On the Origins of the Alphabet:
New Evidence

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
SINO-PLATONIC PAPERS
FOUNDED 1986

Editor-in-Chief
VICTOR H. MAIR

Associate Editors
PAULA ROBERTS  MARK SWOFFORD

ISSN
2157-9679 (print)   2157-9687 (online)

SINO-PLATONIC PAPERS is an occasional series dedicated to making 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public the results of research that, because of its unconventional or controversial nature, might otherwise go unpublished.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-in-chief 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.

Although the chief focus of Sino-Platonic Papers is on the intercultural relations of China with other peoples, challenging and creative studies on a wide variety of philological subjects will be entertained. This series is not the place for safe, sober, and stodgy presentations. Sino-Platonic Papers prefers lively work that, while taking reasonable risks to advance the field, capitalizes on brilliant new insights into the development of civilization.

Submissions are regularly sent out to be refereed, and extensive editorial suggestions for revision may be offered.

Sino-Platonic Papers emphasizes substance over form. We do, however, strongly recommend that prospective authors consult our style guidelines at www.sino-platonic.org/stylesheet.doc. Manuscripts should be submitted as electronic files, preferably in Microsoft Word format. You may wish to use our sample document template, available here: www.sino-platonic.org/spp.dot.

Beginning with issue no. 171, Sino-Platonic Papers has been published electronically on the Web at www.sino-platonic.org. Issues 1–170, however, will continue to be sold as paper copies until our stock runs out, after which they too will be made available on the Web.

Please note: When the editor goes on an expedition or research trip, all operations (including filling orders) may temporarily cease for up to three months at a time. In such circumstances, those who wish to purchase various issues of SPP are requested to wait patiently until he returns. If issues are urgently needed while the editor is away, they may be requested through Interlibrary Loan. You should also check our Web site at www.sino-platonic.org, as back issues are regularly rereleased for free as PDF editions.

Sino-Platonic Papers is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 2.5 License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/2.5/ or send a letter to Creative Commons, 543 Howard Street, 5th Floor, San Francisco, California, 94105, USA.
On the Origins of the Alphabet: New Evidence

by

Brian R. Pellar

Boston, Massachusetts

Figure 1. The first two letters of the Phoenician alphabet as the constellation Taurus of the zodiac. Astrological symbol, Phoenician, Hebrew, and Chinese are all rotated 90 degrees counter-clockwise (photo: Sinai inscription 357).

Introduction

Considering the strong possibility that the origin of our alphabet is correlated with the constellations of the zodiac (see “On the Origins of the Alphabet,” Sino-Platonic Papers 196, December 2009), it is interesting that I first learned the alphabet by having to raise my head and look up. That is, I had to turn around in my chair in kindergarten and look up to a spot just beneath the ceiling on the back wall of the classroom. For there on a wide strip of white paper that ran from one side of the room to the other was written the upper and lower case letters of the alphabet. It was there that I first saw the letter “A” and then “B,” etc., in their proper sequence and upper/lower case forms. I now find it quite fascinating that I first learned the alphabet in the same manner that the inventors of the alphabet in Egypt almost 4000 years ago had originally intended — by looking up and reading what was above me.

I’m quite sure that my having to look up to learn the alphabet had no conscious (or subconscious) bearing on my later discovery that the letters of the Phoenician alphabet were
correlated in couplets with the constellations of the zodiac. Rather, it was quite by accident that I chanced upon this remarkable discovery. That is, while researching another topic and looking at a vertical column of Phoenician letters in Andrew Robinson’s *The Story of Writing*, I happened to notice that the first two letters, the first couplet, looked remarkably like a bull. That is, *aleph*, which I knew was literally translated as a “bull’s head,” seemed to naturally join with the next letter, *beth*, which not only had the general shape of a body, but also a tail (see Figure 2).

![Figure 2](image)

*Figure 2.* The first six letters of the Phoenician alphabet in a vertical column. It was in this configuration that I first noticed the first three couplets of the alphabet (adapted from Robinson 1999: 165, 173).

It was then just a simple step to realize that *aleph* and *beth* resembled the constellation Taurus (a small leap considering that I was working with Egyptian material, a great deal of which revolved around Egyptian astro-theology). I can remember being very excited by this discovery, and I quickly put those first six letters together as seen in Figure 2 to form three sequential constellations of the zodiac: Taurus, Aries, and Pisces. I immediately showed my discovery to my father (who had a great interest in both fonts and astronomy), and I distinctly remember his being pleasantly surprised by what I had found and then saying, “That’s great, now solve the rest.” And so I did, with the fruits of that labor seen in my “On the Origins of the Alphabet” (*Sino-Platonic Papers* 196).
However, although the couplets established a solid basis for the alphabet/zodiac connection, some of the couplets in that paper didn’t quite match up with the zodiacs popularly known at that time. Thus, I’m happy to report that I recently came across several old zodiacs that I didn’t know about when I published that first paper. What I found particularly exciting about two of these is that they do not show the typical or traditional fish symbols associated with Pisces, but rather, a long-tailed shaped symbol of Pisces that is exactly as my first paper predicted, based on the shape of the Phoenician, Hebrew, and Ugaritic letters. Also, a couple of the signs for Sagittarius in these newly seen zodiacs look remarkably like their respective letter couplets. Furthermore, and more interestingly, I also discovered a very strong connection between the zodiac’s astrological symbols and the Phoenician letters/couplets. And, lastly, one of the Pisces signs from one of the zodiacs I recently found, coupled with a new shape for Gemini, shows an even stronger correlation to the mathematical constant $\pi$ to which my first paper alluded.

**Evidence**

In the Corneto and Rapallo zodiacs that I recently chanced upon, instead of showing Pisces as a fish, these two particular zodiacs show Pisces with a long tail/spear aspect exactly as I depict the couplet of $he$ and $waw$ (See Figures 3 and 4).

![Figure 3](image.jpg)  
*Figure 3.* Twelve signs of the zodiac found on a decorative mural in the necropolis of Corneto, Italy. From left to right are: Aquarius, Capricorn, Sagittarius, Scorpio, Libra, Virgo (center), Leo, Cancer, Gemini, Taurus, Aries, and Pisces (image from Serres 2010: 44).
In Figure 3, the form of Pisces not only resembles the Phoenician letters *he* and *waw*, but more interestingly, it has a stronger resemblance to modern Hebrew letters, which were derived from Phoenician by way of Aramaic. In Figure 5b, note the exact correlation of the linear part of Pisces to the Hebrew letter Waw. The resemblance is striking, and I always felt that it was just a matter of time before someone uncovered a zodiac that depicted Pisces exactly in this manner (Based on this new evidence, plus evidence that I will discuss shortly, I’ve updated the figures/charts shown in my first paper, SSP 196. Please see Figures 5a, 5b, and 5c).
Figure 5a. The letter couplets as seen in a vertical column, which was how I first noticed them; this view does not require the viewer to rotate the letters to see the couplets. Note that a letter with an “X” in it denotes the solstice. Also, the reason the couplets might be arranged in this particular manner might have to do with how they are seen as they enter the horizon in the west (that is, vertically). It is at their zenith in the southern sky that they are rotated 90 degrees counter-clockwise.
Figure 5b. Taurus, Aries, Pisces, Gemini, Cancer, and Leo as letters of the alphabet.
Figure 5c. Virgo, Libra, Scorpio, Sagittarius, and Capricorn as letters of the alphabet.

This unique shape of Pisces in the Corneto zodiac also mirrors exactly the form that the ancient Mesopotamians and Egyptians used for Pisces. See Figure 6.
Figure 6. (A) Mesopotamian Cylinder Seal. Aquarius as the God boat on the right. Then moving left, Pisces, Aries (note how this form mirrors not only the shape of the Phoenician letter Gimmel, but it also mirrors the exact shape of the constellation, with its distinctive bend seen at the figure’s elbow), and Taurus with a vessel on its back indicating the vernal equinox (Image taken from Santillana 1969: 301). (B) Senemut celestial diagram. Aquarius on the right in the form of a boat, and then, moving left, Pisces, Aries (which was the vernal equinox at the time, which is why it is shown as a complete figure), and the back half of Taurus (with the seven stars of the Pleiades) in the shape of the letter beth.

The discovery of the particular form of Pisces seen in the Corneto Zodiac now lends credence to the idea that both the Mesopotamian Cylinder Seal and the Senemut celestial diagram, seen above in Figure 6, represent zodiac signs (as discussed in SSP 196). So, clearly, there is another form for Pisces, other than the traditional fish. But more importantly, this other, rarer form provided the blueprint for the Phoenician letter couplets of He and Waw.

Another important feature of the Coreneto zodiac is the form of Sagittarius. Note that it not only depicts an arrow, but also a curved bow, which differs from the normal archer/half-human/half-horse centaur figure as seen in the Dendera Zodiac and later zodiacs. This focus on just the bow/arrow is exactly what the Phoenician couplet of Qoph/Resh indicates. Furthermore, this bow forms half of a circle and resembles quite nicely not only the modern Hebrew “Q”
(Qoph), but also the earlier Hieratic uniconsonant “Q” (as seen in Figure 3, SSP 196). Two other zodiacs that I recently chanced upon also show Sagittarius as a single arrow/bow. See Figure 7.

Figure 7. (A) Zodiac from Egypt (image from Serres [2010: 71], who writes that this particular zodiac is from the “muse du Caire” and is quite old). Signs read from the bottom to top: Aquarius, Capricorn, Sagittarius, Scorpio, Libra, Virgo, Leo, Cancer, Gemini, Taurus, Aries, and Pisces. (B) Zodiac from Serabit el-Khadim, Egypt (image from Serres [2010: 69], who writes that this particular zodiac is from “grotte 23”). Signs read from left to right in a sequence similar to Figure 6: Aquarius, Capricorn, Sagittarius, Scorpio, Libra, Virgo, Leo, Cancer, Gemini, Taurus, Aries, and Pisces.

It is also interesting to note that when one rotates the astrological symbols of the zodiac as one does the Phoenician letters, the forms of these symbols resemble the couplets very closely. For instance, the symbol for Leo seems at first a bit abstract for the constellation to be seen as a lion. But when one rotates the symbol ninety degrees, as seen in Figure 5b, it not only gives a shape that resembles the overall form of Leo, but it quite nicely resembles the Corneto sign of
Leo (which shows the tail of the lion curled around its body like the sphinx). It also looks very much like the Hebrew “lamed,” which is part of the Leo couplet.

Also, and even more interesting, is the astrological symbol for Virgo. When one rotates it, as seen in Figure 5c, it not only correlates to the “M” shape of the Phoenician letter “Mem,” but it is also clearly seen in the upraised legs of Virgo in the Chinese lunar zodiac. However, the most interesting correlation is with Scorpio; I hadn’t noticed an “M” shape in the couplet till just recently. But once I rotated the astrological sign for it (see Figure 5c), I then immediately noticed the large “M” that makes up its claws in the Phoenician couplet. The letter with this “M” in it is “tsade.” The stinger also curves in the same shape/direction as the Phoenician letter Pe. Even when one looks to the old character for the Chinese Branch for sheep (see Scorpio in Figure 5c), it has the same “m” shape to its form (its claws). Even the circular shape to Libra (fall equinoctial sun. See Figure 5c) resembles quite closely the circular letter “ayin” that is also prominently seen in the sign for Libra in the Dendera zodiac (both long and circular).

Thus these astrological symbols just might help prove a correlation between the Phoenician letters and the zodiac. For instance, both Virgo and Scorpio are in the shape of the letter “M,” which is “mem,” but why? There appears to be much speculation as to their origin, which goes back to medieval Byzantine manuscripts that contained ancient horoscopes. But why was the letter “M” chosen for Virgo? It seems more than a coincidence that it matches perfectly with the Phoenician letter couplet of Virgo (mem/nun). Furthermore, I soon realized that the astrological symbol for Virgo has another surprise. Not only is it composed of the letter M (mem, which makes up the Proto-Indo-European root “ma” — “mother”), but it also has the Phoenician symbol for fish attached to it (Liungman 1991:38). What’s particularly interesting about the fish is that the Phoenician letter nun also means “fish.” Thus you have in the astrological symbol couplet for Virgo the letter M and the symbol for the letter N, and in the Phoenician letter couplet you have again the letters mem and nun, which symbolize and make up the form of Virgo. These two couplets correlate perfectly. Whoever designed the astrological symbol for Virgo understood the connection to the alphabet, but hid the second letter “nun” as a fish so that it wouldn’t be that obvious (and rotated it just like the letters of the alphabet). This all seems more than a coincidence.
Furthermore, the letter nun also means snake in Aramaic (“nun”) and in Arabic (“nun”), with the word for snake being “nachash” in Hebrew. I feel it’s also not a coincidence that the Chinese calendar sign for Virgo is Snake! But more interesting still, this letter “n” came out of Egypt, and the goddess that symbolizes Virgo is Nut, whose name begins with “n,” and whose body is divided in half (like the Phoenician letters/bull/Draco — the latter of which is a dragon/snake) by the spear of Anu (see SPP 219). Virgo, as I show in SPP 219, is really just an extension of the great bull (Draco and Ursa Major) in the northern sky (which was the goddess as both a bull and a snake. As discussed, Draco was also seen in the form of a snake/serpent).¹

What’s also interesting is that the fish, Nun, is the head of Virgo. As the head is symbolic of the seed/son/sun/logos (see SPP 219), I’m sure the inventors of the alphabet switched it to a fish symbol for the age of Pisces (before that, it was a bull’s head during the age of Taurus, and a ram’s head during the age of Aries. Furthermore, the Chinese word for woman is “nu” — like nun/nut — and if the oracle bone character is rotated, like the letters/symbols, it shows a woman lying prone with a bull’s head, exactly like Virgo. See SPP 196). The bull’s leg/chisel/spear of He/Waw wouldn’t seem to work as well as the fish does. Thus the Corneto and Roman amulet zodiacs that I just found might represent transitional signs — a missing link between the two (Pisces as a chisel/leg, etc., in the Egyptian star charts/alphabet and as a fish for the new Age of Pisces).

It also seems clear that you have to rotate the astrological symbols to get the actual shape of the constellation in the same way that you have to rotate the Phoenician letters to get the shape of their respective constellations. A great example of this is not only Gemini, but Capricorn. See Figure 8.
Figure 8. (A) Early-nineteenth-century depiction of Capricorn. (B) Astrological symbol for Capricorn rotated 90 degrees. (C) Astrological symbol for Capricorn rotated 90 degrees and flipped vertically. (D) Modern “interpretation” of constellation of Capricorn. It is clear that the astrological symbol is based on the shape of the constellation itself, and thus, like the Phoenician letters sin/taw, needs to be rotated.

Figure 8 shows an early-nineteenth-century depiction of Capricorn that matches the astrological symbol exactly — complete with circular tail and front foot that bends slightly at the bottom (or top horn if flipped vertically). But the only way to really see this is by rotating the symbol.

Aside from the shape, another important feature of the new Pisces symbol I recently chanced upon in the Roman Amulet is the long tail in waw that leads the eye to the center of the amulet in a spiral and then points back up towards Gemini. This same tail movement towards the center of the zodiac might also be seen in the Corneto zodiac as well (thanks to the keen eye of Professor Mair), as the tail extends beyond the line that frames all the other signs and seems to point towards the center of the mural. As the image doesn’t show all of the painting, there is no way to know if the line actually extends towards the center, but it certainly seems plausible, as it does extend/point (like the Roman Amulet Pisces) in a way that the others don’t. This movement from Pisces to Gemini seems to indicate that small loop I found in the alphabet/zodiac (see SSP, 196): That is, from Taurus to Aries to Pisces, with an abrupt shift back to Gemini. In terms of letters/numbers, this small loop goes from Aleph/letter 1 to Zayin/letter 7, which again suggests a relationship to $\pi$ (22 total Phoenician letters divided at letter 7/Zayin. $22/7 = 3.14$. Furthermore,
as has already been alluded to, the three constellations that make up this small alphabetic loop on the ecliptic are merely a reflection of three key constellations in the circumpolar region of the northern sky — the division/opening of the Great Bull by the spear/equinox of Anu to release the sun/son. See SPP 219/Part One, n. 1, and forthcoming Part Two). See Figure 9 for not only an example of the two alphabetic loops, but also for the letters reversing direction at the solstices (see SSP 196). I explain that wherever there is a Phoenician letter couplet with an “X” in it, which just happens to be a couplet that is either the summer or winter solstice, the letters, like the sun on the horizon, then reverse direction. This seems quite complex, logical, and intentional on the part of the inventors of the alphabet and more than mere coincidence.
Figure 9. The astro-alphabet with its distinct two loops that suggest a relationship to the mathematical constant $\pi$ (22 letters divided at letter 7/Zayin = 3.14…). Note that when a letter couplet contains an “X,” which indicates a solstice, the letters reverse, just as the sun reverses on the horizon.

In comparing Figure 5a with Figure 9, it seems that the reason the Phoenician letters are seen normally in a vertical column might be due to the way the constellations are seen as they enter the western horizon. That is, as letters from above, they are sown, so to speak, as the seed/logos, into the earth/horizon/vessel of the goddess in the same way that a scribe sows the
letters onto a papyrus. It is only when the constellations are at their zenith (what I call the “Primal Pattern”; see SPP 219), that the letters are seen to be rotated counter-clockwise 90 degrees. In fact, all of the couplets are seen exactly as they are when entering the western horizon (that is, vertically), except Gemini and Capricorn. These two contain zaiyin and taw, which are letters 7 and 22, which again, indicate pi. Furthermore, due to the two loops that are formed to indicate pi, these two are exceptions; that is, if the constellations all followed in normal sequence, they would appear in a vertical column exactly as they would be seen as they entered the western horizon.

Another interesting aspect of those zodiacs I recently noticed is that Gemini is shown not as twins or as a candle in three of the four zodiacs (Figures 4, 7a, and 7b), but, rather, it is shown as a circle that is divided by a line, which again indicates pi (pi is a circle divided by its diameter). The Egyptian zodiacs in Figure 7a and 7b show Gemini as a circle (grain?) divided by a line, which, once again, seems more than a coincidence. Based on the evidence that I gathered so far, it looks like pi was built into some of the Egyptian’s astro-theology.2

Also, the symbol of Gemini in the shape of a circle with a line through it in Figures 7a and 7b not only might show an earlier stage of the square with a line (the Phoenician letter heth ☢ as part of Gemini, which in turn, correlated with the Gemini candle glyphs/hieroglyphics that made up such words as “the great door of heaven,” “the door of sunrise,” “house of Horace,” “palace of the god,” etc.; see SPP 196), but they also show a strong link to the Egyptian Hieroglyph P ☢ (which is used to form words such as per-em-nub/“gold house” — i.e., sarcophagus chamber; peru-heru/“houses above” — i.e., celestial mansions; pai/“flame, fire, spark”; papa and pestch/“to shine, to illumine”; pest-ti/“ray of light”; petr/“wick of a lamp”)3 and to the Chinese character for sun, ri ☢. In terms of the latter, ri ☢ evolved from a circular shape with a small line in it as an oracle bone ☐, to a rounded rectangle with a line through it as a Seal script character ☢, to the rectangle with a line through it in the modern character for sun ☢ (which looks like the Phoenician Heth ☢, but Wei also noted that the Phoenician/Hebrew letter heth is “similar to the Chinese OB glyphs ☢, ☢, which are the original forms of the word hu (*ga?) ☢, meaning ‘door,’ ‘gate,’ ‘house.’” She also links heth/geng to the Sumerian glyphs ☢, ☢ (gan), meaning “enclosure”; see SPP 196 and Wei 1999: 26-27).
Lastly, it is worth noting that the zodiac found at Serabit El-Khadim (Figure 7b), is interesting in that this zodiac was found at a location to which the origins of proto-alphabetic letters have been traced. That is, at the spot at which researchers have found some of the earliest alphabetic letters, they also found a zodiac, which could help demonstrate that the two are connected.

Conclusion
It seems clear that the ancients looked to the skies in a way that we will never quite understand today. That is, not only did our ancestors for hundreds of thousands of years look to the sky as their physical and spiritual roof (because they perceived themselves as being literally nested and protected within the womb/vessel/heavenly sphere of the great goddess), but some also looked to the celestial vault as a requisite site of return — that is, as their final resting place. The night sky was seen as a blackboard on which the gods first chose to illustrate and illuminate their wisdom and the creation of all things past, present, and future via patterns of light that formed pictures, letters, or words (Logos). The earth to them was merely a reflection of what was patterned/written above. Today, we seem to be so preoccupied with looking forward and downward, so that our blank white ceilings and light-stained midnights are merely a ghostly reflection of what was once the sacred liturgy of the gods, that we scarcely can find the time to even glance up at the sublime Milky Way, our celestial home. I’m reminded of a trip I once took to New York City, where my friend, noticing my preoccupation with looking up at the wonderful architecture that framed the blue sky, remarked that typical New Yorkers, so intent upon going from point A to point B, hardly ever had the time or inclination to focus their gaze upward.

Thus, looking back, I consider myself quite lucky that I not only had the good fortune to have first learned to recognize, say, and write the letters of the alphabet by peering up in my kindergarten class, but I also had the good fortune of understanding, just a bit more, the origin of those very letters. Toward this latter aim, I offer this paper as a small step.
Acknowledgments

I would like to thank Scott Carhart, William Caldarelli, Ronald Pellar, and Victor Mair for their generous support and suggestions.

Notes

1 For a discussion of the idea that the constellations of the zodiac are an extension of constellations in the northern sky, see SPP 219 (Part One) and forthcoming Part Two, which will discuss Taurus, Aries, and Pisces as being extensions of the circumpolar group of Ursa Major (Great Bull), Ursa Minor (son/sun), and Bootes/the equinox (the spear of Anu) respectively.

2 It appears that to the Egyptians π was more than just a number: It seems to symbolize the divine aspect of the doorway/gateway into the Duat or Divinity itself. For instance, Schwaller de Lubicz studied several doorways in Egypt and found that some of them showed a definite relationship to π. See Figure 10.

Figure 10. Egyptian doorway that demonstrates a relationship to π as worked out by Schwaller De Lubicz (image from West 1993:19). The height of the inner doorway is π. It is this inner space, the door/gateway itself, that appears to be
the most important element. Also note that the width of the whole door is 22 units, which is a number that keeps appearing in relation to $\pi$.

In Figure 10, Schwaller De Lubicz showed a clear relationship to $\pi$ in the doorway. That is: the inner width of the door is exactly 10 units wide (2 squares of 5 units), while the inner height is 31.4 units (6 units x 5 squares + 1.4 units). Thus, 31.4 divided by 10 equals 3.14, a number/proportion of this important opening that seems beyond coincidence ($\pi = 3.14$). Furthermore, I also noticed that there is also a relationship to $\pi$ in the height of the outer door. That is, the outerdoor is 44 units high and the inner door is 31.4 units high. If you subtract, this leaves a remainder of 12.6 (44 – 31.4 = 12.6). 12.6 is exactly 4 times $\pi$ (4.00). Thus, the Egyptians also made the height of the outer door exactly 4 times $\pi$ higher than the inner. Also, I noticed that the total width of the door is exactly 22 units, a number that keeps surfacing in relation to $\pi$ (this ratio of 22/7 is found not only in the alphabet and the seven sacred vowels, which will be discussed shortly, but it is also found in the construction of the Great Pyramid — the ratio of its perimeter to its height that corresponds to 22/7. Also, for another interesting correlation with 22, see SPP 196, endnote 7, where I discuss the 22 nomes of Egypt correlating with the zodiac).

As discussed in SSP 196, the shape of the Gemini gate/candle (the Phoenician letter couplet Zayin/Heth), which resembles the shape of the above door, is not only related to the Hieroglyphic symbol for “Gateway,” “Great Door of Heaven,” etc., but also the shape of the temple itself (see n. 3). Simmilarly, as noted in Figure 15 in SSP 196, the Gemini Gate/Flame that is cleverly disguised as the entrance into the Duat is in the form of a circle created by the body of the god Osiris (thus the candle image of Gemini seen in the celestial diagrams is still relevant, as the flame is seen as a circle, with the sun itself being the ultimate circle as fire/gate. This latter aspect is discussed in more detail in both SPP 196 and SPP 219). Also, note that, shown in Figure 7a, Cancer is in the form of the Egyptian God Khepri, who symbolizes the morning sun, or the birth of the sun from the horizon/Nut. Thus, not only does the circle of Gemini as a flame/gate fit quite nicely just above Khepri as Cancer (that is, as being the sun disc that Khepri is holding), but it also symbolizes the birth of the sun (from the celestial horizon/ecliptic) in the center of the Milky Way between Gemini and Taurus, exactly as Santillana and Descend postulate (see SPP 196 and Santillana and Von Dechend 1998:245). Furthermore, as this image depicts the 12th hour (Book of Gates), then considering the interesting fact that the twelfth hour exactly divides the circle of the day, this division/gate at Gemini once again alludes to $\pi$ (a circle divided by its diameter). This idea of a circle being divided by its diameter ($\pi$) is further reinforced in the Pisces symbol in the Roman Amulet (Figure 4), which not only points up towards Gemini, but also points up toward the line that bisects the circle that makes up Gemini (again, indicating the division of the circle by a line).

Furthermore, as Taurus/Aries/Pisces are really just extensions of constellations in the circumpolar region (see n. 1), it appears that Anu/Pisces symbolize the spear/equinox that opens/divides the sphere/vessel of the goddess/bull at the gate of Gemini (the site of the vernal equinox in the center of the Milky Way between Gemini and Taurus in 4320 BC. See SPP 196 and SPP 219). This division of the sphere/vessel once again alludes to the
division of a circle by its diameter — $pi$.

It appears that $pi$ has played a much more significant role in Egypt than previously thought. It is well known that the ancients knew $pi$. Direct evidence of it is seen in Babylon in 1900 BC and in Egypt in the Rhind Papyrus in 1650 BC. There is as well indirect evidence of it, seen in the work of numerous Greeks, including Pythagorus and Plato, who studied in Egypt with the very secretive Egyptian priests. As mentioned in SPP 196 (in endnote number 2), the Nag Hammadi text, *The Gospel of the Egyptians*, shows a strong connection between the sacred invisible vowel/logos and $pi$ (i.e., the “three powers” giving rise to seven sacred vowels, which are repeated exactly 22 times each — thus, the elements of $pi$: 22,7, 3), which implies a possible connection to the alphabet (with its own reference to $pi$) that forms the vessel, so to speak, for those sacred vowels (I am not alone in noticing a correlation between the 22 Phoenician letters and the 22 Chinese calendar signs that make up the Chinese Sexagenary Cycle: others, such as Gordon, Moran, and Mair, have also noticed this connection as well. See SPP 196). That is, just as the body/vessel of Osiris and the wheat/seed must be cut/divided/ground up to release the son/sun/Horace/seed that rises as bread/nourishment in the heat of the oven, so too must the vowel be cut up (divided, like the circle) by the mouth to release the word/Logos/seed/sun that rises in understanding/wisdom like the rays of the sun/son/Horace.

Aside from the words just mentioned, the Egyptian Hieroglyph “P” $\Box$, which I correlate to the constellation Gemini (see SPP 196), not only forms the later word $pi$ itself (of which the Gemini Gate is the symbol/form of that opening/division as discussed earlier and in SPP 196), but it is also the root of many words in Egyptian that one might expect to contain references to the mystical qualities of $pi$: that is, one should see words that begin with “P” that relate to the opening of the Gemini Flame/Gate of Heaven and fire/sun and division (of a circle/circuit or matter, etc.) and giving birth or the giving forth of something (as a result of that opening/division), etc. A cursory glance at Egyptian words beginning with “P” indeed shows some interesting links: Pet (sky, heaven); Papa (to bring forth, to bear, to give birth to); Pi/Pit (heaven); Pefes/Pens (to boil or roast); Pensa (to cut off); Penq (to pour out, to empty a vessel); Per/Perit (house, palace); Per (to go out, to go forth, to be born, to arise from, to empty itself, etc.); per (what comes forth from the mouth — word, speech); Pert (exit, issue, what comes forth, manifestation, outbreak of fire); Per (to rise — of the sun); Per (spendor, to shine); Pert (grain, corn, wheat, etc.); Peh (to arrive at the end of a journey, to attain to a place or object, to reach); Pekh/Pekha (to split, to divide); Pekhar/Pekharr/Pekhar-Pekhar/Pekhart (to revolve, to go round about, to encircle, to make a circuit); Pekharit (revolution of time, the course of time, circle, the rolling year, “a circle is life”); Pekharu (course of time, revolution of the sun); Pekhar ur shen ur (Great Bend of the Great Circuit); Pekhes (to split); Peshi (to boil, to roast, to cook); Pesesh (to cleave, to split, to slit, to divide, to divide with, to share or participate with someone, to open the legs or arms, to distribute); Pesshet (ration, allowance, share, division, etc., the half of anything, the two halves, the two portions, divisions, borders, boundaries); Pesesh-kef (the name of the principle instrument used in the ceremony of Opening the Mouth); Pesht (to divide, to split, to cut, to separate, to distribute, to share); Peshti (the two halves of heaven, the South and the North); Peshsh
(to spread out the legs, to spread out the arms, to divide); Peshen (to cleave, to divide, to split, to separate from); Pesher (to revolve, to make a circuit, to turn the face round); Peshert (a circuit); Peshes (to divide, to cleave, to split); Pega (to divide, to cleave, to open, to open the arms and legs, etc.); Peg (to unfold, to explain); Pet (to break open); Pet/Pteh (the creator god Ptah, architect of heaven and earth); Pteh (to open, to engrave); Pet (to open out, to spread out); Ptsu (opener, breaker, destroyer).

4 A similar idea is found in the older Egyptian zodiac (Figure 7a). As this might be from the age of Taurus (as Serres reports in his book), one might expect to find it beginning with Taurus, but instead it starts with Pisces and ends with Aquarius. This again is evidence for the idea I present in SPP 196 that the Egyptians thought that the “First Time” (Tep Zepi), was when the sun was first born from the Gemini Gate. More specifically, this was when the Vernal Equinox was between Gemini and Taurus (4320 BC), the Summer Solstice between Virgo/Leo, the fall equinox between Sagittarius/Scorpio, and the winter solstice between Pisces/Aquarius. The latter was the “birth of light,” which is where the start of that zodiac is shown (in fact, all four of them). Interesting, in the Roman zodiac (Figure 4), all of those “First Time” zodiac pairs are shown actually linked/carved together as though they are one unit. The only pair not shown linked is the fall equinox (Sagittarius/Scorpio). In fact, the way the Roman/Corneto zodiacs are shown, they appear to be made up of two distinct parts just like the letter pairs I show.
References


Since June 2006, all new issues of *Sino-Platonic Papers* have been published electronically on the Web and are accessible to readers at no charge. Back issues are also being released periodically in e-editions, also free.

For a complete catalog of *Sino-Platonic Papers*, with links to free issues, visit the *SPP* Web site.

www.sino-platonic.org