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Cosmological Patterns in Ancient Egypt and China: The Way to Unify the Universe through Knowledge, Mind, Energy, and the Beneficence of the Elements

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Abstract: Ancient Egypt and China share a realist process metaphysics related to human afterlife transformation. Veiling this transformative biophysics from the general population, the Egyptian pharaonic priesthood and the Chinese sages aimed to unify the universe via a transformation to cosmic mind or energy. To understand their process of change based on knowledge and observer-participancy, this research is a preliminary investigation into both cultures' similar use of psychic transformative signs (mountain, hybrid, gate) often found in religion, myth and literature. Grounded in the semiotics of C. S. Peirce and as part of a continuing inductive argument, testing predictions based on a thesis on the meaning of Ancient Egyptian texts, this paper examines the pharaonic path to universality profiled in ancient Egyptian texts, while showing that the ancient Chinese 'Way' is remarkably similar. In an attempt to approximately verify natural law via induction, this semiotic approach supports that, should we understand the classical action of signs as a holographic veil of the molecular world, a lawful biophysical system for the evolution to universal mind would be accessible to human reason. Depending on observer-participancy, a central feature of the quantum world, both Egyptian and Chinese texts reinforce that the mind acts as the cosmic unifying force. Mind may be the missing element related to 21st Century Physics' search for its 'Holy Grail,' a theory of quantum gravity to shed light on the Big Bang, microscopic black hole spacetime, and the unification of the four forces. To explore these ideas, this paper will examine biophysical survival messages preserved in Ancient Egyptian texts that are mirrored in the Chinese Li Ki, the stele inscriptions of Ch'in Shih-Huang, and other texts.

Keywords: Ancient Egypt, Ancient China, Knowledge and Mind, Process Metaphysics, Semiotics of Evolvability, Chinese Way to Heaven

MATHEMATICIAN RENÉ THOM claims that a realist metaphysics can give back meaning to our world (1990, 220). A realist metaphysics presupposes that universals exist relative to the nature of reality and existence as a whole. Although many scientists believe that external reality exists independent of observation, quantum experiments with entangled pairs of particles are rendering local realistic theories untenable (Gröblacher et al. 2007). Put simply, our classical world is a quantum phenomenon (Ball 2008) and a projected shadow in the quantum (Schlosshauer 2008, 39); yet, at this moment, both the shadow and the quantum comprise the whole.

To verify natural law by induction and explain the realist metaphysics of ancient Egypt and China, this semiotic approach supports that, should we understand the classical action of signs as a holographic veil of the molecular world, a lawful biophysical system for the evolution to universal mind would be accessible to human reason. A substantial amount of evidence exists for scientific claims (Bohm, Pribram, Maldacena, 't Hooft, Susskind) that our cosmos has a holographic mode of operation. Also, new evidence suggests that the

holographic principle can be applied to entangled states (Davies 2007, 13; Cramer and Eisert 2006), while String Theory T-Duality mathematics suggests that at Planck-length scales, the cosmos looks just the same as it does at large scales (Duff 2003, 15). Yet, complex systems can generate simple outcomes.

According to physicist John Wheeler, the act of observer-participancy activates a quantum-mechanical probability amplitude (wave height) and ‘develops definiteness out of indeterminism,’ (1988, 4-5). Against our assumptions of objectivity, change and intervention, a measurement allows a proposition that was neither true nor false to become true (Bub 2006, 86). For example, Sarah Allan argues that complex Shang¹ divination was not an attempt to foretell the future, but an attempt to control it through ritual sacrifice. She argues that the Shang kings envisioned the turtle as a model of the cosmos, using it for divination by applying a red-hot poker to crack the turtle shell or the bone of a water ox, signifying an attempt to replicate the forces of nature. Allan states, ‘The vast majority of divination inscriptions include only a charge or proposition’ with the statement standing for ‘the intended act; the shell or bone, for the cosmos . . . A statement about what would happen was made in order to elicit a response.’ (1991, 112-121) Universality, a regularity of pattern over different scales, is seen in the formation and propagation of cracks and tears in various materials. Thus, Shang divination functions as an act of observer-participancy to control the forces of nature, as supported by the concept of universality, a natural law about different systems (turtle shell and cosmos) behaving identically at the point of transition between order and chaos to yield the intended act.

Quantum mechanics allows a measurement, an observation, a choice due to entanglement (Scully 2007, 144; Greene 2004, 199). As Brian Greene explains about Wheeler’s delayed choice experiment, ‘It’s as if a consistent and definite history becomes manifest only after the future to which it leads has been fully settled’ (2004, 189). Entanglement, which also can occur in macroscopic systems (Vedral 2008, 1004), is essential to quantum information processing. Because of quantum entanglement, objects can become linked and instantaneously influence one another regardless of distance, and recent evidence suggests that this quantum phenomenon might work ‘beyond the grave, with its effects felt after the link between objects is broken’ (Choi 2009; Tan et al. 2008).

Huai-nan Tzu, an early Chinese text submitted to the Han court in 139 BCE by Liu An, provides a cosmogony of the self-generating Chinese cosmos from formlessness to form, explaining the relationship of *kan-ying*, that is, everything is linked and interacting with everything else, and an action in one part of the universe will spontaneously stimulate a response in another part. (Puett 2005, 83) As a thought experiment, assume that the Chinese sages and the ancient Egyptian pharaonic priesthood had a 50-50 or yes-no chance of realizing an afterlife immortal option, what might be referred to as a choice between two quantum paths—becoming a cosmic biophoton² (immortality) or becoming a hot lump of planetary

¹ For general reference, the chronology of dynasties is: Shang (1766 – 1123 BCE); Chou (1122 – 222 BCE); Ch’in (221 – 207 BCE); and Han (206 – 220 CE). The Chou era is further divided into Western Chou (1122 – 771 BCE), Eastern Chou (770 – 222 BCE); Ch’un-ch’iu Period (770 – 471 BCE); and Warring States Period (470 – 222 BCE) (Barnard 1972).

² Energy can be discarded in two ways, photosynthesis or chemiluminescence, the chemical reaction that dominates the cosmos. Whereas photosynthesis produces both light and heat, chemiluminescence produces light without heat or cold light energy. The biophoton is often described as *low-level biological chemiluminescence*. It is a photon of light emitted from a biological system such as a cell. A photon is an elementary particle with both wave and particle

matter (suicide). Because of entanglement and the pure yes-no character of the quantum, the ‘yes’ probability for immortality could be improved to 100% by a choice based on knowledge of a path for quantum immortality. This realist metaphysics based on observer-participancy is present in the quantum mindset of both the pharaonic priesthood, who address their afterlife as a quantum phenomenon allowing the growth or evolution of mind to cosmic energy and the unification of the cosmos (King 2004; 2005; 2006), and the Chinese sages, who also desire the same simple outcome based on knowledge of a transformation path to energy.³

Charles S. Peirce describes a logical theory for dealing with ancient testimonies, beginning with an hypothesis or abduction to be tested, followed by deduction and induction (EP 2.75-113). This paper is part of a continuing inductive (King 2005; 2006; 2007a; 2007b; 2008; 2008a) and deductive (2007) argument, testing predictions based on a thesis (2004) that the semiotic phenomenology of the pharaonic priesthood harbors an eschatological survival message for humans related to cosmic growth of mind as energy, viz., DNA exchange between two different species or horizontal gene transfer (HGT) and lytic replication (cloning) mediated by an ancient virus called bacteriophage Lambda. The Egyptian texts support this complex bacterial virus operates as the world-heart of our cosmos. Due to a competition between two of its proteins, two different DNA texts are generated, producing matter governed by photosynthesis versus its reversal chemiluminescence, the cosmic key for evolution of mind-energy and continuity. (King 2004)⁴ In ancient Egyptian texts, psychic transformative signs include the sphere, stairway, mountain, eye, spiral, circle with its axis as a gate, and the hybrid. These forms are also present in early Chinese literature, art and ritual, suggesting that these signs indicate the same transformation process to mind-energy in both early cultures.

To survive, the human retina correlates the active information of form as a sign for energy renewal.⁵ If form represents information (Thom 1975, 127), then the correlative forms found

properties, momentum, and polarization that follows the laws of quantum mechanics. As a carrier of electromagnetic radiation, the photon can travel in a vacuum at the speed of light. Photons exhibit wave-like phenomena such as refraction by a lens and destructive interference when reflected waves cancel each other out.

³ As in ancient Egypt, knowledge in ancient China was secreted from the commoners. Brashier writes, ‘The classics explicitly demarcate between the sage who understands cosmological patterns and the benighted masses who only believe in hungry ghosts and spirits; the sage in fact invented ghosts and spirits so that the masses would obey.’ (2005, 275) Further, the Chinese literati recorded and historicized ancient Chinese myth in extant texts (Allan 1991, 20), reifying mythic signs or deities into real historical figures.

⁴ In short, Egyptian deities can be interpreted as signs for viral and bacterial genes and proteins undergoing the process of Lambda lytic replication (cloning) in the nonlocal quantum domain. On the quantum process level of DNA transcription, the texts depict and describe proteins binding, folding and tunneling in funneled energy landscapes, using modern terms and images that describe black hole/white hole formation/evaporation processes. Thus, they translate a DNA wormhole into a quantum mechanical Einstein-Rosen bridge back to the Early Universe, a process converting matter to energy. Although the thesis is aesthetically unappealing because it supports a recombination of human and viral DNA, it is compatible with New Science evidence on human genome sequencing, showing humans descended from virus—our distant ancestors, and HGT is possible with our eukaryotic cell-type. This suggests that HGT may be possible at human death because DNA degrades into tiny fragments that can survive and be transported by a gene vector such as the very abundant bacteriophage Lambda. The thesis is also reinforced by natural law, for physicists know that quantum mechanical equations resemble those of the kinetic theory of molecules (Musser 2004, 89), and Wolynes argues that ‘while the relationship between symmetry, stability, and dynamics is different for biological physics than for the subatomic world, there are deep similarities’ (1996).

⁵ Karl Pribram’s holonomic theory (for the example of vision) summarizes evidence that the retinal image is transformed to a holographic or spectral domain. The concept of spectral domain includes the idea that colors, tones, and all exteroceptive sensations, including those dependent on spatiotemporal configurations, that is, shapes of surfaces and forms, can be analyzed into their component frequencies of oscillation (1991, 28). According to Pribram, the spectral (energy) domain is the Fourier transform of spacetime (configural). In other words, the input

in ancient Egyptian and Chinese literature, art, and ritual may provide an information-theoretic guide, showing humans how to recognize ‘food’ or energy for quantum transformation and survival after life. This paper’s objective is to clarify the meaning of form and the value of function in ancient Egyptian and Chinese geometric intuition, while comparing their paths for growth of mind in the cosmos that depend on knowledge, observer-participancy, and transformed mind acting as the cosmic unifying force for wholeness. To explore these ideas, this paper examines biophysical survival messages preserved in Ancient Egyptian texts that are mirrored in Chinese texts such as the *Lî Kî* and the stele inscriptions of Ch’in Shih-Huang.

Final Belief

First written down circa 200 BCE, the *Lî Kî* is a compilation of texts, describing Chinese religious practices from the eighth to the fifth century BCE. Consulting the *Shwo Wan*, the oldest Chinese dictionary, James Legge defines *Lî* as ‘a step or act; that whereby we serve spiritual beings and obtain happiness’ and the character *Kî* as the symbol for ‘the recording of things one by one,’ which is often exchanged for another *Kî*, the symbol for ‘a packet of cocoons,’ the compound denoting the unwinding and arrangement of the threads’. (1885) The title’s meaning supports creative observer-participancy for a choice based on final belief.

In the *Lî Kî*, the Chinese quantum perspective comparable to the Egyptian ‘regions of the dwarfs’ is evident in Book 28 *Kung Yung* (1885, Section I, 47): ‘Such is the manifestness of what is minute.’ Further, the Chinese holographic view is described in Section II, 35:

There now is this heaven; it is only this bright shining spot, but when viewed in its inexhaustible extent, the sun, moon, stars, and constellations of the zodiac are suspended in it, and all things are overspread by it. There is this earth; it is only a handful of soil, but when regarded in its breadth and thickness, it sustains mountains like the *Hwâ* and the *Yo*, without feeling the weight, and contains the rivers and seas without their leaking away. There is this mountain; it looks only the size of a stone, but when contemplated in all its altitude the grass and trees are produced on it, birds and beasts dwell on it, and the precious things which men treasure up are found in it.

According to Legge in his introduction to the *Lî Kî*, the title of the *Kung Yung* is not easy to translate, but in 1861, he called it ‘The Doctrine of the Mean,’ finally translating the title to ‘The State of Equilibrium and Harmony.’ Similarly, Ezra Pound’s nonliteral interpretation of the title is ‘The Unwobbling Pivot’, which relates to the idea of a gate in a revolving wheel of force. In Part I, Pound translates, ‘That axis in the center is the great root of the universe; that harmony is the universe’s outspread process [of existence]’ (1947, 103). In Part II, Pound translates the following aphorism by Confucius, adding an italicized commentary:

Chung Ni (Confucius) said: The master man finds the center and does not waver; the mean man runs counter to the circulation about the invariable.

to and the output from a lens performs a Fourier transform. Our familiar spacetime lies on one side of the transform with a distributed enfolded holographic-like order called the frequency or spectral domain on the other side. The retina and the visual cortex process an invertible transformation from a spacetime image to a processing domain of at least eight dimensions: four in spacetime and four spectral. When the spectral dimension dominates a perception, space and time evolution ceases and spatial boundaries disappear (272).

The two ideograms chung and yung represent most definitely a process in motion, an axis round which something turns. (103)

Also, Pound identifies man's three inseparable virtues as 'knowledge, humanity and energy;' (151-152). Ultimately, the Chinese holographic view explains: 'What heaven has disposed and sealed is called the inborn nature. The realization of this nature is called the process' (99), a process related to knowledge of the revolving wheel's stable axis, humanity's 'inborn nature', and energy acquisition.

Similarly, in ancient Egyptian texts, accessing the earth's axis or cosmic gate is essential for transformation. The texts guide the Deceased to the polestar that marks true north, the axis of earth and the polar cusp, which is the gap in earth's magnetosphere that has a changing tilt angle due to the solar wind. Here at the polar cusp, research spacecraft have measured good elemental abundance for carbon, oxygen, neon, magnesium, silicon, sulfur, and iron. Ancient Egyptian texts advise the Deceased to begin the afterlife journey in the west, moving northward to this open, element-enriched, northwestern gap to the stars, so that the Deceased King can be self-assembled.

Chinese texts also recommend the same path. According to Constance Cook, ritual movements relate to the Four Directions, and the spirit of the Deceased was believed to fly northwards, yet the path to Heaven was in the West while the focus was on the northwest (2006, 33). Cook explains that some Western Han cosmic boards indicate that 'a path radiating from the center (where the Dipper acts as a divinatory dial) to the northwest was the Heavenly Gate,' (33) and the location of the 'magical omphalos for spirit transformation in the far northwest' is found in Han period cults and Kunlun Mountain tales (14-15). Also, the Book of Poems speaks of the honest Prince: 'He has augmented his destiny/And reinforced the beneficence of the elements' (quoted in Pound 1947, 135).

This suggests that both the pharaonic priesthood and the Chinese sages may have understood the northwestern polar cusp of earth as an element-enriched transformative site.

Clandestine Steps upon Imagined Stairs

A comparison of ancient Egyptian and Chinese underworlds also suggests that both cultures practiced a realist process metaphysics related to afterlife transformation based on cosmic knowledge of the same transformation path. This path to a new energy niche depended on knowledge of the polestar's position, the earth's gravitational rotation, the Deceased's clockwise movement from the West to the Northwest or true North, and quantum signs relating to a guiding language of forms such as the sphere, stairway, mountain, eye, spiral, circle with its axis as a gate, and the hybrid. For example, the least corrupted Pyramid and Coffin Texts advise the Deceased to go westward and clockwise to access a 'Great Stairway' at earth's northern polar cusp, using the polestar as a guide. What the pharaonic priesthood perceived as a stairway may be the polar staircase profile observed by scientists, that is, the potential energy landscape related to the form of the interatomic or intermolecular potential according to theory (Wales 2001, 2067).⁶ Similarly, the Chinese *Yili* and *Liji* accounts also

⁶ At the polar cusp, our space physicists have studied the *staircase cusp* energy landscape, which is identified with the ionospheric signature of Flux Transfer Events (FTEs) (Escoubet et al. 1993), defined as the transport of magnetic flux into the earth's magnetopause (Russell et al. 1990).

associate the West with the direction the spirit should go (Cook 2006, 35); in the *Yili* account, the oldest son climbs the western stairs and faces southeast (36).

In addition, the Egyptian underworld or Duat and the Chinese underworld or Yellow Springs are remarkably similar, for both were considered to be under the earth, possessing a western entrance and a flowing river (Allan 1991, 29; Goelet 1994, 143). In *Egyptian Grammar*, Sir Alan Gardiner states that the word for 'netherworld' was originally the place of the morning twilight known as the 'Duat.' The individual ideograms in the hieroglyphs for Duat mean 'star' (1957, 487) and 'house' (33), and the noun is feminine, denoting a feminine star house, suggesting a womb or house where a star is born, a morning star. This meaning is further supported by the Pyramid Text (PT) references to the Morning Star being the Deceased's offspring (PT 473, 481, 507), the Deceased ascending to the sky as a Morning Star (PT 553), and the Deceased joining other stars in the sky (PT 666), what appears to be a chemiluminescent reaction that is explained as the growth of mind in a time reversal process back to the early cosmos (King 2004; 2006). Similarly, Cook explains that the ancient Chinese ancestral spirits were depicted as shining, luminous, and 'actually being stars' (2006, 147).

From the eighth century BCE on, Yellow Springs was used in Chinese historical and literary writings to denote the home of the dead beneath the earth (Yu 1987, 382). In support of the argument that the ancient Chinese sages envisioned the form of quantum energy landscapes and practiced realist quantum metaphysics, their Yellow Springs underworld may describe the rotating dynamics of the earth's interior geodynamo generating our magnetic field. In recent geodynamo simulations, the generated current is organized as a set of coils in the shape of helical springs or at times as a torus (Kageyama et al. 2008, 1106), and the convection, centrifugal, and gravitational dynamics seem to mirror that of a rotating Kerr black hole, a comparison for future research not under the purview of this preliminary paper.⁷

However, egyptologist Erik Hornung claims that the Egyptian netherworld can be defined as a black hole and 'the location of time past' while 'Time reversal permits us to leave the Black Hole,' (1994, 154). As Egyptian texts show through language and imagery, this type of black hole is a microscopic, rotating Kerr black hole, a gateway to a microscopic Einstein-Rosen bridge or wormhole (King 2004; 2006), which is also defined as a Kerr black hole and its time reverse—a white hole. This dynamically changing system is best represented by counterclockwise and clockwise spirals, circles, inner and outer spheres, and early Chinese art flourishes with swirling, spiral forms of single-headed double-bodied snakes, two-headed birds, snakes or dragons with adjoined bodies on wooden vessels and similar décor in Hu-vases found in tombs (Barnard 1972, 143). Likewise, spiraling décor on Baoshan coffin-ends symbolize 'transcendence and flight' (Cook 2006, 52-53), and circular TLV mirrors have clockwise and counterclockwise inscriptions (Loewe 1979, 159-160). This suggests Kerr black hole dynamics, not to mention that many Han Dynasty mirrors have a dark globular central feature (96-97, 145, 144-145; 160-161; 208) that looks like modern scientific depictions of a rotating black hole.⁸

⁷ However, it is interesting that scientists generally agree that the rotating geodynamo has a liquid outer core of molten iron and lighter elements with a viscosity similar to water and a solid inner core primarily of iron with cold downwellings, warm upwelling plumes, and helical convection columns (Lister 2008, 701), acting similar to the spiraling dynamics of a Kerr black hole's two photon spheres.

⁸ In the February, 2009 edition of *Scientific American* (Vol. 300, No. 2), an image in an article by physics professor Pankaj Joshi shows an exterior view of a rotating black hole with an accretion disk (page 39) that looks similar to the TLV mirror pictured in Figure 1.



Figure 1: Han Dynasty Bronze Mirror. Photo reproduced with permission of Gary Lee Todd, Ph.D., Professor of History, Sias International University, Xinzheng, Henan, China

Further, mirrors have been found in many ancient tombs, and the black hole concept of *reflection* explains the physics described in ancient Egyptian texts. A finite probability exists for any particle that approaches the black hole event horizon to bounce back or reflect (Kuchiev 2003). This probability depends on the incoming particle's low energy, its charge, and its projection of the orbital momentum on the black hole's axis of rotation (2003), the same conditions in Egyptian texts (King 2004; 2006).⁹ Kuchiev explains that black holes behave as mirrors, and 'the particle that moves towards the black hole center in the inside region has a finite chance to simultaneously populate the outgoing wave that brings it to the outside region' (2003). Perhaps the mirrors found in Chinese and Japanese tombs may be a sign of *reflection*, as well as a rationale for the Egyptian and Chinese emphasis on the axis. In addition, both underworlds are related to earth, and in light of our cosmos' holographic mode of operation, physicist F. Alan Wolf claims that shrinking the rotating earth to .4438 centimeter would result in a black hole (1988, 148).

Now, the undesirable counterpart to this inner, upwelling, reflective, axial path that Egyptian texts describe is the 'Swallower of Myriads', what represents the Egyptian 'second death', possibly consumption by a black hole's outer rotating sphere, resulting in annihilation at its destructive ring singularity. Comparatively, in her chapter entitled 'Entering the Earth', Cook explains that since the late Shang period, the Earth Altar was a 'potent supernatural force' requiring animal sacrifices and exorcism rituals (2006, 43), and some scholars support that by the late Warring States or early Han period, the Earth Altar was also called the 'Inner Central Earth' or the 'Central Drainspout' (45), another possible reference to destructive activity at a singularity. Still, two ways exist. In 'The Gate in the Circle', Franklin Doeringer

⁹ Teilhard de Chardin defines a similar biophysics (King 2007b). For paper in press by the SSA, see <www.isisthesis.com>

explains that the Chinese gate to change marks the ‘great cosmic process or Way’ and ‘its byproduct, multiplicity’ (1982, 313), as well as ‘a channel of transformation’ (314).

Also, Michael Loewe supports that Han divining boards found in tombs have similar features of TLV mirrors (1979, 80) and the design of the divining board allows the rotation of one of its two discs (one circular and one square), specifically the circular disc (75). The diviner’s boards from Tomb 62, Mo-tsui-tzu, Kansu, (76) and from the tomb of Wang Hsü (80) both exhibit the seven stars of the Dipper, which marks the polestar and earth’s axis. Another indication that the ancient Chinese sages understood the dynamics of a microscopic Kerr black hole as a gateway to an Einstein-Rosen bridge is the poem ‘Li Sao’ by the scholar Qu Yuan (340 – 278 BCE) of the Kingdom of Chu (Hawkes 1985), which references a time-reversed journey from ‘world’s western end’ to a bridge to the ancestor Peng Xian. Also, the mythic Queen Mother of the West, who bestows immortality and resides at the pivotal axis of the cosmos (Loewe 1979, 88), wears the headdress called the *sheng*, often comprised of a pair of circular discs linked by a straight rod associated with weaving (105), the rod suggesting a bridge between two circles sometimes referred to as spools. In addition, the Mulberry Tree tradition centers on a spirit tree near the Yellow Springs, which is described in the *Shanhaijing*: ‘In the swirling water is a great tree’ (quoted from Allan 1991, 28). In early texts, the Hollow Mulberry with its twisting trunk is a cosmic tree, serving as the *axis mundi* between earth and heaven (44).



Figure 2: *Taotie* on Bronze Vessel from Late Shang era. Permission to copy: GNU Free Documentation License

Also, Allan argues that both myth and art derive from religious structure, while violating our classical reality, and early Chinese art is ‘characterized by disjunction, distortion, illusion and transformation.’ She examines the Shang bronze ritual vessels for ancestral offerings, specifically the *taotie*, an enigma to scholars because it does not represent the ancestors or other spirits in the Shang oracle bone inscriptions, but it is a major, constantly changing motif (1991, 128) characterized by two animal-like eyes or human-shaped eyes in its simplest form with a suggestion of a face (131). Allan associates the spiraling *taotie* motif with eating, and it is found on vessels used for offering food sacrifices to spirits of the dead (145). The two eyes of the swirling sign suggest the clockwise and counterclockwise dynamics of a Kerr black hole, and the counterpart to the *taotie* in ancient Egypt is the left eye of Seth and the right eye of Horus, which comprise the whole Eye of Horus, a possible biophysical sign

of a microscopic Kerr black hole and/or protein folding funnel (King 2004). Most proteins fold in an energy landscape resembling a funnel (Wolynes 1996).

Thus, the above evidence suggests that the pharaonic priesthood and Chinese sages perceived specific forms (sphere, stairway, eye, spiral, circle with its axis as a gate) that provided information on quantum dynamics and biophysical energy landscape fields for transformation to mind-energy.

The Stele Inscriptions of Ch'in Shih-Huang

Of special significance to man's transformation is the sign of the mountain or the idea in the mind that the sign excites. During his reign as emperor (221-210 BCE), Ch'in Shih-huang-ti and his high officials climbed to the top of seven elevated sites and erected carved stones. Documented in the annals of the 'First August Thearch', these stone engravings or inscribed stelae on mountaintops are 'the only substantial corpus of texts immediately connected with the First Thearch's official ritual activities.' (Kern 2000, 8) The mountaintop stele inscriptions focus on unifying the heavens as in ancient Egyptian texts (King 2004; 2006).

The first inscription on Mount I explains that the August Thearch originally had a kingdom where 'His might shook the four extremities;' Martin Kern translates 'four extremities' (*ssu-chi*) to 'extremities of the four [heavenly] quarters' (*ssu-fang chih chi*) (2000, 12, footnote 4). The 'grand accomplishment' of the August Thearch is the restoration of peace and stability after chaos, resulting in collective cosmic unity under 'one lineage' (14). Kern suggests that unification relates to the state's historical record (149), yet he considers the locales of the stelae on the First Thearch's imperial tour of inspection as 'stages in a cosmic journey' (57).

Again, the second inscription on Mt. T'ai reveals the Thearch ascended the mountain and 'unified All under Heaven' (18), establishing a cosmological order and observing inner and outer spheres that extend 'down to the later descendants./His transforming influences reaches without limit.' (23). These lines suggest the Thearch is at a midpoint or axis, reaching to the infinite and down to later descendants, supporting Eliade's view on the central cosmic mountain with its peak signifying 'the point where creation had its beginning' (1952).

In line with this idea is the third inscription on Mt. Lang-yeh, stating the August Thearch 'created a beginning' (Kern 2000, 26): 'He made manifest and clear the Way and its inner pattern!/Eastwards He tours the eastern land' (26), and 'He unifies the minds and integrates the wills.' (27) The Thearch 'shines', evil is not tolerated, all are good (30), and the Thearch 'secures and consolidates the four extremities' (31). Peace reigns and the Thearch's 'virtuous power' is everywhere (34).

The remaining four inscriptions¹⁰ generally repeat ideas present in the first three. Perhaps the stele inscriptions of Ch'in Shih-Huang ritualize quantum processes rather than historical events. Other evidence for this view is the language of unifying the four cosmic quarters,

¹⁰ The fourth inscription on Mt. Chih-fu states that the August Thearch ascends the mountain, illuminates the sea, and enlightens 'through rightness and principle', an idea emphasized in Egyptian texts relative to Maat ('Rightful Order'), which can also be interpreted amorally as a right or clockwise direction, a recurring advisory in ancient Egyptian texts (King 2004). In the fifth inscription on the eastern vista of Mt. Chih-fu, the Thearch ascends the mount, shakes and moves the four extremities, unifying 'all under heaven,' (Kern 2000, 39). The sixth inscription at the gate of Chieh-shih and the seventh inscription on Mt. K'uai-chi both repeat the cosmic unifying language, while the seventh states that the king 'promulgates rightness', again separating the inner and outer spheres.

unifying ‘the minds’ and integrating ‘the will’, the conquest of warfare, the ideas of creation and transformation, the presence of inner and outer spheres, and the *shining* Thearch. Relative to this language and the Thearch’s position at the cosmic mountain peak, the mountain sign can be tentatively interpreted as a quantum energy landscape related to a phase transition, the sudden change from one state of energy to another. The language of inner and outer spheres, ideas of ‘without limit’, and the shaking and moving of the ‘extremities of the four [heavenly] quarters’ suggest a phase transition related to a rotating microscopic Kerr black hole.¹¹ Phase transitions often break symmetries such as Time. In ancient Egyptian texts, the Deceased travels backward in Time to a timeless cosmic state, and in early Chinese texts, the king transforms into an ancestor; both processes violate time symmetry, a violation in accordance with natural law.¹²

The Diamond Globe

Hybrid forms dominate Egyptian and Chinese art. The Egyptian word *ka* is expressed by the hieroglyph of two upraised arms, and although there are other interpretations,¹³ scholars consider it a symbol of the embrace of a man by his *ka* (Bolshakov 2002, 179). It is interesting that similar Chinese wooden sculptures of a human body with upraised arms and a circle for a head have been found in Ch’u tombs (Barnard 1972, 39), while Egyptian art in the tombs of Seti I and Ramesses VI also depicts humans with circles for heads, the circles suggesting the spherical morphology of bacteriophage Lambda.¹⁴

Another possible Egyptian reference to icosahedral Lambda morphology is the theme of the Deceased transforming into ‘your original shape’ (CT 20), a hybrid four-faced form or

¹¹ The form of the mountain energy landscape may represent a quantum phase transition with entanglement and scaling, where waves peak and amplify, rather than cancel each other out. Quantum phase transitions occur at absolute zero. They are induced by the change of an external parameter or coupling constant, and are driven by quantum fluctuations. (Osterloh et al. 2002) Physicists are not sure about what happens at a black hole’s singularity of quantum fluctuations; however, computer simulations reveal a rotating black hole phase transition involving the evolution of a naked singularity to a mountain spindle with two singularities, one up and one down (Joshi 2009).

¹² Forward and backward, time-future and time-past, Newton’s, Maxwell’s, and Einstein’s laws, including Schrodinger’s quantum law, treat each direction of time equally. Even the second law of thermodynamics, which is the *tendency* of physical systems to evolve from lower to higher entropy states, still allows the probability for something to evolve from a higher to lower entropy state.

¹³ In the Edifice of Taharqa (Room E), the dominating ritual scene is a mound with a wide band arching above two outstretched arms with hands open to the sky, suggesting the two arms of the Lambda genome functioning for lytic replication, viz., the Deceased King’s transformation to energy (King 2004). A falcon is centered between the arms on what appears to be a lotus with the plume of Maat or ‘Rightful Order’ on the right. See Parker et al. 1979, plate 22.

¹⁴ The corpus of Egyptian texts have numerous references to bacteriophage morphology, or heads, tails, faces, vertices, collars, and necks. Bacteriophage Lambda, a temperate bacterial virus, has a genome that is 48.5 kb long encoding some 46 genes, which can synthesize about 55 proteins. In the tailed phage, the genome is encapsulated in a spherical icosahedral head or protein shell called a capsid. The subunits of the capsid are located at the vertices or face of the icosahedron, which has 20 equilateral triangles arranged around the face of a sphere. A pyramid reflects the same triangular design found in phage Lambda. In light of an analysis of over 870 ancient Egyptian signs, where the value or meaning of each sign emerged, not by choice, but rather from an analysis of each sign’s interaction within a matrix of interlinked thematic signs related to literature, art and architecture spanning 2,000 years of Egyptian history, humans with spherical heads can be interpreted as a sign of phage morphology related to hybridization or horizontal gene transfer (King 2004). Substantial textual evidence for phage morphology exists, as well as the carved drawings on the walls of the Edifice of Taharqa, showing deities on the bark wearing long ceremonial tails.

‘Pyramidion’ (CT 422), a ‘Lord of faces’ (CT 239), what can be interpreted as a square polyhedron or four-faced pyramid, where the four faces extend out from the apex or center. Pyramids abound in early cultures, and other four-faced deities are Vairocana Buddha, Kālacakra, Ezekiel’s vision of god, and the deity called Yellow Emperor (Huangdi) preserved by the early Chinese literary tradition. Scholars often consider the Chinese description as a literal reference to the emperor’s four ministers governing the four directions. However, according to Mark Csikszentmihalyi, the Mawangdui silk text “Liming” reflects the importance of the Yellow Emperor’s correspondence with Heaven and Earth, verifying the cosmological process of transformation to the ‘ancestor of all under Heaven’ (2005, 238).

In the past, the Yellow Ancestor began his material existence with an affinity for trustworthy endeavors. He himself made an image that faced the four directions, and [all four faces] aided a single mind. All four extended out from one center, and they sought verification in front, behind, to the left, and to the right. When he ascended to his office, he carried out this verification. This is the way he was able to be the ancestor of all under Heaven. (237)

In both early China and ancient Egypt, the Deceased’s polyhedral transformation respectively to an ancestral or original form may relate to the molecular form of an ancient lambdaoid virus. Caspar, Crick and Watson thought of viruses as crystals (1956) as do modern virologists. Crick and Watson predicted that the coats of viruses were composed of repeating subunits exhibiting the symmetry of closed polyhedra (Crick and Watson 1956).



Figure 3: Western Han Chinese Silk Manuscript, Mawangdui (Public Domain)

Further, Cook explains an early Chinese afterlife view: ‘The rise of one’s vital energy to Heaven instead of down to Earth represented a fundamental upsetting of what makes someone a human’ (2006, 25). Also, in the Mawangdui paintings, the Deceased is portrayed as a multiple entity or ‘as immortal spirits riding their dragon tails’ (135). Loewe, who states the

hybrid forms appeared in Chinese art and literature from the fifth or fourth century BCE (1978, 100), describes the hybrid image in the upper tableau between the sun and moon (see Figure 3) as a woman wearing a blue robe without legs, ‘her body ends in a scarlet serpentine coil, which emerges from the mouth of one of the dragons’ (1979, 48). This tail iconography is similar to the tailed deities carved in the subterranean rooms of the Edifice of Pharaoh Taharqa (690-664 BCE), suggesting viral morphology.

Using a parallel text in the temple at Karnak, Goyon describes the Edifice’s final carved scene, where the deity Amun is ‘the unique one who created himself in the form of millions’ (Parker et al. 1979). In English translations of Egyptian texts, the transformed Deceased is generally referred to as a star, but also represents a product of multiplicity such as the ‘Great Flood’, ‘Barge of Millions’, ‘millions of cubits’, ‘light-people of Re’, and ‘Millions of earth’. The idea of millions suggests the abundant flood of bacteriophage progeny or clones from lytic replication, as well as the idea of the Deceased King’s transformation to cosmic energy (King 2004).

In essence, comparative textual evidence suggests the following speculative view: the Deceased has transformed to a higher ordered, crystallized state of energy, what might be called ‘crystallized mind’, a term Charles S. Peirce used in his process metaphysics to denote the continuity of mind. However, this outcome is represented in Egyptian texts as a state of cosmic unification before spacetime existed, when the four forces were unified (King 2004). Similarly, in the Baoshan text, the astral god Grand Unity (Taiyi) controls the cosmos (Cook 2006, 114):

The journey to Heaven and across time occurred metaphorically within the symbolic cosmos of the tomb, one governed by Taiyi (Grand Unity) in his Yang and Yin forms up above and by the Lord of the Earth below. (145)

To conclude, the pharaonic priesthood and the Chinese sages understood quantum instability and the holographic value of earth’s axis, humanity’s ‘inborn nature’, and energy acquisition. To guide them in their afterlife, they envisioned cosmic, planetary, and quantum energy-landscape forms, while emphasizing the value of transformative form or information in literature, art, and ritual to predict the quantum interaction of man, animals, and natural objects to achieve practical results in the cosmos, i.e., the transformation path to energy rather than matter. In their realist metaphysics, ritual and divination aimed to develop definiteness out of quantum indeterminism through observer-participancy, while art and literature alerted the living to a biophysical language of forms or a *semiotics of evolvability* related to the sphere, stairway, mountain, eye, spiral, circle with its axis as a gate, and the hybrid, guiding signs that marked the time-reversed transformation path upward to wholeness.

The function of waking consciousness, or our sensory perceptual process involving imagination, may be to read the physical signs or map significant evolutionary forms in the classical cosmos that mirror the biological action of signs (molecules) in the quantum domain (King 2008, 24). Depending on knowledge, observer-participancy, and what appears to be a universal biophysical mechanism modeled on viral lytic replication, both Egyptian and Chinese texts, art, and ritual in this preliminary study reinforce that mind acts as the cosmic unifying force to a primordial energy state. Related to 21st Century Physics’ search for its ‘Holy Grail,’ a theory of quantum gravity to shed light on the Big Bang, microscopic black hole spacetime, and the unification of the four forces, mind may be the missing element that

can evolve to a cosmic primordial energy state via the replication mechanism of a quantum creator-virus, ‘Who in a million diamonds sums us up.’¹⁵

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¹⁵ The final quotation and three subheadings are from Wallace Stevens’ poem ‘Asides on the Oboe.’

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My work centers on biosemiotics in cultural activities (mythology, literature, religion, science, art and so on) to determine human meaning, expand intentionality, and share knowledge about our potential for evolutionary survival and adaptation within the universe. My background includes an education grounded in semiotics, a ten-year career in college instruction related to writing, literature, mythology and business communication courses, academic positions in project management and staff development, self-employment as a competitive grant writer for educational goals, and experience as an author and publisher. I am interested in the enlightenment and preservation of humanity.

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