramids, and the shamanic religion, stimulating new cultures in the Ancient Orient and the New World.
- Schoch and McNally, *Pyramid Quest: Secrets of the Great Pyramid and the Dawn of Civilization*, 2005. Study of the diaspora of pyramids around the world, their ages and provenance. Of the many pyramid books I have read over the many years, this is unquestionably the best, in my opinion.
- Bauval, *The Egypt Code*, 2006/2008. Extends the OCT to the temples of Upper Egypt.
- Bauval and Brophy, *Black Genesis: The Prehistoric Origins of Ancient Egypt*, 2011. Uncovers the link from the Star People of Nabta Playa, 6,000 BC, to the unification of Dynastic Egypt.
- Bauval and Hancock, *The Master Game: Unmasking the Secret Rulers of the World*, 2011. Updating *Talisman* in the light of 911.

³See also (Schoch, 2004; Appendix).

• Bauval and Ahmed Osman, *Breaking the Mirror of Heaven: The Conspiracy* to Suppress the Voice of Ancient Egypt, 2012. An account of the suppression of the culture and destruction of the monuments of Ancient Egypt throughout the ages.

Orion alignments along the journey

The Giza Necropolis of the Giza Plateau on the outskirts of Cairo holds several ancient pyramids, including the three great pyramid complexes, all from pharaohs of the 4th Dynasty, Old Kingdom:

- Khufu, 2nd pharaoh, pyramid built 2580-2560 BC, oldest of the 7 wonders
- Khafre, son of Khufu, ruled 2558-2532 BC
- Menkaure, successor of Khafre, ruled 2530-2520 BC

also the Great Sphinx, and the tomb of Queen Khentkaues I.

In *The Orion Mystery* of 1994, Bauval and Gilbert proposed a theory on the archaeoastronomical alignment of the three great pyramids – namely, that they are aligned as a mirror image of the three stars of Orion's Belt, as they culminated across the north-south meridian, at the time the pyramids were built. This has become known as the Orion Correlation Theory, or OCT.⁴

In *The Egypt Code* of 2006, Bauval expands the context of his OCT to a larger domain of Ancient Egypt, the Star Correlation Theory. The main centers analyzed are those of Saqqara (Ch. 1), Memphis (Ch. 3), Heliopolis and Karnak (Ch. 5), and Tell El Amarna (Ch. 6). In the 2008 edition of this work, Bauval announces new findings on the prehistory of this astronomical tradition, tracing the tradition of the three stars back in time two thousand years, to the culture of "the Black Star People" – also known as "the Cattle People", or *Shemsu-Hor* to the Ancient Egyptians (followers of Horus) – who build the oldest known stonehenge around 4700 BC. In a Postscript to the Introduction and two new appendices of this edition, the new discoveries are presented in brief detail.

Finally, in *Black Genesis* of 2011, Bauval expands in full detail the recent archeological discoveries in sub-saharan Africa, which we quote here, formatted as a chronological table. This chronology connects early *Homo Sapiens* from East Africa, 160,000

⁴A concise summary may be found in (Bauval, 2008; App. 3). See also (West, 1985; p. 452).

BC, to the culture of the Black Star People, and the genesis of dynastic Egypt, ca 3,500 BC.

The journey

This story has been called The Journey of Mankind.⁵

- 160,000. *Homo Sapiens*, modern humans, lived ca. 160,000 BC with the earliest mt-DNA and Y-chromosome ancestors found in East Africa. Four groups of hunter-gathers travelled out southwest towards the Congo and west to the Ivory Coast, south towards the Cape of Good Hope, and northeast towards the Nile.
- 125,000. Around 125,000 BC, one group moved northwards down the Nile and into the Levant, ...
- 90,000. ... but due to a climatic upheaval around 90,000 BC this group died out. A global freeze turned the Levant and North Africa into extreme desert.
- 85,000. Around 85,000 BC another group crossed the entrance of the Red Sea in the south and into the Arabian Peninsula to reach the Indian sub-continent.
- 75,000. They then spread to Indonesia and reached southern China by 75,000 BC.
- 65,000. By 65,000 BC they had spread to Borneo and Australia.
- 50,000. Warmer climatic conditions around 50,000 BC allowed a group to move again northwards through the Levant, cross the Bosporus and reach Europe.
- 25,000. By 25,000 BC the ancestors of the Native Americans crossed the Bearing land bridge into Alaska and then spread into North America.
- 10,500. By 10,500 BC they had spread also into South America.
- 8,000 6,000. Between 10,000 and 8,000 years ago the Levant group moved back into the now-green Sahara.⁶

We now select the main milestones of this journey and plot them on a map, shown in Figure 1.

⁵See bradshawfoundation.org, and (Oppenheimer, 1999, 2004).

⁶From www.bradshawfoundation.con/journey, quoted in (Bauval, 2011; p. 166). See also (Oppenheimer, 1999) and (Schoch, 2004). This interval overlapped the development of Neolithic villages in Anatolia, see (Abraham, 2011a).

- 160,000 BC. From East Africa, at #1 on the map, four groups of hunter-gathers travelled out southwest towards the Congo (#2A) and west to the Ivory Coast (#2B), south towards the Cape of Good Hope (#2C), and northeast towards the Nile (#2D). The Blombos cave of South Africa, 73,000 BC, is among the artifacts of this group.
- 50,000 BC. Warmer climatic conditions allowed a group to move northwards through the Levant, cross the Bosporus and reach Europe (#3). Among their creations we may place the painted caves of Paleolithic France, such as the Chauvet Cave, 30,000 BC.⁷
- 8,000 6,000 BC. The Levant group moved back into the now-green Sahara, creating the stonehenge discovered recently and related rock art.⁸ This epoch is also, approximately, the beginnings of neolithic settlements in the Near East such as Gobekli Tepe and Catal Huyuk in Anatolia and Jericho in the Levant.⁹

The Star People

Connecting this recent reconstruction of the human journey "out of Africa" with the Black Star People ancestral to the genesis of dynastic Egypt, Bauval recounts the story of "the oldest prehistoric astronomical complex in the world.", aka the "stonehenge in the Sahara" discovered in 1974 at Nabta Playa, Egypt.¹⁰ See #2 on the map, Figure 2.

The connection between the star people and Early Dynastic Egypt is established from the continuity of the astronomy of Nabta Playa with that of the OCT and the orientation of the pyramids.¹¹ The three stars of the belt of Orion map exactly onto

 $^{^{7}}$ See (Abraham, 2011a).

⁸One significant site is the Cave of Swimmers at Gilf Kebir, dated 8,000 BC, discovered in 1933. See (Almasy, 1934).

⁹See (Schoch, 1999), (Schoch, 2011a; Appendix), and (Abraham, 2011a).

¹⁰The site was discovered by Fred Wendorf, then curator of the Museum of New Mexico. See (Wendorf, 2008; chs. 26, 28, 33). The astronomical significance of the henge was first noticed by astronomer Kim Malville in 1997. See (Bauval, 2008; pp. 276-277).

¹¹This is not to say that the Ancient Egyptians were black, that is an ongoing controversy, see (Bernal, 1987, 1991). But the evidence strongly suggests the diffusion of the knowledge of the star people along with their peregrinations over the millennia, out of Africa and back again. They may in fact have surveyed into the present day, as the San Bushmen of southern Africa. See (Michael Balter, Ice Age Tools Hint at 40,000 Years of Bushman Culture, *Science* 8/03.2012).



Figure 1: The Journey.

three megaliths in the center of this henge, as shown by Thomas Brophy.¹²

It is further supported by the finding of hieroglyphic inscriptions by Mahmoud Marai and Mark Borda, to the west of Nabta Playa, in 2007. Here, at Gebel Uwaynat, "the Lost Kingdom of Yam" was apparently located. See #3 on the map, Figure 2.¹³

This connection is the major theme of Bauval's book, *Black Genesis: The Prehistoric Origins of Ancient Egypt*, of 2011. The argument rests on the following points. As above, all dates are BC, and page numbers in footnotes refer to (Bauval, 2011).¹⁴

- 12000, Sea level rose 66 feet in 200 years¹⁵ and the black star people migrated from the Chad highlands to the green sahara.¹⁶
- 9000, Beginning of a humid period, earliest artifacts at Nabta Playa.¹⁷
- 6100, Oldest alignment at Nabta Playa.¹⁸
- 5300, Humid period ends, desertification, Sahara exodus.¹⁹
- 4940, Orion's belt culminates at altitude as seen from Nabta stone circle.²⁰
- 4700, Orion belt in south, culmination, summer solstice sunrise.²¹
- 4000, Prehistoric rock art.²²
- 3500, Most recent Nabta alignment.²³
- 3500, Sudden desertification of the Sahara due to Milankovitch cycle.²⁴

 18 (p. 120)

 $^{20}(p. 102)$

 $^{^{12}}$ See the cover photo on (Brophy, 2002).

¹³Paleolithic petroglyphs were discovered here in 1923 by Ahmed Hussanein Bey, who photographed survivors of the star people. See (Bauval, 2008; p. 285).

¹⁴Bauval also cites alignments of the causeways radiating from the Great Pyramid at Giza for 10,500 BC. See the summaries in (Schoch, 2004; p. 75) and (Schock, 2005; p. 80).

 $^{^{15}(}p.~73)$

 $^{^{16}(}p. 192)$

¹⁷(pp. 73, 181)

¹⁹(p. 181) See also (Schoch, 2005; p. 80) referring to the replacement of the cattle herding culture at Nabta Playa by the more sophisticated star people around 5500 BC.

 $^{^{21}(}p. 98)$

 $^{^{22}(\}mathbf{p}. 55)$

²³(p. 126

 $^{^{24}(}p.~76)$

• 3000, First pharaoh of Early Dynastic Egypt.²⁵

The lynchpins of the new and revolutionary theories of the prehistory and history of Egypt are two astronomical methods: the heliacal rising of a star along the horizon, and the altitude of a star as it culminates, that is, transits the zenith meridian.

The astronomical methods

The two methods require a bit of explanation. We begin with a little history of astronomical orientations. A *henge* is a megalithic stone circle.

- 6100 BC, the earliest alignment at Nabta Playa
- 2500 BC, the earliest known henge in Britain
- 1865, Charles Piazzi Smyth (1819–1900) arrived in Egypt in 1865 to measure the Great Pyramid. His results were published in his books of 1867, 1870, and 1884.
- 1880, William Matthew Flinders Petrie (1853–1942) was the archaeologist who dug up ancient Egypt. Inspired in 1867 by Piazzi Smyths first book on the Great Pyramid, he sailed for Egypt, arriving at the pyramid a few days before Christmas, in 1880.
- 1889, The discovery that the British hedges were astronomical observatories was first made by the American astronomer Samuel P. Langley (1834–1906), in 1889.
- 1890, Previously, a professor in Germany had discovered the astronomical orientations of ancient Egyptian temples, and Norman Lockyer (English astronomer, 1836–1920) went to Egypt in 1890 to survey the pyramids. Lockyer discovered solar temples with astronomical alignments dating from 5000 BC, and reported fully on his discoveries in his book, *The Dawn of Astronomy*, in 1893.²⁶
- 1997, Kim Malville observed the alignments of the Nabta Playa henge in the Egyptian Sahara.

The Egyptian alignments are mainly directed to the helical rising of Sirius. Sirius tops the list of the ten brightest stars, excluding our Sun:

²⁵(p. 181

 $^{^{26}}$ For the full story, see (Michell, 1989, p. 19).



Figure 2: The Source.

Name, Constellation, Apparent magnitude, Declination

- 1. Sirius, Alpha Canis Major, -1.46, -16.42.58
- 2. Canopus, Alpha Carina
- 3. Rigel Kentaurus, Alpha Centauri
- 4. Arcturus, Alpha Bootes
- 5. Vega, Alpha Lyra, +0.03, +38.47.01
- 6. Capella, Alpha Auriga
- 7. Rigel, Beta Orion, +0.12, -08.12.16
- 8. Procyon, Alpha Canis Minor, +0.38, +05.13.30
- 9. Achernar, Alpha Eridanus
- 10. Betelgeuse, Alpha Orion, +0.50, +07.24.25

The belt of Orion comprises the three stars: Zeta, Epsilon, and Delta Orion.

Let us imagine we sit in chairs on the Giza Plateau, at 30 degrees North Latitude, with an unobstructed view of the eastern horizon. At night, the celestial sphere seems to rotate as a rigid surface containing the myriads of stars. Each star traverses a circular path overhead, leaning 30 degrees to the right of vertical. The axis of the celestial sphere is held by the north celestial pole to our left, and about one eighth of the stars are circumpolar, that is, their full circles are always visible a rind the north celestial poe. Another eight circle the south celestial pole, they are never-rise stars, and are perpetually invisible. All others have part of their circle visible overhead at night, and the remainder invisible underfoot in the daytime. These stars all have rising and setting points on their paths, these are called rise-and-set stars.

Chief among these of course is our Sun. And when it rises, all the other stars become invisible. Observing sunrise, the position on the horizon is among the most impressive of astronomical events. Norman Locker wrote, "The horizon was the telescope of ancient peoples." The sunrise point on the horizon moves along from day to day. In the Spring, it moves to the left, or northward, every day. At Summer Solstice it turns and begins moving to the right, or southward. And again, at the Winter Solstice, it turns again. This annual cycle of sunrise points on the eastern horizon provide a calendar of the seasons. Another rise-and-set star will also rise and set, but its rising point on the horizon will not be visible if the sun is out. Let's take Sirius as an example. Its declination is negative, so it is in the southern sky. Due to the daily motion of the sun along the ecliptic, transiting each sign of the zodiac in about a month, the rising time of stars is set back about four minutes each day. Once a year the sun will be close to Sirius. The sun will rise before Sirius rises, and the Sun will set after Sirius sets, so Sirius will be out of sight all night long. This conjunction lasts about 70 days, from late May until early August. Suddenly the delay in the rising time of Sirius will progress so that Sirius will rise briefly before sunrise, and it will be seen as a morning star, just as dawn's early light, well, dawns. This is the helical rising of Sirius. For the Ancient Egyptians, it marked the beginning of the New Year.²⁷

Now it is easy to explain the culmination of a star. Let's take Betelgeuse as an example. Suppose it is Winter, and the path of Betelgeuse is mostly visible from its rising in early evening to its setting a little before dawn Along the way, around midnight, it will attain its greatest elevation. This will be a point on the meridian circle, the great circle which passes though the north celestial pole and the zenith, the point directly over our heads. This is the culmination of Betelgeuse. The angle along this meridian between the horizon and the culmination will change with the seasons, achieving a maximum elevation, like the Sun, at the Summer Solstice. This is a midday alternative to horizon observations that must be done at dawn, and may serve to set the annual calendar.

3. Dynastic Egypt, 5 KYA

The unification of ancient Egypt, around 3100 BC, began the epic civilization of the Pharaohs. Like Mesopotamia, the dynastic sequence falls mainly in the Bronze Age.

The dynastic periods

The very long life of ancient Egypt bridged from Mesopotamia to Islam. The customary periods of ancient Egypt, following the predynastic period, span the long line

²⁷This is abstracted from the splendid description in (Bauval, 2011; pp. 42-43).

of ancient Egypt from 3100 BC until the Muslim conquest, 641 CE.²⁸

- Early Dynastic, 3100 2600 BCE, Dynasties I III
- Old Kingdom, 2600 2180, Dynasties IV VI
- First Intermediate, 2180 2000
- Middle Kingdom, 2000 1780. Dynasties XII XIII
- Second Intermediate, 1780 1580
- New Kingdom, 1580 1085, Dynasties XVIII XX
- Third Intermediate, 1069 653
- Late, 672 332 (conquest by Alexander the Great)
- Ptolemaic dynasty, 332 30 (defeat of Marc Antony and Cleopatra 7)
- Roman period, 30 BCE 641 CE (defeat by the Muslim army)

The shamanic tradition

The journey of mankind, at some early juncture, developed an Ur religion or spiritual tradition, shamanism. It emerged in the archeological record as early as the Blombos cave, 75,000 BP, that is, 75 KYA, and is very visible in the abstract signs of the epipaleolithic painted caves of France and Spain, 32,000 BP. From the continuity of the iconography of the painted caves and rock paintings along the way, we may count the star people of Gebel Uwaynat and Nabta Playa among the flowers of this tradition.

The inclusion of Ancient Egypt and Mesopotamia, and thus our own history, in this long line derives from the artistic record of the shamanic symbols, together with the continuity of the archeo-astronomical science, including alignments such as the OCT. The leap from Nabta Playa to the Giza Plateau, precipitated by the sudden desertification of the Sahara around 3100 BC, is only about 100 miles. In addition, as the extreme antiquity of the Great Sphinx is by now quite plausible, the overlap

 $^{^{28}}$ From (Frankfort, 1961; p. 159) and Wikipedia. A slight variation is give in (Lamy, 1981; p. 65) where Early Dynastic is denoted "the Thinite period", 3200 – 2800 BC, Dynasties I – II only.

in time of these sites extended for thousands of years. As we have treated the archeoastronomical tradition above, we turn now to the artistic tradition of the shamanic symbols.

Further support for the survival of the shamanic tradition in Ancient Egypt is provided by the death ritual, mummification practice, and mortuary function of the pyramids. The subtle bodies of a living human comprise the Akh (spirit), the Ba (soul), and the Ka (double). After death, the Akh lived on among the stars, the Ba wandered in and out of the tomb through a small door like a cat-door, and the Ka was confined to the tomb with the mummified body. In the case of a Pharaoh, the Akh would ascent through a shaft in the pyramid aimed at Orion/Osiris.²⁹ All this may be seen as the prehistoric beliefs of shamanism, precipitated and refined into history. The cave has been replaced by the pyramid.³⁰

The shamanic heritage

We will seek now the continuity of the iconic language of shamanism, as discovered by Genevieve von Petzinger in the epi-paleolithic painted caves of France. She found 26 signs appearing frequently in 146 caves, shown in Figure 3. These are somewhat similar to the well-known signs of astrology, shown in Figure 4.³¹ They also resemble the phosphenes seen in visual artifacts, and the five cards used in ESP research, original due to Karl Zener (1903 – 1964), shown in Figure 5. Sometimes they figure in modern abstract expressionist pairings, e.g., Wassily Kandinsky (1866 – 1944), Frantisek Kupka (1871 – 1957) and Robert Delauney (1885 – 1941).

To connect the iconic signatures of shamanism to Ancient Egypt, we must look for the 26 signs of Figure 3 in Egyptian art and literature. We cannot expect them to be ubiquitous as the Ancient Egyptians invented such an extensive new visual language. But some of these glyphs have been found in stone reliefs and Egyptian papyri. For example, in the Egyptian Book of the Dead, we find frequent occurrences of the seven forms that have figured most presently in the painted caves: line, dot, open angle, oval, penniform, circle, and quadrangle.³² Further, some of them occur among the hieroglyphs. For example, among the 26 uniconsonantal signs we find the quadrangle (sign for P), oval (R), and circle (CH).

 $^{^{29} \}rm{See}$ (Frankfort, 1948; ch. 4), (West, 1985; p. 63), and (Hancock and Bauval, 1996; pp. 241-242). $^{30} \rm{See}$ (James, 1965).

³¹From (Cornelius, 1996; frontis).

 $^{^{32}\}mathrm{See}$ (Abraham, MS131; sec. 5.4) for this list of forms.

Moreover, as archeo-astronomy became astronomy in historical Egypt and Mesopotamia, so also the pre-geometry of shamanism evolved into geometry in Egypt, and thence into the *Elements* of Euclid in Ancient Greece about 3,000 years later. The pre-geometry and archeo-astronomy of prehistory gave rise to the mathematics of Ancient Egypt, and thus to Ancient Greece. The symbols and megalithic observatories became the pyramids, and eventually, the Platonic solids.

Not only the signs of shamanism survived in historical Egypt, but the shamanic rituals may have been enacted within the pyramids, as substitutes for caves where there were none.³³

4. Mesopotamia, 6 KYA

The periods of the ancient Near East are roughly,

Copper Age, 4500-3300 BC, Bronze Age, 3300-1200 BC, Iron Age, 1200-539 BC.

The earliest civilization of Mesopotamia was that of the Sumerians, dating from around 5300 BC. Its first city was Uruk, 4000-3200 BC, where writing and history began abound 3000 BC. Our first task will be to connect Sumer to the Journey. Like Early Dynastic Egypt, Sumer appeared from nowhere as a fully formed culture.

Sumer and the Journey

The journey of the Homo Sapien star people moved north from 50,000 BP through the Levant, arriving in France by 30,000, then back to the green Sahara by 10,000 BP. Along the way they would encounter Paleolithic peoples of the Shanidar Cave in Iraq, and Neolithic sites of Anatolia, such as Gobekli Tepe and Catal Huyuk, seeding their shamanic religion as they went.³⁴ In their contact may be seen the origin of the amazing advancement of arithmetic and astronomy in Sumerian and Babylonian culture. Similar the pyramids of contemporary Egypt, the ziggurats

 $^{^{33}}$ See (James, 1961).

 $^{^{34}}$ See (Roux, 1992; ch. 3).



Figure 3: The 26 Signs.

These symbols are the sigils representing the zodiacal constellations (above) and the Sun, Moon and planets (below). They are derived, in part, from glyphs found on ancient stone reliefs and Egyptian papyruses.

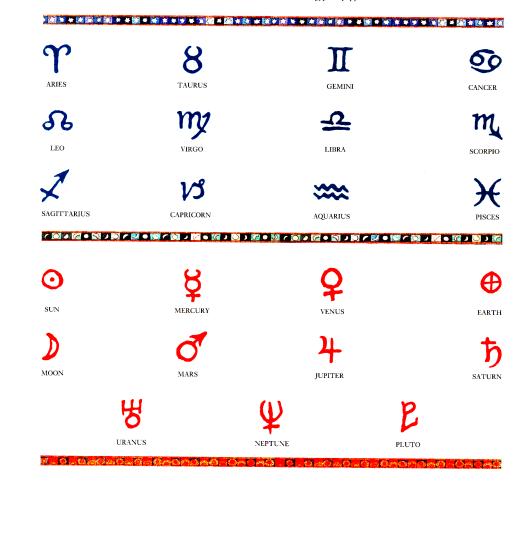


Figure 4: Asthological Signs.

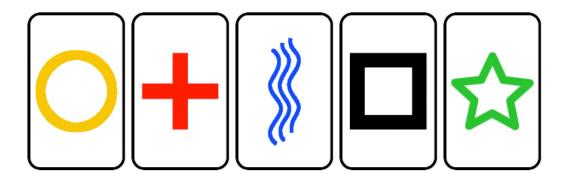


Figure 5: Zener Cards.

performed a religious function with overtones of shamanic ritual, as well as platforms for astronomical observations.³⁵

Sumer and shamanic signs

The cuneiform writing on clay tablets is highly suggestive of repeating patterns, and many artifacts from this culture exhibit approximately repeating patterns. Several of the 26 primary shamanic signs may be found in the earliest cuneiform pictograms, from $3000 \text{ BC}.^{36}$

5. Megalithic Ireland

Ireland was among the last European locations to be inhabited, and has many surviving megalithic constructions. Among them the Neolithic passage tomb sites are especially significant for us, as they are essentially pyramids. These are mong the best known are these, all in County Meath, with estimated creation dates.³⁷

- 3200 BC, Loughcrew
- 2000 BC, Dowth

 $^{^{35}}$ See (Abraham, 1994).

³⁶See (Kramer, 1981; p. xxiii) and (Walker, 1987; p. 10).

³⁷Dates vary in different sources. These are taken from (Brennan, 1994; pp. 135–144).



Figure 6: Gavrinis Art.

- 3100 BC, Newgrange
- 3000 BC, Knowth
- 2500 BC, Tara

Most notable of these sites is their decorations, which connect with the abstract symbols of the Paleolithic painted caves of France. In fact, the diffusion of the cultural of shamanism and paleolithic signs from paleolithic France to megalithic Ireland is thought to pass through the megalithic passage tomb of Gavrinis in Neolithic Brittany,. This is a pyramid-shaped chamber, its walls covered with carved symbols, built around 3500 BC.

6. Conclusion

Every human migration and trade route transports not only people and real stuff, but also all kinds of cultural goods: math, science, tech, language, writing. literature, myth, ritual, arts, religion, etc. In the case of the star people, conceivably from Sundaland, we have seen that over a very long and wide swath, the shamanic tradition stimulated megalithic monuments and burials chambers, cosmologies, models of the afterlife, astronomy, number symbols, proto-writing signs, and so on. Culminating in history itself, the immortal pyramids, astronomy, astrology, geometry, and protoalgebra of the Egyptian papyri and Babylonian cuneiform tablets, our planetary culture was born from the footsteps of the star people.

Acknowledgments

LIke many of my papers on cultural history, this one began with a suggestion by William Irwin Thomson. I owe him many thanks, and also to Susan Bailey for her extensive links to the San, and to Paul Lee for discussions of *Black Athena*.

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