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## On the Origins of the Alphabet

by Brian R. Pellar

Victor H. Mair, Editor Sino-Platonic Papers Department of East Asian Languages and Civilizations University of Pennsylvania Philadelphia, PA 19104-6305 USA vmair@sas.upenn.edu www.sino-platonic.org **S**INO-PLATONIC PAPERS is an occasional series edited by Victor H. Mair. The purpose of the series is to make available to specialists and the interested public the results of research that, because of its unconventional or controversial nature, might otherwise go unpublished. The editor actively encourages younger, not yet well established, scholars and independent authors to submit manuscripts for consideration. Contributions in any of the major scholarly languages of the world, including Romanized Modern Standard Mandarin (MSM) and Japanese, are acceptable. In special circumstances, papers written in one of the Sinitic topolects (*fangyan*) may be considered for publication.

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On the Origins of the Alphabet

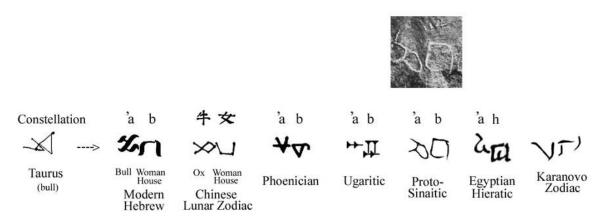
by

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#### San Diego, California

*Twenty-two foundation letters: He placed them in a circle.... He directed them with the twelve constellations.* 

— Sefer Yetzirah (The Book of Creation)



**Figure 1.** The constellation Taurus as Aleph and Beth. Hebrew, Chinese, Phoenician, and Proto-Sinaitic are all rotated 90 degrees counter-clockwise (photo: Sinai inscription 357).

#### Introduction

The alphabet has often been referred to as one of the greatest inventions of humankind. It has helped to make literacy more widespread and made the recording and dissemination of information, culture, and history more efficient.

As far back as 2000 years ago, classical writers noted that the alphabet appears to have originated in Egypt (Moran and Kelley 1969:3). Modern scholarship has since found substantial evidence that the alphabet did indeed originate in (or at least passed through) Egypt at places like Wadi el-hol and Serabit el kadim (For instance, see Moran and Kelly 1969; Daniels and Bright

1996; Darnell *et al.* 2005; etc.). From Egypt, the alphabet then spread north, influencing the Canaanite scripts, which in turn impacted the scripts of Europe and most of Asia (Daniels and Bright 1996: 2; Darnell *et al.* 2005: 90–92).

However, in 1912, W. M. Flinders Petrie, who discovered the proto-Sinaitic script in Egypt, challenged the standard Egyptian origin hypothesis, noting that many pre-alphabetic signs found in prehistoric Egypt and other lands appeared "long before the hieroglyphic system in Egypt" (Petrie 1912: 2). Moran, following Petrie in rejecting an Egyptian origin, asked how the alphabet "thus invented, does not show some logical form and correlation in its several parts, but bears internal evidence of having been an unpremeditated growth around some primitive but forgotten principle?" (Moran and Kelley 1969: 11). He posited certain criteria for a theory for the development of the phonetic alphabet: 1. "An organizing principle." 2. "Great age." 3. "Widespread distribution." 4. "Correlation of form, meaning, and phonetic value." And 5. "Constant order" (Moran and Kelley 1969: 11–12).

Moran then looked to astronomy, the Near East, and China (with its conservative and unbroken history) for an answer. While focusing on China, he noted an interesting correspondence between the twenty-two Hebrew letters of the alphabet, the twenty-two Chinese calendar signs, and the twenty-eight lunar asterisms or lunar constellations, as he felt that an astronomical template for the alphabet would satisfy his above five conditions. He then attempted to correlate all twenty-two Hebrew letters with the twenty-eight Chinese lunar stations, and in 1953 he published the results in his book *The Alphabet and the Ancient Calendar Signs* (Moran and Kelley 1969).

Following Moran's lead, in 1994 Gordon then noted a correlation between the thirtyletter Ugaritic alphabet and the thirty-day lunar zodiac (Gordon 1994: 38). Mair (Mair, 1992,

2

1996) and Wei (Wei, 1999) also looked at the correlations (and Mair, a possible means of transmission) between the twenty-two Phoenician letters and the twenty-two Chinese calendar signs (*tiangan dizhi*, or *ganzhi*) and noted many "unquestionable" correspondences between them — too many, in fact, to be merely "explained away as the result of sheer coincidence" (Mair, 1996: 34).

However, there has been little attention paid to Moran's work; this may be due to the perception that many of his correlations seem a bit forced and abstract, or to his rejection of Egypt as a source or route that the alphabet took, or both.

Thesis

In 2003, completely unaware of Moran and the others' work, I discovered that if you rotate the Phoenician alphabet ninety degrees counter-clockwise, and join the twenty-two letters into sequential couplets, a pattern appears that resembles the eleven constellations of the Egyptian solar zodiac. The alphabet doesn't follow a simple circular pattern, but instead follows a more complex pattern that incorporates letter reversals at the solstices. It also forms two loops that meet at the constellation Gemini. Furthermore, this astro-alphabetic pattern is not only found in Modern Hebrew, the Chinese Lunar Zodiac, Phoenician, Proto-Sinaitic, Egyptian Hieratic and Hieroglyphs, but, in accord with Petrie's assertion, proto-astro-alphabetic glyphs also appear on a European stag bone from 3800 BC, and on a Karanovo Culture zodiac from 4800 BC. All of these manifestations will be discussed in the course of this study.

### Evidence for the Origin of the Alphabet

It turns out that the correct pattern, like Moran's, starts with the letter couplet '*aleph* and *beth*, which join to form the solar zodiacal constellation Taurus, the bull. See Figure 2a and 2b for a simplified example of the eleven couplets.<sup>1</sup> A complete chart appears in Figure 3.

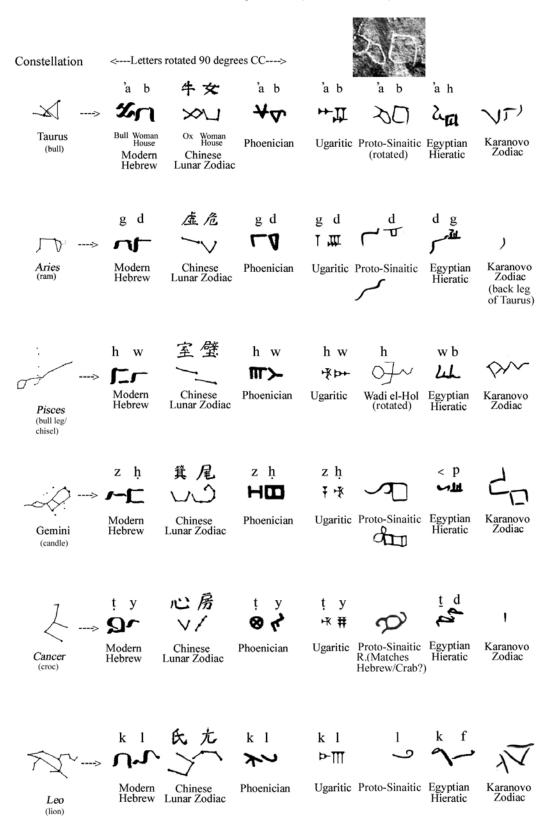


Figure 2a. Taurus, Aries, Pisces, Gemini, Cancer, and Leo as letters of the alphabet.



Figure 2b. Virgo, Libra, Scorpio, Sagittarius, and Capricorn as letters of the alphabet.

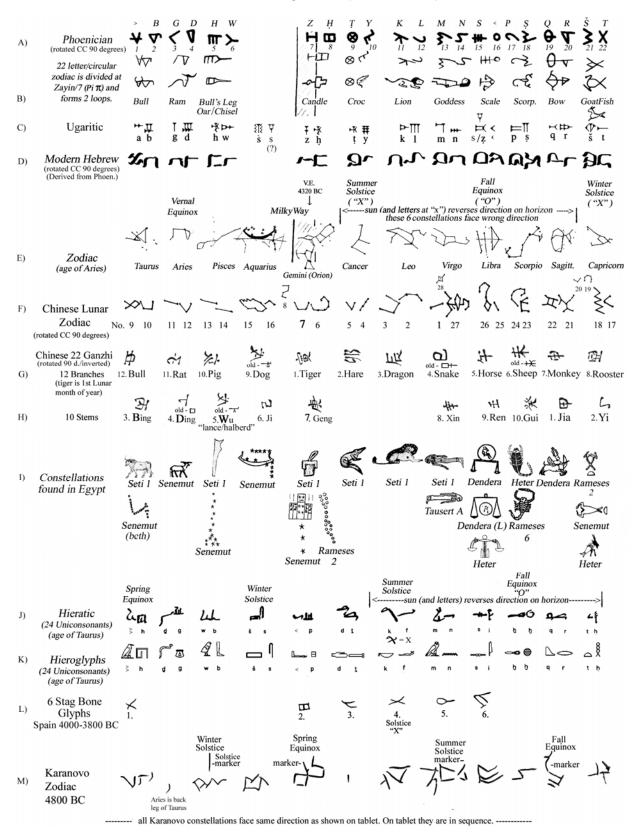


Figure 3. Astro-Alphabetic Chart

In Figure 3, rows "A," "B," and "E," note that after '*aleph/beth*, the sequence then moves backwards to Aries (*gimmel/daleth*, which form a ram's head), and then to Pisces (*he/waw*, which forms a bull's leg/oar/chisel). However, instead of continuing backward to Aquarius, the sequence then jumps forward to Gemini (*zayin/heth*, which form a candle and flame/gate in the center of the Milky Way), then to Cancer (*teth/yodh*, a crocodile), then to Leo (*kaph/lamedh*, a lion), then to Virgo (*mem/nun*, a goddess on her back), then to Libra (*samekh/ 'ayin*, a scale), then to Scorpio (*pe/tsade*, a scorpion), then to Sagittarius (*qoph/reš*, a bow and arrow/ram's head), and then, finally, to Capricorn (*šin/taw*, which form a goat/fish). Thus, two loops are formed. A small one composed of four constellations (Taurus, Aries, Pisces, plus the silent/unseen Aquarius), and a larger one composed of eight constellations (Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn). These two loops all join at *zayin*, letter 7 in Gemini. Since there are twenty-two letters of the zodiac "circle" being divided/joined at this seventh letter, the astro-alphabetic pattern suggests a relationship to Pi (22/7 = 3.14...).<sup>2</sup>

The small loop from Aquarius to Taurus is not only clearly seen in the Egyptian sky chart of Senemut (on the South wall), but is also seen in several Mesopotamian cylinder seals. An example of both is seen in Figure 4.

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**Figure 4**. **A**. Mesopotamian Cylinder Seal. Aquarius as the God boat on right. Then moving left, Pisces, Aries, and finally Taurus with a vessel on its back indicating the vernal equinox (Santillana 1969: 301). **B**. Senemut Sky chart (South Wall). Aquarius on the right, and then, moving left, Pisces, Aries (vernal equinox), and the back half of Taurus (with the seven stars of the Pleiades) in the shape of the letter Beth.

The sequence from the older Mesopotamian Cylinder Seal in Figure 4, row A, is from right to left and starts with the sun being carried as a small bull in what Santillana calls a "God boat" (Santillana and Von Dechend 1998: 301). This God boat is actually Aquarius, the winter solstice at the time (the winter solstice symbolized the birth of light, thus the birth of the young god/bull as the sun/seed/logos on the ecliptic). As the God boat carries the sun/light/logos, then Aquarius, like the other constellations, could be looked upon as being the vessel or consonant in the *abjad* (consonantary, to use Victor Mair's term) that carries the silent or unseen vowel, which is the sun/logos itself. Thus, the silence/invisibility of Aquarius. Furthermore, its absence might have been purposely predicated so that the pattern would include only eleven constellations meeting at letter 7, thus indicating Pi, as mentioned earlier). In the hands of Aquarius is Pisces,

shown in the shape of the letter *waw*. Just in front of Pisces is Aries, clearly defined in the shape of *gimmel*, with the figure's elbow forming the small bend seen in the actual constellation. The sequence ends with Taurus, the bull, with a small vessel just over its back that appears to denote the vernal equinox (which, if correct, will give a date of approximately 2600 BC for the seal). Thus, a winter-to-spring loop is seen in this cylinder seal, echoing a winter-to-spring loop that is also seen in the small loop of the Phoenician alphabet.

In Figure 4, row B, the same four constellations of the small alphabet loop are shown in the Egyptian Skychart of Senemut (south wall) that has been dated to around 1470 BC. Note the same vertical aspect of Pisces that is seen in the Mesopotamian Cylinder Seal, and the same boat aspect of Aquarius. Here, however, Taurus is only shown in the shape of the letter *beth*, and its tail is shown with the seven stars of the Pleiades.

One indicator that the alphabetic sequence is not purely random is seen in the reversal of the letters/couplets at the solstices. Since the Phoenician alphabet was put together during the Age of Aries,<sup>3</sup> its architect(s) placed a letter with an "x" shape in it at a solstice point. Thus, there is an "x" in the letter *teth*, which is Cancer, the summer solstice. The letter *taw*, which is Capricorn, the winter solstice, is also in the shape of an "x" (thus, like both "x" forms, both "t" sounds are solstices). But even more remarkable is that the couplets reverse the direction that they face when the sequence encounters an "x"/solstice point. This reversal seems to indicate a reversal of the sun on the horizon at both the summer and winter solstice, then it stops, reverses direction, and moves south. When it reaches the winter solstice, it stops and reverses direction once more, moving north again. As a reflection of this reversal of the sun on the horizon at the solstices into the design/pattern of the letters of the alphabet.

Modern Hebrew, a derivative of Phoenician via Aramaic, also shows these same constellations/patterns (row "D"). And in the case of Gemini as the candle (*zayin/het*), Libra as the scale (*samekh/ayin*), and Scorpio as the scorpion (the single letter *tsadi*) in the Hebrew, the images of the constellations are even more explicit.

An interesting correlation between the twenty-two Hebrew letters of the alphabet and the twelve constellations of the zodiac comes from the *Sefer Yetzirah: The Book of Creation* (translated by Aryeh Kaplan). For instance, the book states,

Twenty-two foundation letters: He engraved them, He carved them, He permuted them, He weighed them, He transformed them, And with them, He depicted all that was formed and all that would be formed.... Twenty-two foundation Letters: He placed them in a circle like a wall with 231 gates. The circle oscillates back and forth.... He formed substance out of chaos and made nonexistence into existence. He carved great pillars from air that cannot be grasped. This is a sign [Alef with them all, and all of them with Alef]. He foresees, transforms and makes all that is formed and all that is spoken: one Name. A sign for this thing: Twenty-two objects in a single body.... a rule of twelve and seven and three: He set them in the Teli, the Cycle, and the Heart.... He bound the twenty-two letters of the Torah to his tongue,

and He revealed to him His mystery.He drew them in water,He flamed them with fire,He agitated them with Breath,He burned them with the seven [planets],He directed them with the twelve constellations(Kaplan 1997: 100, 108, 131, 231, 255).

This passage echoes the idea of the logos, of "the word made flesh" (a later iteration of the Egyptian god Ptah creating/sculpting creation from the word) at the Gemini gate at the boundary/horizon between the upper and lower worlds. Thus, in the last few sentences quoted from the *Sefer Yetzirah* there is the meeting of "water"/Aquarius, "fire"/Gemini gate/candle, and "breath"/logos/vowel at *zayin* ("twenty-two"/ "seven" = 'three," Pi), which was the 4320 BC "Gate of Heaven" as the Egyptians referred to it (this date of 4320 BC is an important date and will be discussed in more detail later in this paper. This date refers to a time when the vernal equinox or spring was situated in the center of the Milky Way between Gemini and Taurus. Santillana theorized in *Hamlet's Mill* that this spot in the center of the Milky Way on the ecliptic was a sacred place to the ancients, as it was the place where the sun was originally perceived to have been born) (Santillana and Von Dechend 1998: 245).

Furthermore, with regard to the line, "He set them in the Teli, the Cycle, and the Heart," Kaplan states that the ancients believed that the "Teli" was associated with the "Pole Serpent" (Leviathan), which is Draco (which contains the pole of the ecliptic), and the obliquity (the inclination between the ecliptic and the celestial horizon). He explains that the word "cycle" is the Hebrew word "Galgal," which the Talmud used "to denote the sphere of the zodiac." Kaplan then concludes that "The *Sefer Yetzirah* (2:4) earlier stated that the twenty-two letters had to be fixed in the *Galgal* to produce the 231. The word *Galgal* therefore also denotes the mystical array of the twenty-two letters. In this respect, the *Teli* denotes the almost invisible lines upon which the letters are written. The *Galgal* is the circle in which they are drawn."<sup>4</sup>

Thus, as the twenty-two letters are "directed" by "the twelve constellations" (it should be

noted that the book does indeed correlate twelve Hebrew letters with signs of the zodiac, but only one matches the actual astro-alphabetic pattern — surprisingly, *zayin*, letter 7, with the constellation of Gemini, the gate), it seems clear that the ancient author (believed to be the Patriarch Abraham by early commentators as far back as the tenth century) of the *Sefer Yetzirah* understood the link between the twenty-two Hebrew letters and the twelve houses of the Zodiac, which are arrayed in a circle (Galgal) on an "invisible" line (Teli), that appears to be the ecliptic, or associated with the ecliptic.

Remarkably, this same astro-alphabetic pattern, with letter couplets forming constellations of the solar zodiac, is also found in the Chinese Lunar Zodiac (row "F"; cf. Figure 3). Note that the lunar signs in Figures 2 and 3 are taken from the *Yung Tai Ta Ch'eng* [*Yong Dai Da Cheng*], "The Great Becoming of the Everlasting Ages," as published in Moran's book). Moran noticed that the ninth Chinese Lunar station, which is located in or near the "herdsman" in the vicinity of Capricorn, is shaped like an ox/bull head and is called the "Ox" (*niu*). Furthermore, he also noticed that the very next letter, *nü*, which he found means "a woman," "a daughter," has a shape that is very close to the Hebrew *bet*, which, aside from "house," can also mean "a daughter." He further remarked that "the same transfer or metonymy found in the Semitic languages is found also in the Chinese, which uses a single term to represent 'house,' 'woman,' and 'place'" (Moran and Kelley 1969: 71). He then reasoned that this correlation along with many others was not a coincidence.

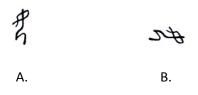
However, instead of moving backward to Aries, Moran correlated the third lunar house with Gemini. This decision, which understandably attempted to follow the lunar sequence, threw off the correct solution and resulted in no correct lunar correlations other than Taurus. But remarkably, Moran still correlated four Hebrew couplets correctly with their respective constellations (Taurus, Virgo, Sagittarius, and Capricorn), plus two partial correlations (Leo and Libra). Moran's error was not noticing that the lunar station of the ox was just on the edge of the Milky Way, and thus Gemini should have been opposite it, on the other side of the Milky Way, instead of behind Taurus. Furthermore, Moran did not know that he needed to rotate the lunar stations 90 degrees counter-clockwise, just like the Phoenician, in order to see the true pattern.

When correlated correctly, the couplets in the Chinese Lunar Zodiac, such as Taurus, Aries, Leo, Virgo, Scorpio, and Capricorn, are almost an exact match with the Phoenician/Hebrew, and show the same reversals of the couplets/letters at the solstices (rows "E" and "F" in Figure 3).

But what is even more remarkable is that the only Chinese lunar number that lines up with/matches the Phoenician, is Lunar station No. 7, which is the Gemini Flame/gate marker in both the Chinese and Phoenician. Furthermore, it turns out that when the twenty-two Chinese *ganzhi*, or calendar signs, are rotated ninety degrees as well, and correlated with the Phoenician letters (see row "G," "H," and "A"), the Heavenly Stem glyph *geng*, which Wei thinks might be associated with "gate," turns out to also be number seven, and is the flame/gate of Gemini (with regard to the twenty-two *ganzhi*, Wei, following Moran and Mair, without knowing the hidden pattern, got at least six of the correlations correct, i.e., *'aleph* with *chou, beth* with *bing, daleth* with *ding, waw* with *wu, heth* with *geng*, and *pe* with *wei*).

Returning to the Phoenician/Chinese lunar zodiac correlations (rows "A" and "F"), we see that Virgo is especially prominent, as it not only begins the Chinese Lunar Sequence at lunar station No. 1, but shows the body of the goddess with her legs spread out in a vertical "M" shape like the Phoenician. Furthermore, when the lunar signs are rotated, she is shown giving birth to a fetus/seed on the ecliptic, which is lunar sign No. 28, the last one. Thus, the Lunar Sequence begins and ends with her. In fact, the lunar sign shows her belly swollen as if pregnant, and her legs are spread as if giving birth. This giving birth to a fetus/head/seed echoes the Western counterpart of the star Spica ("ear of wheat," or seed) located in the womb area of Virgo. This is important, as the Chinese character (*si*) for the zodiac sign of the snake (Virgo), means "serpent," but also "fetus" (row "G") (Moran, Figure 4).

Regarding Virgo lying prone on the ecliptic, it's also interesting to note that the oracle bone character for "woman," (*nü*), if rotated 90 degrees, looks like a woman lying prone. See Figure 5.



**Figure 5. A.** Oracle Bone character for "woman." **B.** Oracle Bone character rotated 90 degrees clockwise.

That is, the oracle bone character doesn't seem to make sense in a vertical position, for the woman's knees are drawn into her body as if she is lying on the ground (or ecliptic as Virgo). Also, the character has what appears to be a bull's horn on her head (In Egypt the goddess Hathor was known as the celestial cow).

Furthermore, if the Oracle Bone and Shang character for horse are rotated 90 degrees counter-clockwise (as both it and the Shang character do not seem to make sense in a vertical position), it looks more naturally like a horse. The Great Seal character, however, if rotated counter-clockwise doesn't look as natural, and in fact, its proportions resemble a human's (woman's), not a horse's. But if rotated 90 degrees clockwise, it not only looks more natural but also more balanced and exactly like Virgo (the mother goddess), complete with Spica/wheat lower down in the groin area as the splayed tail (in some images, the bull of Mithra also has wheat as its tail).<sup>5</sup> See Figure 6.

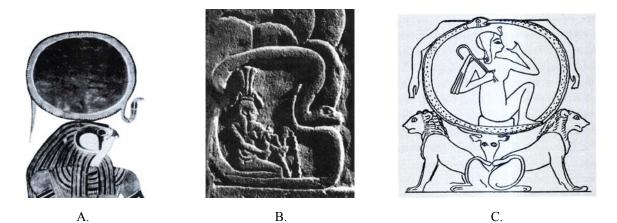


Figure 6. A. Oracle Bone character *ma*/"horse" in normal position. B. Oracle Bone "horse" rotated 90 degrees clockwise. C. Shang character "Horse" in normal position. D. Great Seal character "horse" in normal position. E. Great Seal "horse" rotated. F. Virgo, with Spica/wheat at her groin.

It thus seems beyond coincidence that, knowing that both the horse and wheat came over to China at the same time, we find these two together in a glyph that resembles a Western female goddess constellation with a star (Spica) at her groin, with the meaning "ear of wheat."

Furthermore, the letter "n" is associated with Semitic names for serpent. As Albright notes, "The coincidence of Proto-Sinaitic forms and later Semitic names of letters, such as serpent, Proto-Sinaitic 'N', Ethiopic 'nahas' (Heb. *nahas*, Ugaritic *nhs*, 'serpent') for older 'nahas' ... (Albright 1966: 7).

What's significant about this observation is that the letter "n" in the astro-alphabetic pattern is correlated with Virgo, which is the snake, the earthly branch/month *si* in Chinese (which means "serpent"; and as Virgo starts the Chinese Lunar sequence, this seems highly significant). The Egyptians also used the snake to symbolize the goddess (which again points to Virgo/spica) as the vessel that encloses the sun/son/seed/logos (the symbol of the sun in Egypt is very often enclosed by the feminine snake). This idea of the snake as the feminine container/vessel of the sun/son/seed/logos is seen later in the Ouroboros, the snake that encloses/protects the universe. See Figure 7.



**Figure 7. A.** Re-Harakhti, the sun god of the eastern horizon, with the feminine snake/Uraeus enclosing the sun. (Tomb of Queen Nefertari. Roberts 1997: 9) **B**. Hapy, the god of Nile/inundation, who is also shown as Aquarius in the Dendera Zodiac, pours water into the Nile/Milky Way, which is depicted as a snake enclosing him (Hadrian's gateway at Philae. Roberts 1997: 12). **C**. Snake as sundisk/feminine womb/vessel enclosing Ihy as the young sun/son/seed at the Horizon (Papyrus of Heruben. Roberts 1997: 21).

Another interesting correlation is the Chinese solar zodiac sign of the Monkey (row "G"), with the Phoenician *qoph* (row "A"). *Qoph* means "monkey," and both are correlated with

Sagittarius (row "E"). In the Egyptian hours of the day, there is even a depiction of the sun in the seventh hour, the day's hottest, in the form of a monkey shooting an arrow (Wilkinson 2003: 129). As the Chinese earthly branch Monkey is the seventh month in the sequence, and is Sagittarius (with arrow/bow), the correlation with 7/monkey/Saggitarius seems beyond coincidence. Furthermore, the Chinese lunar station No. 21 (row "F"), which is Orion, the archer, is equivalent to the Phoenician *reš* (row "A"), which, together with lunar station No. 21, are both correlated with Sagittarius, the archer (row "E"). There is also a prominent "bow/arrow" constellation just beneath Orion/Lunar station No. 21 in Chinese sky charts, which again, is Sagittarius, the bow/arrow.

Another fascinating correlation between the Phoenician and the Chinese lunar zodiac is seen in the Chinese character  $wu \neq (row "G")$ , which is the fifth Earthly Branch, Horse, and which means "noon"/"south" (Mathews: 1065; Moran: figure 4). As wu/"Horse" is Libra, the fact that Libra was the Fall Equinox at the time, meant that the day was divided exactly in half at "noon," when the sun was seen overhead and in the "south" (from the Northern Hemisphere, where both Phoenicia and China were), and more importantly, was moving "south" along the horizon. The Fall Equinox, like the Vernal Equinox, by definition, marked not only the position of the sun half way on the horizon between the solstices, but also marked the division of the day into two equal halves, with noon residing in the south as the sun moved south, and midnight residing beneath the horizon in the north.

One last interesting correlation between the Phoenician and the Chinese Lunar Zodiac concerns Capricorn. Since Aquarius is missing in the Phoenician, and is symbolic of the waters/fluid/ink of the Milky Way that carry, deliver, and nourish the logos as seed/sun, its waters pour down onto the back of Capricorn (row "E"), which is the last couplet and whose fish tail meets exactly at the Gemini Gate in the center of the waters of the Milky Way (its waters pouring down onto the back of Capricorn are also seen in the Egyptian constellation of Aquarius as well [row "I"] and in the Karanovo zodiac [row "M"]) (it is also interesting to note that the Chinese graph for "wheat"/mai, along with the twenty-two ganzhi, were first used around the same time as the arrival from the West of wheat [wheat seed] into China [see Mair, 1996: 36–38,

for a detailed discussion of both the arrival of wheat into China from the West, and his proposal that the Sinitic word for "wheat" is derived from a derivative of the Proto-Indo-European root \*mel(ə) ("grind, crush")]: thus, the emphasis on Virgo giving birth to the seed/logos [Spica/seed], as well as the new vernal equinox [Aries, as the VE moved out of Taurus in 2160 BC] being the letter  $zi \neq$  ["child," "son," with a slight iteration of this character forming  $zi \neq$ , meaning "a letter, a written character, a word" (Mathews 6942). The character  $\neq$ , remarkably, may also mean "a grain, seed" (Mathews 6939a) and is used to form  $zi \not\in$ , meaning "the seed of various kinds of grain" (Mathews 6945). Also note that the same three-pronged, splayed depiction of grain is used in the same exact same way for the tail of the horse/woman as shown above]). Moran also reflected on this: "When Aries became the Ram or Lamb by the process of precession of the equinoxes about 2300 BC, the Chinese instead of replacing the Bull by the Ram, as the Semites did, chose instead the symbol  $tzu \neq$  'the son' or 'male child" (Moran: 70). Note that when zi is rotated, it looks very similar to the outline of Aries, and it looks very much like a small calf, ", which is "the son" or the "male child" of Taurus.

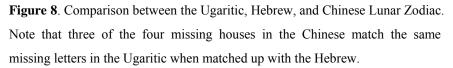
Thus, the water pouring onto Capricorn accounts for the vertical watermark that makes up the Phoenician letter *šin*, and the reason Capricorn has a fish's tail. But what's interesting is the Chinese lunar station No. 18 (row "F"), which is Capricorn and the equivalent to the Phoenician *šin*, is also made up of the same vertical watermark. Furthermore, the Heavenly Stem counterpart to Capricorn, *yi*, also means "stream" (row "H").

Furthermore, the link between *you* 酉 (Row "G"/Rooster) and Capricorn is made even stronger, as *you*, by being the original form of *jiu* 酒 (which means "beer"), also implies that it is a symbol for liquid. Thus, like the Phoenician *šin*/Capricorn, which is a water sign, and the Chinese Lunar No. 18/Capricorn, which is a water sign, and the Chinese Heavenly Stem *yi*/Capricorn, which is a water sign (as it means "stream"), and the Egyptian constellation of Capricorn, which is a water sign (as it has a fish's tail), and the Egyptian Hieratic h/Capricorn, which is also a water sign, the Chinese Earthly Branch *you*/Capricorn is a water/liquid sign (as it means the liquid beer).<sup>6</sup>

It should also be mentioned that there are four missing lunar houses to the Chinese Lunar

Zodiac (i.e., twenty-eight houses minus four equals the twenty-four positions of the Phoenician). These four missing signs are very close to the same missing letters in the Ugaritic alphabet (Figure 3, Row "C") that Gordon noted is based on the 29.5 day lunar cycle. See Figure 8.

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Hebrew		g d רג	h w רה		ņ п	ţ y v ,	k ו לכ	n m נכמ	ż/s٬ لا ت		י P רק	š ו תיש	
Chinese Lunar Zodiac (rotated CC 90 degrees)	₩0. 9 10		8 13 14 15 16	7	ری ہ	<b>∨</b> / 5 4	3 2		26 25	<u>ک</u> 24 23	-	19 19 18 17	



In Figure 8, note that in the Ugaritic, the two missing letters " $\frac{1}{2}$ " match exactly the two missing Lunar houses (No. 20 and No. 19) in the Chinese Lunar Zodiac (it should be noted that I noticed this only after I had already removed the four Lunar Houses from the Chinese Lunar Zodiac). It turns out that these missing letters fall between Sagittarius and Capricorn. Thus, again, a link to 4320 BC, as they follow Capricorn, which is the last couplet that joins the Gemini Gate of 4320 BC. Likewise, the missing letter "d" in the Ugaritic, which falls between the "m" and "n" of Virgo, matches exactly the missing Lunar house (No. 28) in the Chinese Lunar Zodiac (it should be noted that I didn't know whether to remove Chinese Lunar House 1 or 28. But later, after comparing the missing letters in the Ugaritic with the Chinese, I realized that Lunar House No. 28 is the missing one). Furthermore, both the Ugaritic letter "d" and the Chinese Lunar House No. 28 are not only similar in shape, but they appear to symbolize the seed Spica in the pregnant belly of Virgo (note the same swollen shape in the belly of the Virgo glyph in the Chinese Lunar House No. 27).

Though the placement of the last missing letter/Lunar House ("b"/No. 8) in the Ugaritic/Chinese Lunar Zodiac does not match, there are some very interesting correlations

between the two. In the Ugaritic, the missing letter "b" appears between the letters "g/d," which is Aries, the vernal equinox at that time. The Chinese, however, chose to place this missing Lunar House (No. 8) just in front of Gemini, which is the center of the Milky Way and the old vernal equinox of 4320 BC (which is tied to the beginning and ending of the alphabet itself, as both the large loop and the small loop meet here. The spring equinox and winter solstice of 4320 BC in the alphabet loops also meet here, as well as the winter solstice/Capricorn during the Age of Aries when the alphabet was put into its Phoenician form). As will be covered a bit later in the paper, this spot/date was not only important to the Egyptians, but it was equally so to the Chinese. In addition, note the similarity in shape between the missing Ugaritic "b" and the Ugaritic "z" that makes up the flame of Gemini within the center of the Milky Way.

Furthermore, one of the remaining letters in the Ugaritic, letter "s" (Figure 8, just above the Chinese Lunar House No. 15) has double water marks which resemble the same double water marks/spouts of both the gods Enki/Hapi (who symbolize Aquarius in Mesopotamia and Egypt). Given that it is an "s" sound, it appears to be equated with the "s" glyph that forms the Egyptian Aquarius, which is associated with water. The other Ugaritic "s" that I placed next to the Ugaritic letter "z," which symbolizes Libra, could possibly be the other "s" that forms the two "s" glyphs of the Egyptian Aquarius (Figure 3, row "J/K"). Thus, by removing that "s," it would then leave the Ugaritic "z," which has a shape that matches the shape of Libra.

This shortening of the Ugaritic/Chinese Lunar sequence can be seen in the solar zodiac being actually embedded within the lunar. That is, just as the ancients believed that the moon was the vessel of light and merely carried/reflected the sun's light, the lunar zodiac carried/reflected the solar zodiac within it. This seems to be why there are two versions of the Ugaritic alphabet: the longer thirty-letter alphabet, with a "superfluous" thirtieth letter that does double duty for the "s," as Gordon speculated, thus giving a 29.5 day cycle; and the shorter twenty-two-letter version, which I believe reflects the solar zodiac as seen in the later twenty-two-letter Phoenician.

It should also be noted that Gordon, following Moran and Mair, suspected that this thirtyletter alphabet, and its shorter twenty-two-letter "mirror" version, were related to the Chinese Lunar Zodiac and/or twenty-two-letter calendar signs (Gordon 1994: 37–45). Both Gordon and

Moran, however, never suspected that the solar zodiac was contained within the lunar zodiac and within those thirty letters.

The Ugaritic alphabet does not need to be rotated like the later Phoenician, and when these two are compared to the zodiac, they match almost perfectly (rows "C," "A," and "E"). Even Gordon noted the correlation between the shapes of the Ugaritic letters "z," "m," and "s" and the Phoenician "z," "m," and "s" (Gordon 1994: 40).

Furthermore, and once again, the Ugaritic letters "m" and "n" for Virgo indicate a figure on its back with its legs up in the air. Even the two Ugaritic letters for Scorpio, "p" and "s," correlate well with the horizontal body and tail and vertical claw aspect to the outline of a scorpion. As the letters are limited by the mechanics of the stylus, the abstract shapes they form still come remarkably close to the outlines of the Phoenician couplets and the actual constellations.

In light of the work done by Darnell on Wad el-Hol, along with the astro-alphabetic pattern found within them and their later Phoenician iterative forms, it is clear that the proto-Caananite alphabet was derived from the older Egyptian Hieratic and Hieroglyphs, which in turn were a function of older theological/astronomical sky charts/observations (which is the subject of an unpublished paper that I have written).

There are exactly twenty-four original uniconsonants in the Egyptian writing system, which, as couplets, matches the twelve Egyptian constellations perfectly.<sup>7</sup> Looking at rows "J," "K," and "I," note not only the shapes of the Egyptian constellations from a variety of sky charts, but also the fact that they reflect the older age of Taurus, and thus their letters reverse at the solstices one house back from the Phoenician. So Cancer is shown as a small crocodile facing the correct way instead of being reversed in the Phoenician/Hebrew (rows "A" and "D"). Also Capricorn in the Egyptian is shown reversed instead of facing its normal direction. There is also the vertical water element to the letter "h" in the Hieratic, which is Capricorn. The Egyptian constellation in the Senemut sky chart shows Aquarius, once again, pouring water down onto the back of Capricorn. The other sign letter to Capricorn is "t," which in Egyptian is symbolized by a bread loaf (the word/logos/seed, with water/fire, becomes flesh/bread/beer). In row "I," note that

in two of the skychart images in Egypt (Rameses 2 and Senemut) there is a breadloaf just beneath the tail of an animal that matches the Phoenician Capricorn couplet.

Also, note in the Hieratic (row "J") the hidden "x" that marks the summer solstice in Leo (letters "k" and "f"). *Kaph* in the Hieroglyph (row "K") is a pitcher of water and might possibly denote the start of the flood of the Nile at the summer solstice, which was in the sign of Leo at this time. Thus, the summer solstice is symbolized by the letter *kaph*, which is the back of Leo, after it moved there from the head of Virgo (which is *nun*, the water symbol, when the summer solstice/Nile flood point was there in 4320 BC, the year when the astro-alphabetic sequence, though not necessarily the alphabet, was believed by the Egyptians to have first started. This latter aspect will be discussed shortly).

But more importantly, note the shape of "q" and "r" in the Egyptian, which make up Sagittarius, the bow and arrow. "Q" in both the Hieratic and the Hieroglyph is the bow portion, but more importantly, it is depicted as only half a bow (the Phoenicians used a whole bow for this letter; see row "A"). Furthermore, and more important still, note that the later Modern Hebrew reverted to half a bow (row "D"). This reversion is a critical detail, as one would expect the shapes of the letters to evolve and become more distant in form from the original source over time (such as is seen in the later Arabic, Greek, Latin, etc). But given that the Hebrew scribes/Rabbis went back to the original half bow, this reversion shows conscious intent, and knowledge of the original astro-alphabetic Egyptian pattern/template from which they copied the idea. (It is also worth noting that, instead of choosing to link Cancer with the Egyptian croc, the Hebrew scribes/Rabbis chose instead to link it with a crab, which is how we know it today. A Proto-Sinaitic glyph that seems to match the outline of a crab, rather than a scorpion, seems to fit the letters *teth/yodh* quite nicely. See Figure 2a).

The Egyptian Hieroglyph "r," which is a mouth (like an arrow, an instrument of cutting), is believed to mean "fissure," "cleft," "division" (Betro: 57), which, again, are all linked to the actions of a bow/arrow.

Another detail worth noting in the Egyptian (rows "J" and "K") is the circle that makes up the "b" of Scorpio, which was the fall equinox at the time. This circle being associated with

the fall equinox appears to have held constant over the years, as the later Phoenicians used it to mark *'ayin* in Libra, the new Fall Equinox. Furthermore, within all three of the Libra skychart images from Egypt (row "I"), there is a prominent circle on or below the scale with a small human figure in it. This circle appears to be symbolic of the sun as the seed/logos sown into the earth's horizon as it dips beneath (and is symbolically sown into the lower vessel/body of the celestial sky, Nut) the celestial equator at the fall equinox (again, the word/logos/seed/sun made flesh/wheat, via Ptah).

In row "K," the Egyptian hieroglyph "d" is a hand, and corresponds to Cancer. One important connection between the Egyptian and the Phoenican/Hebrew (rows "A" and "D") is that *yodh*, which is Cancer, also means "hand." Furthermore, the Phoenician/Hebrew letter *kaph*, which is associated with Leo and water, also means "hand." Thus, just as there was an element of water/flood symbolism conserved from *nun* to *kaph* when the summer solstice moved, there also seems to be the idea of the "hand" that pours the water (i.e., the hand of Hapi, the Nile/Aquarius god who floods the river/Milky Way for wheat/bread/beer by pouring the water out of a small vessel in his hands) being conserved progression from *nun*/water (summer solstice/flood in Virgo) to *kaph*/water/hand (summer solstice/flood in Leo) to *yod*/hand (summer solstice/flood in Cancer when the Phoenician alphabet was created).

Another detail in the Egyptian (row "K") is the Hieroglyphic "b" that is depicted as a foot. This leg symbolizes Pisces, a bull's leg/oar/chisel/penis/pen/plow — the instrument/spout that delivers the sun as the seed/logos into the earth/Nut/celestial equator/Gemini gate (i.e., the vessel/female/Nut must be opened for the word/seed to be sown). The Chinese show this (row "H") as a Halberd, a pike/spear, as the Heavenly Stem *wu*. It should also be noted that Pisces is not the shape we are accustomed to seeing now, but rather, as seen in row "E," it extends into the upper part of Cetus (this is the handle of the chisel or the upper part of the bull's leg).

It should also be noted that the Hieroglyph "š" that forms Aquarius is a pool of water (row "K"). The other "s" of Aquarius that seems to depict "folded fabric" (Betro: 178), actually forms the water/fabric flowing down from Aquarius onto the back of Capricorn, which not only

is made up of the Hieratic glyph "h," which depicts water, but the Hieroglyph "h" is believed to be a "folded strip of fabric" that was twisted to form a wick for a candle (Betro: 180). And as Capricorn joins Gemini as the last letter in the center of the Milky Way, the water/fabric/wick/candle/fire implications are quite interesting.

Another important detail in the Egyptian is the arm glyph ("<") that makes up the Gemini gate (row "K"). This appears to be symbolic of the arm of Orion reaching up, like Prometheus, into the Gemini candle flame/gate (*zayin*/letter 7), and grabbing the fire/sun (see row "E" for an illustration of this).

At this point, it is important to go into a little more detail concerning Gemini for context, as both loops of the alphabet join here at *zayin*/letter 7. It is exactly this spot between Taurus and Gemini where, as I mentioned earlier, Santillana theorized that the sun was believed to have been born to the ancients. Thus, it is no surprise that the Gemini/candle and candle-like glyphs in Egyptian Hieroglyphics depict such words as "The great door of heaven," "The great gate," "The door of sunrise, the last door of the Duat," "Door," "Gateway," etc. See Figure 9.



**Figure 9. A**. Hieroglyph used in words for "Door," "Gateway," "Great Door of Heaven," "The door of sunrise, the last door in the Tuat" (Budge 1978: 654–655). **B**. Gemini candle Hieroglyph with Uraeus as flames in the Egyptian word for "Great Gate" (the Uraeus was used to circle/enclose the sun and was the "flaming eye of god" that protects the Pharaoh/God) (Betro 1996: 87). This same Gemini/Candle hieroglyph also used in word "gate of the horizon" (Budge 1978: 658–659). **C**. Hieroglyph with Uraeus as flames for "gateway" (Gardiner 1957: 494). **D**. Hieroglyph for "door, gateway" (Gardiner 1957: 496).

Hieroglyphic characters of this same candle shape with a flame (s) on top also refer to the Gemini Candle/gateway being a house or palace of the gods (with Hathor, "house of Horace"

being an iteration, as Horace was the sun/seed/logos within the body/walls of the goddess as vessel/snake). See Figure 10.



**Figure 10**. **A**. Gemini Constellation. **B**. Gemini Candle as the hieroglyphic *sa* used in the tomb of Seti 1 as Gemini. The hieroglyph means: "back of something" (Gardiner 1957: 542). It was also a word that meant "a shrine or sanctuary in which a god or goddess was housed" (Budge 1978: 633). The Glyph was also used in words for "wall, walled building, fort, castle, fortified gateway" (Budge 1978: 633). **C**. Hieroglyph meaning "palace." Note that if rotated 90 degrees, the diagonal line in the top half of the glyph would represent the ecliptic within Gemini (Budge 1978: cxxviii). **D**. Hieroglyph meaning "palace of the god." Note the Uraeus on top (Budge 1978: cxxviii). **E**. Hieroglyphs meaning "house of Horace" — "Hathor" (Budge 1978: cxxvii).

In terms of the Gemini Candle/gate symbolizing a vessel that carries the sun/flame/light, the importance of the link between these Egyptian shapes/words, the Hieroglyph "p,"  $\blacksquare$ , the Phoenician shape of *heth*,  $\blacksquare$ , and the Chinese word/shape for "sun,"  $\boxminus$  (*ri*), cannot be overestimated.

Furthermore, and more importantly, Wei noted that the Phoenician/Hebrew letter *heth* is "similar to the Chinese OB glyphs  $\exists, \exists$ , which are the original forms of the word *hu* (\*ga?)  $\vDash$  (DEZ: 242), meaning 'door', 'gate', 'house,'" (Wei 1999: 26). She also links *heth/geng* to the Sumerian glyphs  $\exists, \exists$  (gan), meaning "enclosure" (Wei 1999: 27).

Furthermore, not only did the glyph for Gemini mean "door/gate/house/fire/sun" in Egypt, it also had associations with the temples of Egypt that framed the rising sun between its pylons like the horizon (*akhet*)/horns of the moon/bull (In terms of the bull's head/Taurus/moon, the bull's horns have been traditionally linked to the moon/goddess/horizon, which carries/gives birth to the light/son/sun/seed/logos. See Figure 11).

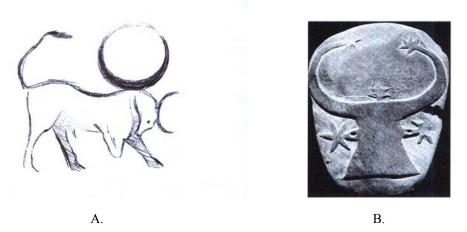
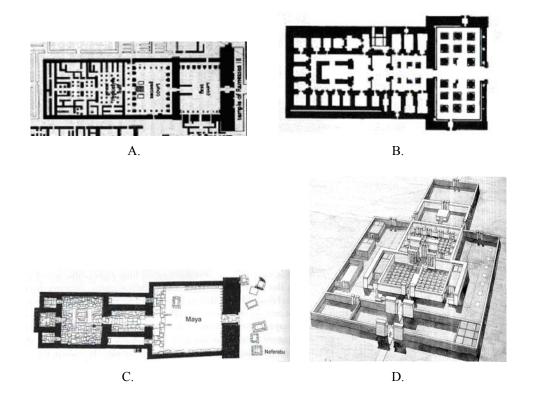


Figure 11. A. Bull symbolizing the moon that carries the light of the sun. Long Zodiac of Dendera (Drawing by author). B. Stone palette from El-Gerza, Egypt. Bull's head as goddess/moon/horizon (Photo: Wengrow 2006: 189)

That is, the outline of Gemini as a candle/"palace of the god" also forms the blueprint for many Egyptian temples (as well as tombs and doorways), as the flame symbolizes the new sun/seed/logos rising up from between the two pylons/doors as the gateway at the horizon. See Figure 12.

Brian R. Pellar, "On the Origins of the Alphabet" Sino-Platonic Papers, 196 (December 2009)



**Figure 12. A**. Temple of Ramesses III in the shape of the Gemini candle (Manley 1996: 79). **B**. Temple of Hathor at Dendera in the shape of the Gemini candle (Shaw 2002: 440). **C**. Tomb at Saqqara in the shape of the Gemini candle (Shaw 2002: 288). **D**. A reconstruction of the Sanctuary of the Great Temple complex at Armarna. Note the strong Gemini candle shape (Wilkinson 2000: 140).

This link between the temple pylons and fire/sun being situated at the entrance to the temple as a candle is further reinforced by Wilkinson — "the entrance pylons were built to mirror the form of the heiroglyph for *akhet*, 'horizon', on which the sun rose each day" (Wilkinson 2000: 79). It is also worth noting that the sacred lake next to the temple symbolized the primordial waters/River of Nun in which the priests of the temple "bathed at dawn before entering the temple to begin their service" (Wilkinson 2000: 72). This "River of Nun," where the sun god was believed to wash his face each day before rising at dawn, not only echoes the Nile (and the god Hapi, who is shown as Aquarius in the Dendera Zodiac), but more importantly, the Milky Way. Thus, there is a close association between the birth of the sun and the temple in the

shape of the Gemini candle and the waters of Nun/Aquarius/Milky Way (the latter being where the sun was believed to have been born, as previously noted by Santillana).

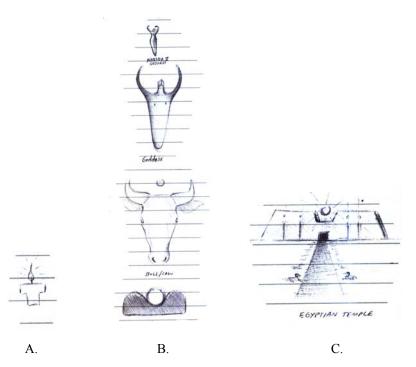
This link between Gemini and the Horizon/bull/Goddess/temple is also seen in Mesopotamia in a cylinder seal from around 2200 BC (Age of Taurus). See Figure 13.



**Figure 13.** Cylinder Seal that shows the Gemini gate between Leo and Aries. Note the water god Enki (Aquarius) with a stream of water meeting the Gemini/Taurus gate where Utu cuts open the horizon/gate to release the sun (ca. 2200 BC. British Museum; Kramer 1971).

In Figure 13, note how the Gemini gate is situated between Leo (lion) on the far left and Aries (ram lying prone next to the gate) on the right. Also note that the tree standing next to the goddess on the Gemini gate appears to be the Axis Mundi, the world tree or axis (with its four branches/circles indicating the four directions/pillars), and appears to symbolize the vernal equinox at the Gate in 4320 BC (which cut the upper and lower celestial spheres). On the right of the gate is Enki, the water god, who is Aquarius. He has two streams of water (like Hapi/Aquarius in Egypt who also has two streams of water) with fish, one of which rises out with the sun/son/seed and fish from the Gemini/Taurus gate. This meeting of the waters of Aquarius at the Gemini/Taurus gate in the alphabet loop. Also, note that the horizon/gate, where Utu is situated (cutting open the gate/horizon/goddess with a knife that symbolizes the sowing/opening aspect of Pisces, which releases the sun/son/logos), looks like the Egyptian symbol for the horizon and looks like the front of an Egyptian temple, which as just shown, is

designed to resemble the shape of Gemini. Thus, this gate, like the meeting of *zayin/'aleph* in the astro-alphabet loop, is a combination of Gemini and Taurus, the latter the bull that carries the sun as seed/logos that rises between its horns. See Figure 14.

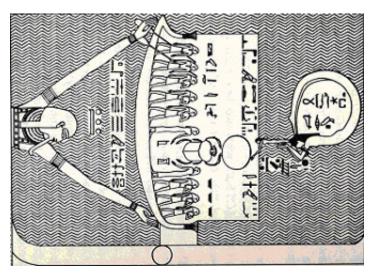


**Figure 14. A.** Candle. **B.** Goddess as Bull's head as Horizon (*Akhet*). **C.** Egyptian Temple (drawings by author from notebook).

It is important to note that the Egyptian temple also symbolized the primeval hill/Celestial cow (Hesat, which Hathor mirrored, which again is the goddess as the vessel, as all matter, containing the sun/seed/logos within) rising from the waters of creation at the Egyptian First Time (aside from the Nile, the counterpart to the Milky Way, it also had a sacred lake just outside), which symbolized the Milky Way/Aquarius joining the sun rising up from the celestial/terrestrial horizon at the Gemini/Taurus gate at 4320 BC (the First Time, or Tep Zepi). But more importantly, the meaning of the candle glyph as "back of something" seems to refer to the location of the place the god actually resided in the temple. Thus, the Gemini/candle Hieroglyph, shown above in Figure 9b, was also used in the word "Khen/khenu," which means "the most private part of a building, the most sacred part of a temple, dwelling, cabin of a boat, house, palace" (Budge 1978: 575). The "most sacred part of a temple" being within the Naos at

the very back of the temple where a sculpted figure of the god was kept (this idea of the god residing in the back of the temple also seems to emphasize the importance of the stars Castor and Pollux, which are at the back of Gemini).

Furthermore, as the body of the candle/temple itself symbolized the actual hill or material aspect of creation (which was the domain of the Goddess as vessel/matter), it is not a surprise to see the material/terrestrial aspects of the world being associated with the body/walls of the candle, and the immaterial/celestial fire/gate of heaven being linked to the wick/fire in the front of the candle (where Nut/Osiris and the gate of heaven/Duat reside). See Figure 15 for a clear example of this.



**Figure 15**. Gemini Gate/Flame. *Book of Gates*. Twelfth Hour. Rotated 90 degrees. Note Osiris curled as the flame/gateway into the Duat.

Note in Figure 15 the God Nu, and the waters of creation surrounding the Gemini Candle/gate (figure rotated 90 degrees), which would symbolize the waters of the Milky Way/Nile/Aquarius meeting Gemini as the gate/temple/primal hill. Also, note the small circle in front of the bark in an opening/gateway in the waters that seems to depict the sun leaving Gemini on the ecliptic exactly as it should.

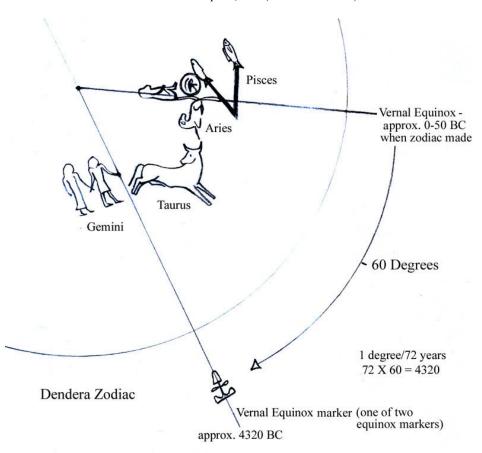
Furthermore, in terms of the candle/flame of Gemini being a gate into the Duat, which I show in Figure 15, Wilkinson also noted that,

According to the Egyptian world view, the temple stood at the nexus of the three spheres of heaven, earth and the netherworld; and it thus served as a kind of portal by which gods and men might pass from one realm to the other. In the same way that the temple pylon functioned symbolically as an *akhet*.... Just as the physical horizon is the interface between heaven and earth — and in terms of the setting sun between today and tomorrow, the present and future, this world and the beyond — so the temple, of whatever type, was regarded as an *akhet* or interface between these spheres or realms and was often described as such (Wilkinson 2000: 79).

Thus, that "portal" between the three spheres was the Gemini Gate/Candle of 4320 BC, the place/date of the birth of the sun on the ecliptic. This is the date at which the vernal equinox was in the center of the Gemini flame/gate/*zayin*. It turns out that *zayin* is this very spot on the ecliptic in the center of the Milky Way where the sun rises up from the depths of the earth/celestial equator at the spring equinox. Thus, it is this spot where the upper celestial world of the gods/logos meets the lower terrestrial world of the mortals/flesh/earth. It is the "portal"/gate between the worlds. It is the groin/opening of the Goddess as a consonant, as a vessel of the body/flesh. But more importantly, this spot/date is also the start of the alphabetic sequence as contained within the actual Phoenician alphabet, and it is also the exact date where Pisces joins Aquarius at the winter solstice in the other end of short alphabet loop. Thus, both ends of the small alphabet loop that starts the sequence/pattern correlate exactly with this same date of 4320 BC and the center of the Milky Way on the ecliptic. Thus, it appears that the memory of this early date was later integrated into the various writing systems when they were invented and developed into an astro-alphabetic pattern.

The Gemini Gate and the date of 4320 BC also appear to have been conserved in the Dendera zodiac. See Figure 16.

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**Figure 16**. Dendera Zodiac showing the Gemini Gate in the year 4320 BC (illustration by author).

The Egyptians placed two horizon markers 180 degrees apart and just outside the circle of the zodiac. A simple angle/degree calculation (1 degree/72 years) of 60 degrees from the vernal equinox at the time of the making of the zodiac (around 0 BC) to the prominent "horizon" marker between Gemini and Taurus confirms, once again, the date of 4320 BC as an important date/spot in the minds of the Egyptians (note that the tail of Aries that points to the vernal equinox marker in Pisces of around 0 BC, and which also points to the center of the womb of a large image of Nut [not shown above], matches Starrynight Pro's vernal equinox placement in Pisces at exactly at this same time).

And the date of 4320 BC wasn't just important to the Egyptians. This date is also seen in the Chinese lunar and solar zodiac as well (rows "F" and "G"). The first Chinese Lunar Station was placed in the head of Virgo, which is the old summer solstice point of 4320 BC (this date of

4320 BC is also seen in the Egyptian letter "n"/Phoenician letter *nun* [rows "J," "K," and "A"]. As that letter is a water symbol, this letter/date is the first historical indication of the Egyptian summer solstice when the Nile first started to swell. To put it another way, the summer solstice of 4320 BC fell exactly within the head/letter *nun* of Virgo, and they recorded and conserved this date/spot).

Furthermore, the first day of the Chinese Tiger month traditionally begins the lunar new year. Thus, that first day of Chinese New Year falls on the Chinese solar vernal equinoctal point of 4320 BC, since the Tiger in the Chinese solar zodiac is Gemini and its first day would be exactly in the Gemini flame/gate.

Lastly, and more important still, the Chinese word *renri*  $\[Aextide]\]$  for the seventh day of the first lunar month (Tiger/Gemini) has the Gemini shaped sun character *ri*  $\[Bextide]\]$ , which is derived from the earlier Seal Script character  $\[Bextide]\]$ , which in turn mirrors the shape of the Gemini gate/candle in both Egypt and the Phoenician alphabet. *Renri* means "the birthday of Mankind," which again, appears to reflect the birth of the sun/logos at the first lunar month (Tiger/Gemini Gate) in 4320 BC, which was the Egyptian First Time, or Tep Zepi. Also, that it is also on the seventh day seems to indicate a relationship to *zayin*/Pi in Gemini.

Older astro-alphabetic glyphs than the Egyptian are seen in the six stag bone glyphs found in Spain and dated to around 4000 BC to 3800 BC. See Figure 17.



**Figure 17**. Stag Bone, Spain 4000–3800 BC (Schoyen Collection. MS 5237/2. Bancal de la Coruna, Spain, Ca. 4000–3800 BC).

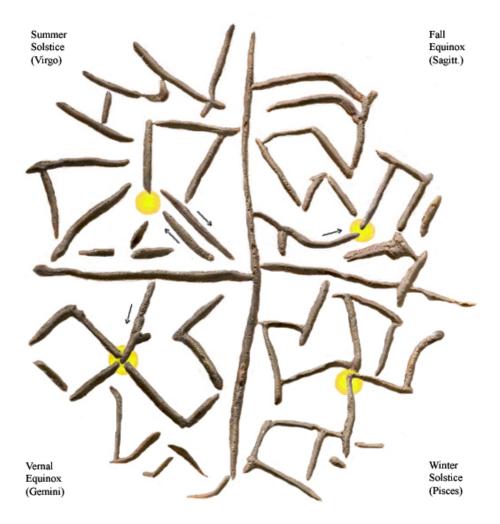
They appear to show a sequence of six constellations from equinox to equinox (a half year). See Figure 3, row "L." Like the Egyptian, they show no rotation, as they are older and appear to be a precursor to the Phoenician (even in the Late Assyrian form of Cuneiform, the letters were rotated 90 degrees counter-clockwise. The Chinese also rotated their letters 90

degrees at an early point as well). But note the same shapes that match Taurus ('*aleph*), Gemini (*heth*), Cancer (*yodh*), Leo ("x" as it was the summer solstice at this point), Virgo (this circle and stick shape seems to embody both the "m" and "n" of Virgo, and matches the Old Chinese Oracle bone letter for the Earthly Branch for Snake/Virgo [for the latter, see row "G"]. Thus, it seems to be an intermediary glyph), and then Libra (*samekh*).

And lastly, the astro-alphabetic pattern can be clearly seen in the Karanovo Zodiac, which comes from the Bulgarian village of Karanovo in Sliven Province, and which dates to 4800 BC (row "M"). See Figures 18, 19, 20.



Figure 18. Karanovo zodiac (Merlini 2009).



**Figure 19.** Karanovo Zodiac. 4800 BC. Yellow dots denote position of sun at the four colures (adapted from Merlini's photo).

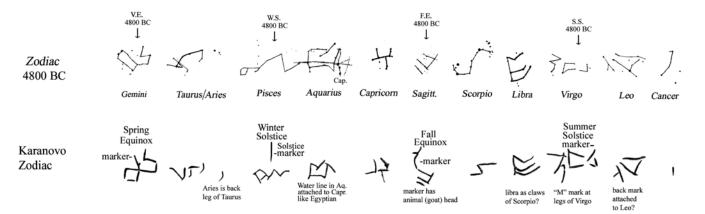


Figure 20. Karanovo Zodiac and actual constellations in 4800 BC.

Flavin's instinct is correct in that it is a zodiac (Flavin 1991), but unfortunately, he correlated the wrong symbols with the constellations. As can clearly be seen in Figure 24, the Karanovo glyph for Taurus correlates well with 'aleph (row "A") and chou (Chinese "ox head") (row "G"), and its body with beth (row "A") and niu (row "F") (and the Egyptian pr or house). Here, at this early date, the form of the bull is in two distinct parts, a couplet, and just might be the precursor to the alphabet. Also, in row "M," note the shape of Pisces and the shape of Aquarius. Aquarius, like the later Egyptian and Chinese, pours water down onto the back of Capricorn (I had to cut this line at the back of Capricorn as the two are separated by the columns of my chart). Gemini, Leo, Virgo, Libra, Scorpio, and Capricorn all show very strong similarities to the later alphabetic glyphs. But what is even more remarkable about this particular zodiac is that it also includes markers that point out the solstices/equinoxes. Thus, the marker just outside the body of Gemini dates it exactly to 4800 BC, which concurs with Gimbutus' date of the object. The same could be said with all the other markers, as they all exactly line up with the year 4800 BC (a correlation that seems beyond coincidence). Also note that the fall equinox marker has an animal's head on it in Sagittarius. This entire constellation/marker resembles the bow with the arrow with an animal's head.

Lastly, note that all the seasonal markers point to Virgo, which begins and ends the Chinese Lunar Zodiac (No. 1 and No. 28).

## Conclusion

Moran's thesis that the system of alphabetic signs needed to encompass a range of criteria in order for it to be so successful was an excellent one, as an astronomical/zodiacal template for the alphabet easily fulfilled his five criteria.

In addition, Petrie's pre-Egypt theory of the early development of the alphabet needs to be taken more seriously. Based on the discovery that the small alphabet loop is also seen in Mesopotamia, and on the proto-writing glyphs being found in Tartaria, Karanovo, and China (such as found in Dawenkou,<sup>8</sup> Shandong Province, and in Jiahu, Henan Province), it appears that there might have already existed a culture/tradition of proto-alphabetic signs based on theo-

astronomical observations/rituals that not only pre-dated Egypt, Sumeria, and China, but that also had its roots in Northern Europe. Given Marshak's findings that Cro-magnon man in Europe appeared to keep track of lunar appearances via vertical scratches/marks on bone (Marshak 1972), it seems that writing was perhaps a natural, southern and then eastern extension/maturation of the observations/notations of the moon and sun moving through the sky via what they perceived to be divine forces. This early and sophisticated dependence on the sky for information seems inevitable, as Krupp noted that the stars and constellations provided "practical services: timekeeping, season marking, calendrics, weather signs, concentrations of supernatural power, and symbolic containment of important cultural data" (Krupp 2000: 58).

Furthermore, this early dependence on the sky for information grew to include both pictographs and, more importantly, as Marshak attempted to show, notation/counting, a practice that figures significantly in Schmandt-Besserat's theory that plain and complex tokens might be the precursors to writing in Sumeria, as well as in Gunter Dreyer's discovery of protohieroglyphs in Egypt that might pre-date writing in Sumeria. The hieroglyphs that Dreyer found refer to both religious and administrative functions and are written on bone and ivory tags, pottery, and clay seals. But more importantly, they show that at the beginning of the 1st Dynasty "writing was at a developed stage" (Dreyer 1999: 110).<sup>9</sup> In light of all three of these findings, it would seem that growing religious, administrative, and economic pressures that had their rudiments in the early Neolithic, merely extended the astro-theological (and secretive) notational/calendrical/ritualistic accountings of the shamans, priests, and administrators, and writing became democratized over time (i.e., more accessible and secularized) by the sheer economic and administrative necessities of an expanding church and state.

It also appears that very early on in Karanovo, in addition to the proto-alphabetic glyphs that were used calendrically (as they marked the four seasons), there already existed a theological/symbolic division/coupling between the upper head and lower body of both the bull that makes up Taurus, and the prone figure of the goddess that constitutes Virgo — a division or coupling, I might add, that can still be seen 6,800 years later in the Latin letters "A"/"B" and

"M"/"N" that we use today when they are rotated and joined together, as this paper attempts to demonstrate.

Thus, the very close correlation of both the visual and complex theo-astronomical elements/pattern between the Phoenician alphabet, Hebrew alphabet, Ugaritic alphabet, Chinese Lunar Asterisms, Egyptian Hieratic, and Karanovo Zodiac appear to be beyond coincidence and should warrant further study (i.e., particularly Mair's and other's observations [such as Pulleybank's] in regards to the overland transmission of the twenty-two specific glyphs into China from the West in the second millennium BC). In fact, one of the reasons the Proto-Sinaitic alphabet might have been so successful in spreading back north out of Egypt is due to the fact that non-literate people could easily memorize and retain a sequence of letters correlated with common zodiacal signs. Thus, this latter aspect helps explain the conservative nature of the order of the alphabet and why it retained its original letter sequence for so long.

Finally, it is worth noting that with the movement of the four colures (equinoxes/solstices) from the Egyptian writing system to the Phoenician alphabet, and with the Phoenician alphabet keeping a record of 4320 BC as the point at which its two loops join at the old spring equinox and winter solstice, it appears that the idea of the precession pre-dated Hipparchus by, at the very least, a thousand years.

#### Notes:

- The Proto-Sinaitic glyph for Gemini that I use in Figure 2A (the top glyph with the box and flame), which comes from H. Grimme's interpretation of Proto-Sinaitic Inscription 353, does not appear in an interpretation of this same inscription by Petrie and Pusch. Instead of showing the Gemini box, Petrie and Pusch show a glyph of a head (the letter Resh).
- 2. There is also another connection between the sacred, invisible vowel/logos and Pi. In the Nag Hammadi text, *The Gospel of the Egyptians*, the "three powers" (the Father, Mother,

- 3. The Age of Aries was a period of time when the vernal equinox resided in the house of Aries, which is one of the twelve houses of the zodiac. This period lasted until around the time of Christ, and was approximately 2160 years in length. We are currently residing near the end of the Age of Pisces, with the Age of Aquarius not far away. The different ages of the zodiac are due to the precession of the equinoxes, a process that is linked to a change in the position of the earth's rotational axis.
- 4. The number "231" refers to the number of lines that can connect to 22 points/letters in a circle. Kaplan states, "In general, if a number of points are placed in a circle, the number of possible lines that can connect any pair of points can be easily calculated. If we let *n* be the number of points, and *L* the number of lines, the formula is:

$$L = n (n - 1)/2$$

.... The number of lines that can connect the 22 letters placed in a circle is therefore (22 X 21)/2.... Making the calculation, we find that there are 231 lines. These are the 231 Gates" (Kaplan 1997: 109).

5. It is important to note that at some point in the third millennium, Cuneiform underwent a change in the orientation of its pictograms, as well as in the direction of the writing of the script. Both were turned 90 degrees counter-clockwise. That is, instead of being written from top to bottom, the scribes rotated the clay tablet 90 degrees counter-clockwise, resulting in the signs laying on their backs, with the direction of the script now running from left to right. In terms of the letters of the Phoenician astro-alphabet having to be rotated 90 degrees to see their true shapes as constellations, there is the possibility that they, like the Egyptian writing system, were not rotated at all like the Cuneiform. One could see their true shapes, as I first did, when they were written vertically and coupled. That is, like the flow of ink down onto the papyrus, or the sowing of the seed/sun into the earth, the scribes/priests saw the orientation of the constellations as they were "sown" into the earth at the Western horizon — i.e., vertically (again, the word/logos sown or made flesh). It is really only a matter of convention that we see the constellations horizontally as if seen in the southern sky at their zenith. Thus, there appears to be a correlation between the way the constellations are viewed and the way the astro-alphabet was viewed in its true or hidden form. Viewing the constellations from the east or south or west results in a 90-degree rotation of the viewer, which could imply a 90-degree rotation of the letters. Furthermore, in terms of the Phoenician astro-alphabet being written/read from left to right, there is the possibility that this is due to the observation that the sun (as seed/logos) travels from right to left (west to east) through the constellations in the southern sky (blackboard of night). It's also interesting to note that in Egypt, "right" was correlated with the west, and "left" with the east. Thus, the viewer was looking south, the direction the constellations were viewed at their zenith.

- 6. The root you 酉, being possibly correlated to grain is interesting (along with the observation that grain was introduced into China around the same time as the 22 ganzhi). As I touch on throughout the paper, the alphabet really deals with the Egyptian idea of the "Word becoming Flesh" (via the creator god Ptah), or rather, the 2D logos, as written on the upper blackboard of the celestial sky, becoming the 3D flesh/bread/beer of the lower Egyptian terrestrial world. It was bread and beer that sustained/nourished the Egyptians. Thus, the alphabet shows a continuum from the onset of this process ('aleph as the bull's head as the seed/logos/sun) to the conclusion (taw as the bread loaf). Thus, the alphabet has four elements/letters that are used in the making of bread/beer:
  - The silent Aquarius (water/liquid/ink that carries/nourishes/transformsgrain/ logos).
  - 2. 'Aleph (grain/logos/head/sun)
  - 3. *Zayin* (fire/heat for the cooking of the grain/logos, and which also symbolizes sun/light/wisdom, which all rise, like the wheat/flesh).
  - 4. Taw (fish tail with bread loaf under it. Symbolizes liquid as it is within the center of the Milky Way when it joins zayin to form the end of the two loops). So there is a continuum from seed to flesh, from 2D to 3D. Orion as Osiris (who is the later Great Bull and the god of wheat who gets cut up/ "divided"/harvested in spring at the vernal equinox and resurrected like the grain), reaches his hand up into the Gemini Gate/flame and pulls out the sun/son/bread/beer at the end of the process. This is why the hieroglyphic "<" that forms Gemini (along with the "p") is in the shape of an arm. The new seed/logos pulled out/left over from the harvest</p>

starts the process anew. As *zayin* is the gate/flame at the center of the Milky Way, it symbolizes the old vernal equinox from 4320 BC, as I discuss in my paper.

7. In 1915 M. Georges Darressy published a paper ("L'Egypte Celeste" in the *Bulletin De L'Institut Francais d'Archeologie Orientale, XII*) on the correlation between Egypt's twenty-two nomes in Upper Egypt and the Zodiac. Reviewing his paper, I couldn't help but notice that the nomes/Zodiac match the Phoenician alphabetic couplets from Gemini (nomes 7 and 8) to Capricorn (nomes 21 and 22). That is, though the nomes don't show the short alphabet "loop," they do show a rough sequential grouping in twos that starts with Aquarius in upper Egypt. The Zodiac of Dendera shows the Nile river god Hapi clearly as symbolizing Aquarius. It is Hapi, like the Sumerian water god Enki, the Bull God, who fertilizes the Nile (the Tigris for Enki) for the growth of wheat/grain to make bread/beer, which are symbolized by the last Nome (22)/Capricorn at the start of Lower Egypt, where the wheat is mostly grown. Thus the progression of Aquarius/water/seed/'*aleph* to the last letter *taw*, which is symbolized by the bread loaf. They all meet at *zaiyin*, the flame and the symbol for the fire/heat that makes both the

bread and beer. And as Aquarius/Hapi, as the silent consonant couplet, begins the Nomes in upper Egypt, and Capricorn ends it at the border of lower Egypt, this does seem to match the start and end of the astro-alphabetic pattern (and indeed Hapi is a couplet of sorts as he is made up of both male/female attributes, a male/female pairing of masculine head/feminine body that the alphabet couplets hint at).

8. A glyph found in Dawenkou, Shandong Province, , appears to resemble the Egyptian *Akhet*, the horizon. This symbol seems to be linked to the moon/bull as the

feminine vessel of the sun/light/son, a symbolism that might have a common Neolithic/Upper Paleolithic root.

9. Wengrow notes that "various inconsistencies have since been identified" in Dreyer's readings (Wengrow 2006: 203). Wengrow then goes on to say that "all that experts generally agree upon to date is that the signs notate prestigious names of some kind, perhaps including gods as well as persons and places; that they probably do not communicate more complex linguistic messages; and that the communicative system to which they belong was a direct precursor of the hieroglyphic writing system, and already made use of the rebus principle" (Wengrow 2006: 203).

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