

Paranada: Beyond Beyond

Hector Currie
with Juan Pacheco

Abstract: “Paranada: Beyond Beyond” represents the culmination of the author's research findings of geometric evidence in the Pythagorean design of the temple and theatre complex of the ancient Greek Temple of Delphi. Rather than a dualistic moral judgment, Delphic rites sought a dynamic equipoise between Apollonian and Dionysian psychic forces, transcending the self/boundless dichotomy. The temple has a deflection of 7.5 degrees—1/12th the 90-degree gravitational fall of all existents, the gravitational factor in music theory (as in the Pythagorean "harmony of the spheres") in each note's descent in the 12-tone scale's octaval fall. Significantly, this means that the Delphic design encapsulates a space/time concordance. The design reveals that Pythagoras' epochal concept of a transcendent *kosmos* is realized in both space (the sacred site's cosmic plan) and in time (the nightly celestial whirl of constellations above it). “Paranada” traces this discovery of a divine order at the Delphic center to the sages of the kingdom of Bharat in ancient India and the birth of speculation on the meaning of existence in their most sacred *Rig Vedic* "Creation Hymn" X. 129. “Paranada” thus suggests that the Western cultural tradition is derived not ultimately from Greece, but from India, and contemplates the significance such ancient visionary philosophical insight might have for the daunting challenges continually confronting us. This work constitutes an eclectic integration of transdisciplinary insights into the known and the unknown, the arts and the sciences, and science and religion. In descriptive and poetic forms, “Paranada” seeks to find vital correspondences and affinities among Pythagorean geometry; numerology; cosmology; ancient psychologies; nature philosophy and mysticism; Greek mythology; Greek, Shakespearean, and modern tragedy; quantum physics and astrophysics; and transcendent cosmic consciousness.

Key words: Anaximander, cosmology, equipoise, gravitational factor, Greek, harmony of the spheres, integration, nature philosophy, quantum physics, Pythagoras, Shakespeare, Temple at Delphi, tragedy, transcendence.

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Introduction

Paranada is Sanskrit for that which is beyond the beyond, the transcendent “soundless sound” from which creation emanates (“Soundless Sound,” 2008), thus nature's "soundless sound beyond creation" (Omega Institute for Holistic Studies, 2006).

This work, “Paranada,” honors Pythagoras' profound psychic insights into the nature of existence and transcendence, which, it is here contended, hearken back to the Vedas, or early Hindu sacred hymns. These Vedic texts beckon us to see beyond—even beyond "beyond."

The concept of transcendence found in early Vedic thought inspired Anaximander, an early Greek philosopher. Anaximander in turn inspired his contemporary, Pythagoras, as evidenced in the visionary geometry he infused in his design for the sacred Delphic site. Pythagoras' intricate Delphic design reveals that he had insights into nature that transcended space and time. For over two millennia, this secret has been forgotten. It is this author's contention that the time has come to rectify this egregious neglect.

This paper is organized chronologically, aiming to integrate ancient elements with their contemporary implications, which led to key findings from research on the plan of the Temple at Delphi. From there, the author offers his interpretation of the significance of Delphi's plan and the "cosmic secret" the author regards as Delphi's contribution to humanity.

The first section is a brief discussion of the birth of philosophy in the Eastern world, and the mystical hints we have of its transcendent approach, and includes the author's speculation on the transmission of Eastern thought to the West. The author develops a sketch of Anaximander's contributions to the birth of philosophy in the Western world, insofar as they appear to have influenced Pythagoras.

With these foundations laid, the central section develops the thesis about Pythagoras' insights into transcendence. First, the layout of the Temple at Delphi is described. Then, the measurements of Delphi's geometry are presented, including the author's discovery. Next, the author develops his interpretations of the cosmic significance of Delphi's geometry. The final section highlights selected points of the nature philosophy suggested by this ancient site so as to correlate them with insights of contemporary science, joining the ancient and the modern. The conclusion presents the author's advocacy for bringing more of Delphi's harmony into our modern world.

Dighatamas and the Birth of Transcendence in Vedic India

Approximately 2000 BCE in India, then called the Kingdom of Bharat, there lived a blind-from-birth Vedic seer, Dirghatamas. Reverently known as "Long Darkness," Dirghatamas became the high priest to King Bharat. In his enveloping darkness, Dirghatamas had a blinding vision which he captured in moving poetry, the key phrases excerpted below:

Then was neither being nor non-being... (line 1)

The breathless breathed breathlessly... (line 2)

All was darkness wrapt in darkness... (line 3)

...Sages searching in their hearts with wisdom found the bond between being and non-being. (line 4)

...This was before the gods... (line 6)

*Creation Veda X.129*¹

Georg Feuerstein (1996) credits the seer-bards who composed the *Vedas* in the third millennium BCE, with bringing about the birth of Eastern philosophy through their recognition of the “curious relationship between the outer cosmos and the inner universe, between the objective world and the subjective space, or psyche.” Feuerstein identifies this interconnectedness as the apparition discerned by the Vedic seers: "The deep mysteries of the universe and what lies beyond creation."

The vision of Dirghatamas, author of hymns 140 to 164 in the first section of the Rig Veda, takes an iconoclastic perspective, a logical approach that discriminates fact from fancy.

To the Vedic sages, creation indicated that point before which there was no Creator, the line between indefinable nothingness and something delineated by attributes and function, at least. Like the moment before the Big Bang Theory. These concepts preoccupy high wisdom, the Truth far removed from mere religion. The Bible begins with the Creation. Before the Creation, however, there was the Creator, but does even He know what was there before He existed? (Londhe, 2008)

Dirghatamas' intuition/perception of abstract physics of space and time—of space/time—is truly phenomenal. In his Vedic Hymn, I. 164, he divined the sexagesimal (12) order of time in the movement of the planets and celestial firmament across the night sky, thus producing man's first astral zodiac (Griffith, 2006/1896, p. 220). This set the measure for what the Greek philosopher Anaximander would describe as the "eternal motion," which is time, marked by the day's solar arc and the night's majestic celestial round (quoted in Burnet, 1908, p. 55). Dirghatamas saw the number 360 as dividing the temporal circle of the year in the zodiac, as well as the sun's circle of the day. He also broke the circle into 360 degrees.

The hymns of Dirghatamas speak clearly of a zodiac of 360 degrees, divided in various ways, including by three, six and twelve, as well as related numbers of five and seven. We must remember that the zodiac is first of all a mathematical division of the heavens such as this hymn outlines. This is defined mainly according to the elements, qualities and planetary rulerships of the twelve signs. The symbols we ascribe to these twelve divisions is a different factor that can vary to some degree. The actual stars making up the constellation that goes along with the sign is yet a third factor. For example, some constellations are less or more than thirty degrees, but the mathematical or harmonic division of each sign will only be thirty degrees. What is important

¹ There is no standard translation of the Vedas, but a multiplicity of them, due largely to the age of the text and the inherent difficulty in translating it. Additionally, there is a tradition of authors interpreting and phrasing the Vedic hymns. The phrasing of the lines from the Creation Veda 10.129 are the author's own, based on a number of translations, primarily Griffith (2006/1896) and Moore and Radhakrishnan (1957).

about the hymns of Dirghatamas is that he shows the mathematical basis of such harmonic divisions of a zodiac of 360 degrees.

For Dirghatamas, as was the case for much of later Vedic astronomy, the main God of the zodiac is the Sun God called Vishnu. Vishnu rules over the highest heaven and is sometimes identified with the pole star or polar point, which in the unique view of Vedic astronomy is the central point that governs all celestial motions and from which these are calculated. (Frawley, 2006)

Dirghatamas also divided the circle of the compass at a sacred Vedic fire altar, a measure that would later be reflected in the Delphic *temenos*. With visionary foresight, Dirghatamas set the course that quantum and astrophysics only now are coming to sense/intuit. And yet, Dirghatamas is little known or recognized in the West.

The Brief Flowering of Transcendence in the Archaic/Classic Age of Greece

Following its inception in India, transcendence enjoyed a brief flowering in Greece. The foundation of Western philosophy and science laid down in Grecian schools was born from the concepts crystallized in India centuries before, which came to have a profound impact on Greek thought.

The flowing of this influence and the accuracy with which the doctrines were transmitted suggests a direct contact between the thinkers of the two countries rather than knowledge acquired through intermediaries. The clarity with which Greek philosophers propounded their views presupposes a familiarity with a subject that can only arise when all doubts and dissensions have been resolved through discussion. Plato and Democritus, it is told, traversed the long distance to the Indian sub-continent to confer with Indian sages as did Pythagoras at an earlier date. (India Holiday, 2009).

The Persian Empire under Cyrus II controlled an unprecedented swath of territory, running from the Indus River in the east to the Dardanelles in the west. The trade routes radiating from Babylon would have made it possible to travel from the coastal cities of Asia Minor, such as Anaximander's Miletus all the way to India (Long, 1948, p.9).

“An age of intellectual activity in both India and Greece occurred between the 6th and 4th centuries BC” (India Holiday, 2009). Greek knowledge of India was acquired on the whole by way of Persia, whose emperor Darius the Great (c. 515 BCE) extended the reach achieved by Cyrus into the Indus valley. It is significant that “Greek philosophy originated in the cities of Ionia on Asia Minor's western shore—that portion of the Greek world closest to the Orient” (Sedlar, 1980, p. 10). There was an intense metaphysical interchange between the Greek and Indian cultures around 600 BCE that points to striking similarities between the two metaphysical schemes (McEvelley, 2002).

The Birth of the Philosophy of Nature

Anaximander was from the port city of Miletus on the Aegean Sea, a key port on the trade routes from the East bound for Egypt. He was therefore exposed to the ideas that flourished in the minds of Milesian nature philosophers. These philosophers were, during this time of the 500s BCE, beginning to break the mythic past and develop a scientific approach, beginning with the basic question, "What is the world, and all that is in it, made of?" The nature philosophers Heraclitus, Anaximenes, and Thales, respectively identified the *arche*—the basic principle of all that exists—as fire, air, and water; each predating the formation of earth.

For Anaximander, who had been exposed to the influence of visionary Asian philosophical thought, such speculation based solely on the physical/material nature of existence must have seemed inadequate. Anaximander boldly broke with the materialist bent of his philosophic confreres. He conceived the ground of being—the-basis-of-it-all (and, he might have added, the-basis-of-the-none)—as "the Boundless," or the *apeiron* (from the Greek *a-peras*, without limit). This is reminiscent of the Hindu *Moksha*, the doctrine of the transmigration of souls in a transcendent release.

This apprehension is evident in Anaximander's first conception of the world in a map he drew on a cylindrical disc, with Asia to the east, Europe to the west, and Delphi at its center (De Santillana, 1961 p. 36).

Giorgio de Santillana (1961) was moved to describe this revelation as "comparable only to the discovery of fire" (p. 36). Nietzsche (2001), in awe of Anaximander's audacity in breaking free of the limits of matter, termed it "an incredible leap" (p. 33).

In the one surviving fragment of his treatise "On Nature," Anaximander expressed an Eastern/Vedic grasp of the control time exerts over nature's ineluctable process of coming-to-be and passing-away. A. N. Marlow (1954) noted that Anaximander envisions this control as "an immanent dike [that] ensures that all things shall eventually return to the apeiron whence they came" and went on to reproduce Anaximander's fragment "From which all things take their rise, and by necessity they are destroyed into these; for all things render just atonement to one another for their injustice according to the due ordering of time" (Diels & Kranz, 1951, p. B1, as cited in Marlow, 1954, p. 37).

Numeric mysticism played a key role in Anaximander's philosophy of nature, as in Pythagoras' declaration: "All is number" (Burton, 2003, p. 64). Anaximander's vision of cosmic order conceived the distance of the fiery circles of the stars from disc-shaped Earth as a ratio of the breadth of Earth: 9, 18, 27, and as a ratio of its depth: 27, 54, 81, all based on 3, the three of space's three dimensions. The key number—the ratio of the Earth's depth to its distance from the Sun—was 81, 3 to the 4th power ($3^4=81$), as space (three dimensions) to time's (the fourth dimension) power. Numerologically, 3 plus 4 produces 7, Apollo's sacred number. The ratio of the sun's wheel of fire to the breadth of disc-shaped Earth is $3 \times 9 = 27$ in Anaximander's first cosmic scheme. Numerologically, 27 is $2 + 7 = 9$, nine, the fateful penultimate number of Saturn-Time in Philolaus' Pythagorean Table of Planetary Spheres. Time, which, per Anaximander's fragment orders all things (McEvelley, 2002, p. 31) and which occupies the

penultimate position in the eternal round, of the decad (10), therein transcends the sphere of Stars, and mystically attains "The Boundless," the infinite, *apeiron*.

Anaximander's concept was amazingly prescient. It conceived of a boundless void—a vacuum, a nothingness.

The Time of Pythagoras c. 580–490 BCE

Pythagoras ushered in the Golden Age of Greece. He was the son of a successful Phoenician merchant, Mnesarchus of Tyre. Mnesarchus was granted citizenship by Samos for his gift of grain to that drought-stricken island. Before the birth of Pythagoras, Mnesarchus consulted the Pythia, the Oracle at Delphi, regarding his trading ventures. The Pythia did not respond to his questions about trade. Rather, in a story retold by Iamblichus in *On the Pythagorean Life*, she predicted his son would “surpass humans of all times in beauty and wisdom and would be of the greatest benefit to the human race with regard to the whole of life” (Riedweg & Rendall, 2005, p. 6). In response to the prophecy, Mnesarchus named his son Pythagoras. In further tribute to the Oracle, his wife changed her name to Pythais in honor of “Pythia,” the Delphic Priestess.

Pythagoras was educated and inspired by Pherekydes of Syros. Pherekydes was born in the time of the 45th Olympiad, 600-597 BCE, and was in his prime c. 544/1 BCE (Schibli, 1990, prologue). Pherekydes is the author of what is believed to be the first prose work of Greek literature, *Theologia*, generally known as *The Seven Adyta* (Mead, 1965, p. 21). *Adyta* is closely related to the Sanskrit *Aditi*, the Vedic goddess of the boundless sky, who can be seen as a precursor of the Anaximandrian/ Pythagorean concept of the "Boundless."

Pythagoras “was educated for 20 years in astronomy, geometry, medicine, psychology and mathematics in the Vedic institutes of Egypt” (India Holiday, 2009). Felix M. Cleve (1969) argued that even though Pythagorean society appears to exhibit in its organization an Egyptian pattern, its real roots can be traced back to India, specifically to Indian *Samkhya* philosophy (Navia, 1990, p. 139-40). Samos “had close commercial links to an Indian community in Memphis, Egypt, that would have given Pythagoras access to Hindu and Egyptian knowledge” (Occhiogrosso, 1994, p. 308).

Anaximander and Pythagoras knew each other (they were coexistent for 24-34 years), exchanged ideas, and at times put forth competing or differing on concepts (Pengelly, 2005). Pythagoras embraced Anaximander's boundless *apeiron*, naming it *Kosmos*. He proposed that the highest state the spirit can achieve is what he conceived to be the Boundless.

It should not surprise us, then, to discover, by connecting the dots and counting the angles of the geometric shapes contained therein, that the key to the *Tetractys*, the most sacred Pythagorean symbol by which solemn oaths to secrecy were sworn, is also 81. The geometric shapes within the *tetractys* have a total of 81 angles: 13 triangles (39), nine rhombi (36), and a hexagon (6).

The Transcendent Power of Delphi

The number of the *Tetractys*, 81, is also the key to the god of order, Apollo. Numerologically, 81 is 3 to the 4th power; $3 + 4 = 7$, Apollo's symbolic number. As the god of music, his seven-string lyre produces "the harmony of the spheres" (Wyss, 1996, p. 37). At Apollo's cosmic center, Delphi, Pythagoras plotted the *tetractys* on the sacred site (Figure 1).

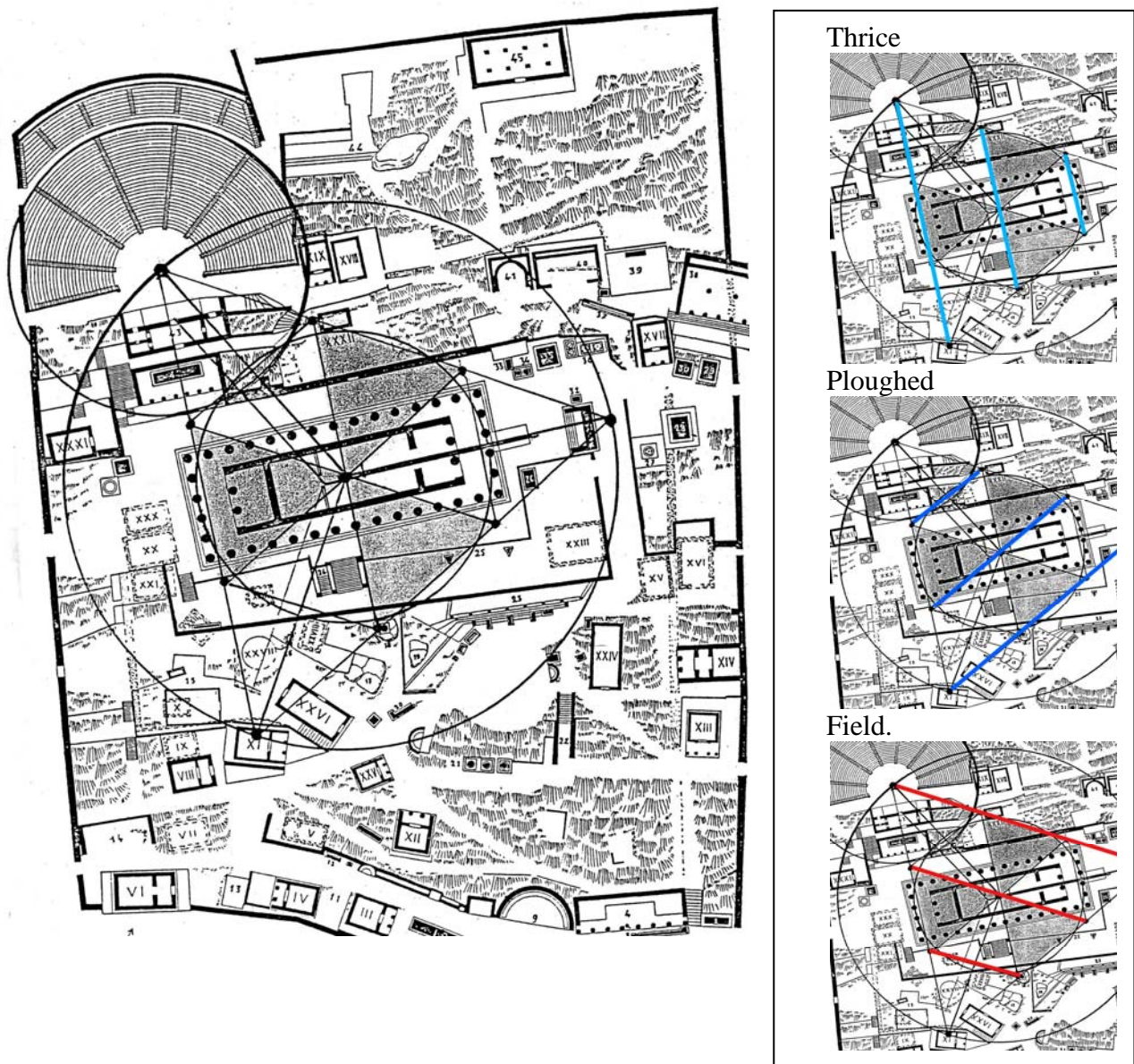


Figure 1. Site Plan of the Sanctuary of the Temple of Apollo at Delphi (“Themenos of Apollon in Delphi,” Coste-Messeliere, 1936, foldout)

Its apex is in the center of the theater of Dionysos, its tripod-center is in the cosmic center of the temple of Apollo. Its other two corners terminate in the Treasury of the Athenians and at the point on the Sacred Way fronting the Temple (dark blue line Figure 2). The precision of the loci

of the four *tetractyl* tripod's center and termini on Delphi's steeply sloping site evidences the precision of Pythagoras' plan (and, it might be added, the meticulous precision of the Pierre de la Coste-Messeliere survey!).

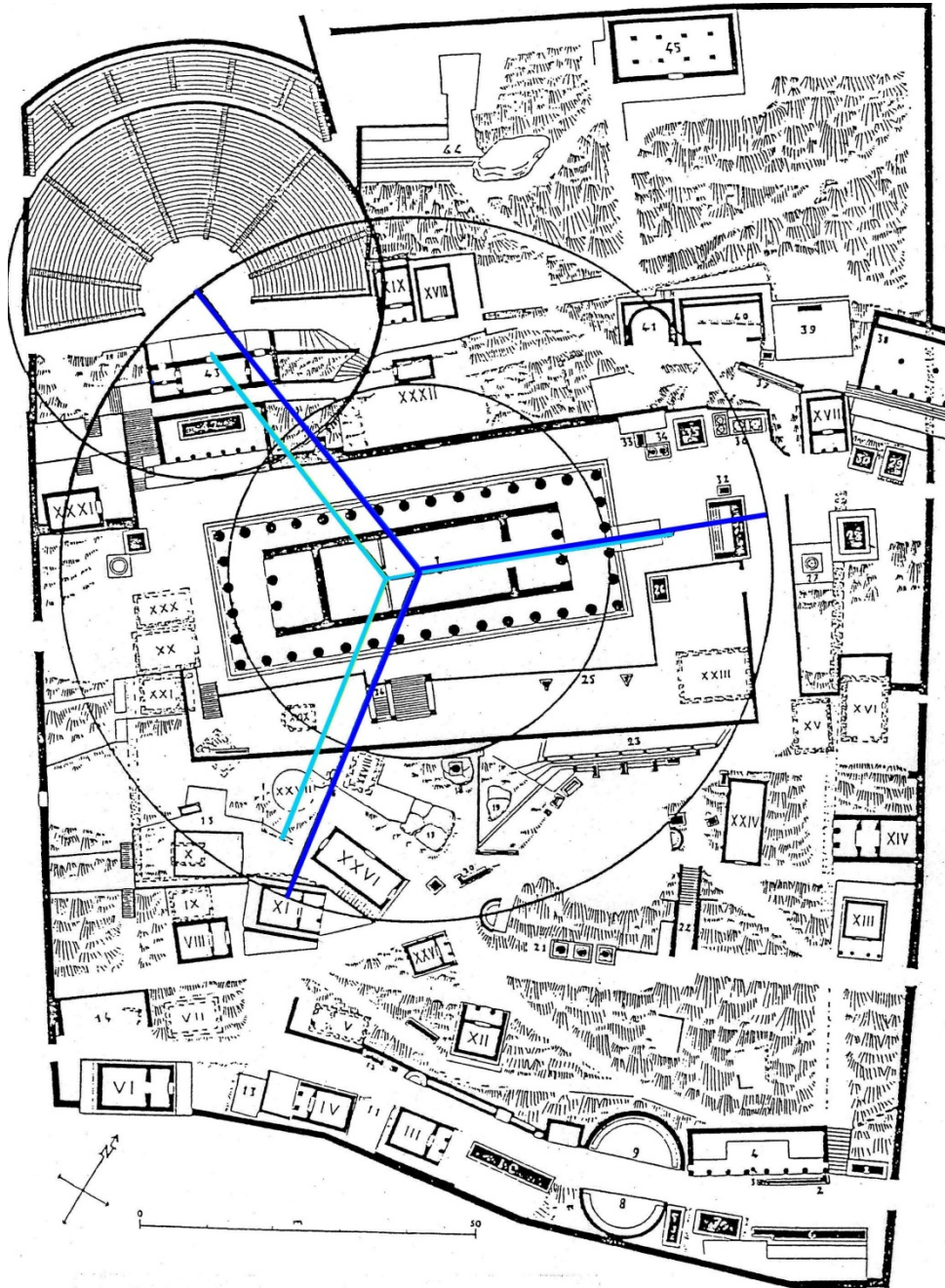


Figure 2. Topographic Tripods of Centers and of Thresholds (“Themenos of Apollon in Delphi,” Coste-Messeliere, 1936, foldout)

The location of the center and termini does not exhaust the mystic design of Delphi. In addition to the Tripod of Centers, in the middle of the Temple of Apollo, and extending its legs to the center of the Theater of Dionysos, and to the Treasury of the Athenians, there is a second

topographic tripod. The Tripod of Thresholds, (light blue line) centered at the threshold to the inner sanctum, or the *adyton*, indicates where the Pythia, seated on the mantic tripod, uttered her veiled prophesies.

Its apex is in the central doorway (threshold) in the stage-house of Dionysos' theater, through which the tragic hero retired to face his fate. Its second, lower, terminus is at the cleft (threshold) by the Mound of Earth (Gaia), first holder of the Delphic seat before it was wrested away by Apollo from Phoebe, the third to hold the seat, to whom the scapegoat (*tragos*) was sacrificed. The third terminus of the Tripod of Thresholds is at the base of the ramp fronting the temple where the suppliant paused before entering.

The *Tetractys*, it will be noted (Figure 1), consists of ten points and three sets of parallel lines that cross. The lines might be seen as the furrows of Themis, the goddess of justice and of the thrice-ploughed field, and, after Gaia, second holder of the Delphic seat. A field ploughed thrice, diagonally right, then left, then horizontally, will produce an array of hexagons. Analyzing the pattern, each hexagon has radiating from its six faces six additional hexagons: three above its mid-point and three below. It fittingly constitutes a schema of the Scales of Themis, representing justice.

Pythagoras thought he had found the key to the universe concealed in the geometrical lines of the Delphic temple. Amazingly, for 2500 years it has remained a mystery. Or, perhaps, not so amazingly: Pythagorean brotherhood, the *Mathematikoi*, was a secret society, its members sworn to secrecy under threat of death.

How Pythagoras managed to accomplish the survey on the steeply sloping site remains a mystery, though we know he spent over 20 years in Egypt and while there may well have mastered the art of land surveying, so vital to Egypt's economy. The quality of the ropes used in the topographic survey of the Delphic sanctuary was a crucial factor in its successful execution. The ropes came as a gift from the last great Egyptian pharaoh, Amasis, who contributed one-fourth of the cost of the reconstruction of the temple. The gift was believed until recently to have been of alum. James Calvert (1999) has suggested that a transcription error by a scribe explains the unlikely gift of alum, a styptic agent, to a construction project. Rather, he suggests, with the change of a single Greek character, a gift of "alum" becomes a gift of "rope," fine Egyptian linen survey rope.

The Numerical Significance of the Trieteric Rite

The Pole Star is the center of the zodiac. The zodiac measures the cycle of the year. The Greeks noted a rhythm in the passing of time within the year, comprised of beats to a four count. That is to say, 1-2-3, 1-2-3, 1-2-3, 1-2-3, thus completing the cycle. This is equivalent to the three months to each season, with the four seasons constituting a year. The four repetitions of the 3/4 waltz-like rhythm may be seen as suggestive of the leaping rhythm of the Goat (*tragos*) Song of the Dionysian *dithyramb*.

The Greeks observed this repetitive beat in the heavens and perceived its seasonal effect on nature. They noted it was the rhythm in the lunar cycle, as well as that of the solar. The moon

was envisioned as moving through four phases, divided into the three-phased (crescent-full, decrescent, and the new, or no-moon-at-all when "the inconstant moon" was dark or absent), each lunar cycle comprising roughly one month. The solar year was conceived in like manner, based on the sun's effect on nature's cycle: spring's birth-growth, summer's coming-to-fullness, autumn's harvest-reaping, and winter's "death."

With the advent of spring at the vernal equinox, nature was renewed and the cycle began again. This cycle was the temporal basis for the Greek trieteric rite of spring, the celebration of the round dance of life, death, and rebirth. It was the celebration of nature's inexorable coming-to-be and passing-away, *ad infinitum*.

The Dionysian rites were performed in the winter quarter. Their culmination was the trieteric rite of spring, when women bore the infant Dionysos in a winnowing basket symbolically divided into three parts. In the wild dance of Dionysos' *maenads*, women recreated the cosmic whirl of chaos, whirling their baskets, the winnowing action casting the chaff to the periphery, while allowing the grain kernel, the precious seed, to remain and to be sewn in the fecund Earth (Gaia). The basket's whirl marked the creation of the cosmos in Anaximander's first cosmic scheme.

The trieteric festivals were biennial events as determined by the dactylic meter of the leaping Goat Dance of the dithyramb, and of the transcription by priests of the *Pythia's* frenzied chants into dactylic-hexameter. Thus, "ONE-two-three, THREE-four-five, FIVE-six-seven" would result in rites in the first, third, and fifth years, constituting the first of three triads of rites culminating in the seventeenth-year rite, and include in its span the eighteenth. This cycle of 8.6 years marked a squaring of the solar/lunar calendars.

The lunar aspect of the trieteric rites suggests they might have been in honor of the moon goddess, Phoebe, third holder of the Delphic seat. This lunar aspect is revealed (the hexagon of geometric forms in Figure 3, below) when the sequence of biennial rites' yearly numbers is taken into account, and the overlaying in the *tetractys* of numerically equivalent geometric shapes is effected.

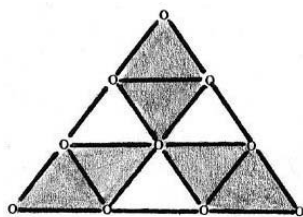


Figure 3. Tri-armed *Tetractys* (© Hector Currie 2004)

Years $1 + 3 + 5$ equal 9. Three two-tiered triangles, superimposed, produce a tri-armed Maltese cross, a rotary symbol, closely akin to the running tri-legged *triskelion*, emblem of Trinacria (Sicily), near Pythagoras' Croton. Years 7, 9, and 11 total 27. There are nine single-tier triangles in the *tetractys*. Thus the *triskelion* prevails in this, the second triad of trieteric rites: Years $13 + 15 + 17$, totaling 45, involve the superimposition of the 9 diamonds (36), the hexagon (6), and the three-tiered triangle (3).

This produces a silver hexagonal disc (the superimpositions having been of segments of the argent heavens), which might be seen as a token to Phoebe, the moon goddess, third holder of the Delphic seat, and as recognition of the 18.6-year squaring of the solar and lunar calendars.

Finally, and most significantly, the Pythagorean *acousma* (catechismal instruction), heard (acoustically) by learners of the sect, clearly states the *tetractys* is the key to Delphi's mysteries. Iamblichus in *The Life of Pythagoras* includes some of these acousmata, including an important one about the Delphic temple, "What is the oracle at Delphi? The tetractys, which is the harmony in which the Sirens sing" (quoted in Bakalis, 2005, p. 18). The Sirens here stand for the planets or crystalline spheres that produce the harmony of the universe.

In the *Tetractys*, 10 (Gk., *tetra*, 'four,' a four-row pyramid of 1, 2, 3, 4 points, totaling 10,) is the key to Pythagoras' cosmic scheme, ten being the perfect number for Pythagoreans. This most sacred number expressed the mysteries of the *kosmos*. To Pythagoras, it represented the universe and the unknown depths of the soul.

There are ten points in the *Tetractys*, and ten heavenly spheres in the Pythagorean Table of Planetary Spheres, as Pythagoras' disciple Philolaus recorded some time after his spiritual leader's oral pronouncements:

1. Counter Earth
2. Earth
3. Moon
4. Sun
5. Mercury - Hermes
6. Venus - Aphrodite
7. Mars - Ares
8. Jupiter - Zeus
9. Saturn - Cronus
10. Stars-zodiac, and the *apeiron*, "The Boundless."

If Counter Earth (placed between Earth and the throne of Zeus at the center of the universe to stop man from looking directly at the godhead) is accorded the prime placement at the *Tetractys*' apex (1), it makes no symbolic sense when paired with Jupiter-Zeus (8), to total 9. When other pairs are so plotted, they also reveal a lack of symmetry and symbolic affinities in the pairings:

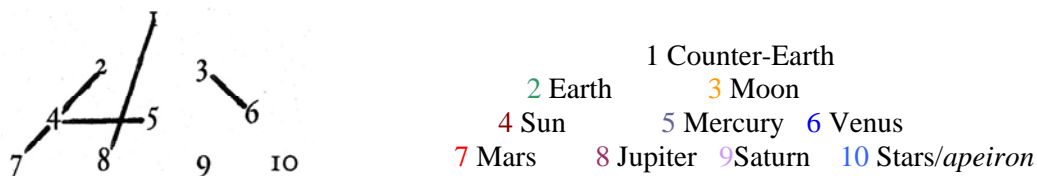


Figure 4. Counter Earth at Apex of *Tetractys* (© Hector Currie 2004)

Contrariwise, place the Pythagorean Central Fire of origin—0 —at the apex of the *tetractys* (which makes eminent sense, the *tetractys* being a diagram of the cosmos and its creation), and there emerges a symmetric pattern, and a symbolic affinity, in the planetary pairings.

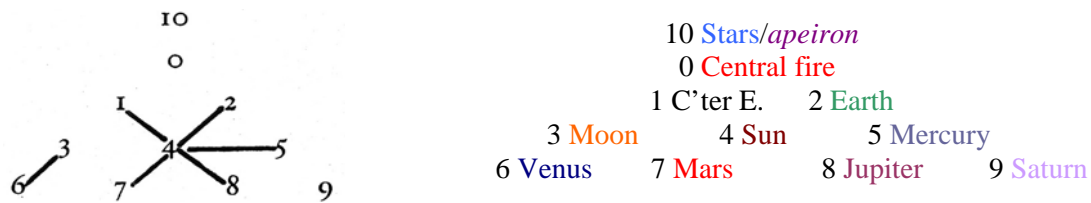


Figure 5. Central Fire at Apex of *Tetractys* (© Hector Currie 2004)

The Central Fire's prime placement at the *tetractyl* apex is symbolically apt, inasmuch as a sacred fire burned at the *thymele*, the altar of Hestia, the hearth of the universe, in the center of the theater's circular orchestra. It stood as a symbol of the ecstatic, generative energies of Dionysos. Further each pairing of heavenly spheres might be noted to total nine to produce a symmetry of design, with Apollo, the Sun, appropriately, in the center, and Saturn—"Time, the governor," per Anaximander's fragment (Diels & Kranz, 1951, as cited in Marlow, 1954, p. 37)—isolated in the *Tetractys*' ninth position.

The Mysterious "E" at Delphi



utexas.edu.classics/chaironeia/Plutarch



penelope.uchicago.edu/plutarch

Figure 6. Plutarch (Mayer, 1997)

Figure 7. Roman Amulet (Plutarch, 2006, note 6)

Plutarch (2006), a Delphic high priest, (Figure 6) in "On the 'E' at Delphi" asked rhetorically, "What is all this to Apollo?" His response, "Much, we will answer, not to Apollo only but also to Dionysus, who has no less to do with Delphi than has Apollo." Then, remarkably, he revealed the secret of secrets, that the divine is unified despite the fractured perceptions of humanity. He characterized the different perspectives of human beings. Theologians assert that "the God subsists indestructible and eternal...and passes through changes of his person; at one time he sets fire to Nature and so makes all like unto all, at another passes through all phases of difference — shapes, sufferings, powers — at the present time, for instance, he becomes 'Cosmos.'" The "wiser people" call him "'Apollo' from his isolation [and] 'Phoebus' from his undefiled purity." Other changes they describe metaphorically as "rendering and dismemberment" and call the God

by different names, “Dionysus or Zagreus or Nyctelius or Isodaites” and construct “riddles and tales to match the changes.” The God offers a prescription for this confusion, “the phrase ‘KNOW THYSELF’ seems to stand in a sort of antithesis to the letter ‘E’,” a consecrated letter in the Delphic temple, “and yet, again, to accord with it. The letter is an appeal, a cry raised in awe and worship to the God, as being throughout all eternity; the phrase is a reminder to mortal man of his own nature and of his weakness.”

Regarding the Roman amulet (Figure 7), C. W. King perceptively noted, “The symbol, which is preserved to us by amulets, was indeed similar in shape to the lunar ϵ but then that character was unknown before Imperial times. In all probability it was an Indian cast mark; and imported like the Swastika or Fylfot, and many other Indian symbols, in prehistoric times” (as cited in Plutarch, 2006). The first impression of the amulet is of a circular “C” with a horizontal arrow through the aperture toward, if we are to believe Plutarch, the Cosmos. This brings to mind the Vedic *Shiva's* male member mythically projecting beyond infinity. For, at the spring equinox, as well as the meridian at midnight, the “far-darting” arrow of Apollo (and Sagittarius) is projected from the center of Dionysos’ sanctuary (building XXXI), and soars, bearing the spirit of initiates toward the Pole Star at the center of the celestial whirl, and beyond beyond, to the boundless *apeiron*.

While the angularity of its arrow-form is unlike the Greek epsilon, the mysterious “E” at Delphi may be read as a stylized arrow form “E.” This arrow form directs the powers of hermetic wisdom (Mercury-Hermes) from the Sun (*Phoebus* Apollo) in a recognition of feminine (*Pythian*) intuition toward the reflective lunar sphere (Phoebe). Dirghatamas identified the sun with the pole star, which ties in to the trieteric rite of Dionysos at Delphi, where it is envisioned as the target for Apollo’s far-darting arrow transcendently bearing the spirit “beyond beyond.” Thus, from a high priest of the Delphic Oracle we have it: the vernal trieteric rite of rebirth/renewal of nature is Dionysos’; his, the mystery of the spirit’s transcendence.

Transcendence: The Key to Equipoise Between Apollonian Order and Dionysian Ecstasy

Delphi is famous as the seat of Apollo, the god of reason, of limit. The Delphic motto is “Know thyself,” the stern injunction inscribed at its temple portal. Delphi is also home to Dionysos, the god of instinct, of un-limit, the boundless *apeiron*. Somehow the two gods, so seemingly opposed at a fundamental level, gained here, at the center of the cosmos a mysterious equilibrium of force-counter-force, of materiality contra immateriality, of Being contra Non-Being.

Transcendence is the key to the tragic dithyramb of the god of frenzied ecstasy, Dionysos, the god who dies to be reborn in the trieteric rite of spring: *tri*-(three), *e*- (from) *ter*- (three) equals zero, i.e., is of non-existence. Transcendence is also the key to the “far-darting” arrow of the god of order, Apollo; the key to one, and none—freed from the confines of space and time, transcendent.

The mundane world was largely unaware of this balance of psychic forces at Delphi’s cosmic center. The Pythagorean code of secrecy saw to that. Though there is a celebration of

transcendence in Sophocles' Oedipal trilogy at the end of the Classic Age, the Hellenistic age which followed the Classic lost the great age's high tragic vision.

With the advent of Hellenistic moralism in the 300's BCE, the free spirit of the transcendent nature philosophy of Pythagoras was replaced by judgmental strictures. Nature philosophy's preoccupation with the abstract, with creation and "cosmogony," with the foundation of existence (and non-existence), was replaced with worldly concerns about order and equity in the affairs of man, and with moral concerns affirming the good and castigating evil. The boundless, the limitless, was classified as evil; limit, as good, in the Pythagorean Table of Opposites. Limitlessness was associated with the void. This, Aristotle could not abide, declaring, "Nature abhors a vacuum."

The *apeiron* was dismissed out of hand without a counter argument; the transcendent was soon forgotten. For some two millennia the *apeiron* has largely vanished from public consciousness. As of 2005, no English dictionary (except Klein's, 1966, *Etymological*) so much as lists the term, though it is the title of recondite scholarly journals of archeology and advanced physics. Yet it was at the very heart of Pythagoras' philosophy of nature. He placed it at the pinnacle of his sacred *Tetractys*. The *tetractys* is Pythagoras' key to the mystery at Delphi, its "root and fount," as his *acousma* (oral teaching) declared (as cited in Iamblichus, 1986/1818, p. 87).

The anonymous Homeric Hymns attributed the design of the Delphic *temenos* to Apollo ("To Pythian Apollo," 1914, ll.254-276, p. 343), which seems but a mythic fantasy. Yet, it is inconceivable that Pythagoras could have established the basic coordinates of the centers of Apollo's temple and Dionysos' theater, orienting toward the northeast, rather than, as with temples in the East and West, facing due east to greet the equinoctial rising sun.

When Apollo wrested control of the Delphic seat, it had a long mythic past, having been the domain successively, of three goddesses: Gaia, Themis, and Phoebe. Apollo imposed a masculine order on the sacred site. Yet, before Apollo, Themis, the goddess of justice and of the thrice-ploughed field, gave form to the Pythagorean *Tetractys*, which brought tri-form order to the oracle at Delphi. Gender issues aside, one can only surmise that the Homeric Hymns spoke the truth: Delphi is the mythic seat of cosmic mystery of Apollo, the god of order ("To Pythian Apollo," 1914, ll. 179-181, p. 337).

The Greek and Vedic Gods of Nature

To understand Delphi is to grasp its transcendent purpose. Its roots go deep into the Greek consciousness before the Anaximandrian breakthrough to the Boundless, deep into the realm of myth involving the gods of nature, both Greek and Vedic.

The three original holders of the Delphic seat were feminine: first Gaia, the earth goddess, followed by her daughters, Themis, the goddess of justice and of the thrice-ploughed field, and Phoebe, the goddess of the tri-phased moon (Kingsley, 1995, p. 46).

Sita, the Vedic goddess of the furrow (Frawley, 1992, p. 242). She would appear to be the Indian counterpart to the Greek goddess Themis, second holder of the Delphic seat and "goddess of the thrice-ploughed field," order-bringer to the sacred Pythagorean *Tetractys*.

The Vedic god *Vishnu*, the sun god, relates to Delphic *Phoebus* Apollo, the Greek sun god; in the trieteric rite of Dionysos, the sun is identified with the pole star, envisioned as the bull's-eye target for Apollo's "far-darting arrow," transcendently bearing the spirit beyond beyond.

The Greek-Vedic conceptual connection is evidenced by the Greek *Seven Adyta* of Pherekydes coinciding with the Vedic seven chakras. *Chakra* (in Sanskrit disk or wheel) signifies one of seven energy centers or levels of consciousness. The seven chakras are associated through yoga with the Hindu god *Shiva*, god of destruction and rejuvenation (Mallinson, 2007, p. x).

The similarities between the Greek and Indian pantheons was known in ancient times.

The Greeks explained the similarities in the cults of Shiva and Dionysos by a journey of Dionysos to India.... According to Diodorus, it is due to the memory of his expedition to India that the Boetians, the other Greeks, and the Thracians, instituted trieteric sacrifices to Dionysos. (Danielou, 1992, p. 38)

And this was not the only influence. According to Martin West (1971):

It was the very extravagance of oriental fancy that freed the Greeks from the limitations of what they could see with their own eyes, led them to think of ten-thousand year cycle ... of an infinity beyond the visible sky and below the foundations of the earth, renewed ... aeon after aeon (p. 67).

The Roman Twilight of the Gods of Nature

The Roman twilight of the gods marked the period of Rome's slow decline from its zenith architecturally, with the dedication in 125 CE of that marvel of Roman engineering, the Pantheon. Rome reached its nadir with the death of her last pagan (i.e., believer in the Greek pantheon of the gods of nature enshrined at Delphi), Emperor Julian, branded The Apostate. The Roman twilight also marked the slow fading of the light emanating from the Delphic Oracle. And with the Pythia departed the balance of the gods of nature, Apollo and Dionysos. We examine this slow fading of the light of pagan Rome and Delphi, in the person of the two Roman emperors who embraced the Greek nature gods and their mystery. We will trace the Roman sun's rise to its heights, and its decline into the darkness, which ultimately enveloped the Delphic flame. In 390 CE the flame at Delphi was demolished by the order of Emperor Constantine.

Hadrian's Visionary Pantheon

The Emperor Hadrian was committed to a distinct vision of Greece as a sacred land. In 120 CE, he

began designing a Pantheon reminiscent of Greek temples.... The rotunda's internal geometry would create a perfect sphere, since the height of the rotunda to the top of its dome would match its diameter ...[its] height to match its diameter, 142 feet (43.30 m). At its top, the dome would have an oculus or eye, a circular opening, with a diameter of 27 feet (8.2m), as its only light source. Hadrian said, "My intentions had been that this sanctuary of All Gods should reproduce the likeness of the terrestrial globe and of the stellar sphere...The cupola...revealed the sky through a great hole at the center, showing alternately dark and blue. This temple, both open and mysteriously enclosed, was conceived as a solar quadrant. The hours would make their round on that caissoned ceiling so carefully polished by Greek artisans; the disk of daylight would rest suspended there like a shield of gold; rain would form its clear pool on the pavement below, prayers would rise like smoke toward that void where we place the gods." (Parker, 2001, p. 14, original ellipses)

Hadrian's vision was philosophically sophisticated: spheres both "open," yet "mysteriously enclosed," as well as conventionally religious, from which "prayers would rise like smoke." Yet it recovers from this sanctimony and rises to an Eastern metaphysic, attuned to the dimensionless para-cosmos of the Anaximandrian-Pythagorean *apeiron*: "toward that void," and closes with a conventionally pious genuflection: "where we place the gods." One thing is clear: the Pantheon, in Hadrian's soaring imagination, was to be a place of mystery, of transcendence.

The Pantheon, "dedicated in 125 CE, gave expression to Hadrian's vision that all the gods were manifestations of a singular, but complex energy" (Lambert, 1960, p. 71). Contemporary "Theory of Everything" (TOE) physicists would commend Hadrian's insight and foresight. He was two millennia ahead of his time in a quest for the holy grail of quantum theory: the "Grand Unifying Theory" (GUT) of everything—and nothing.

Hadrian's Contemplative Maritime Theatre

Hadrian's Maritime Theater at Tibur's wall is a 142-foot circle. "Its reflective pools were created, it is said, to observe the star-filled heavens" (Heebner, 2000). Begun in CE 126, Villa Adriana offered Hadrian a refuge. He would often withdraw to this circular house surrounded by a moat to sit in deep contemplation of the star-girt sky.

The central triad of columns, reflected in the still waters of the lunette pool, framed one zodiacal constellation oriented toward the Pole Star round which wheeled the firmament, and—in the constellation of the Eagle—the star he had named in memory of Antinous, beloved member of his entourage. Here, might not Hadrian, in the center of his mirror-pond, as the stars turned about in their course across the night sky, have sought to transcend time that he might recover his youthful ideal?

Hadrian's desire ruled him as he sought the center in the void. Might he have sensed the pulse of Being-Non-being, the passion, the "arc of desire," of the *Creation Veda*, in the star of Antinous shimmering in the dark waters?

In the Greco-Roman world [Antinous] was ... frequently assimilated with the Hellenic equivalent of *Osiris*, the god Dionysos, who had suffered, died, been reborn and subsequently brought fecundity to the soil. It was with Dionysos that Antinous was to be linked throughout the empire. It was this infusion of oriental energy, mysticism, and transcendence . . . that gave belief in Antinous a deep and wide appeal ... in the second century and later. (Lambert, 1960, p. 188)

Might not Hadrian have envisioned Dionysos' sanctuary as the launch site, at the very center of the Greek cosmos, for a rite of trieteric transcendence bearing Antinous' aspirant spirit to—and beyond—the Great Unknown? Might he not have envisioned his own spirit, in the proper time, joining that of Antinous, borne by the same arrow?

Hadrian attempted to revive the national consciousness of the Greeks by making Delphi the main pan-Hellenic center, but was unsuccessful, due in part to Spartan resistance (Birley, 1997b, pp. 220-221).

Hadrian was, however, given the title of honorary magistrate (*archon*) in Delphi at least twice (Dempsey, 2003/1918, p. 178), and by a declaration naming the days of his visit as an ongoing religious holiday (Birley, 1997a, p. 187). Plutarch erected a statue at Delphi to celebrate Hadrian's ascension to the emperorship of Rome (Birley, 1997a, p. 169).

Emperor Julian: Champion of Free Thought

Emperor Julian's philosophy was, like that of Anaximander, Pythagoras, and the *Vedic* seer of the *Creation Veda* X.129, a philosophy of exaltation. Emperor Julian (1793) in oration to the “Sovereign Sun,” exalts Apollo the sun god, opening his dedication with “The Sun's resplendent deity I sing / The beauteous offspring of almighty Jove” (p. 35). In the oration proper, Julian establishes the universal nature of his insight into Apollo's power, addressing the oration to all “who breathe or creep on earth,” quoting Zeus from the *Iliad* (p. 39). He noted the sun's power to divide “the zodiac into twelve powers of god” and connected the god of the sun with the god of wine, noting that Bacchus “is said to obtain a common kingdom with the sun” and completing the thought by noting the unity of the godhead, “But why should I here mention the epithet Horus, or other names of the gods, all of which correspond with the divinity of the sun?” (p. 74). This connection between Apollo and Bacchus recalls Plutarch's (2006) comment that Dionysus “has no less to do with Delphi than has Apollo.” For Julian, Apollo is central to his existence, having “*generated my soul from eternity, and rendered it an attendant on his divinity*” (p. 92, original emphasis). And he closes with an entirety to “the sun, the king of the universe” to “impart to me a good life; more perfect wisdom; a divine intellect” and a desire to “ascend to his divinity, and abide with him, if possible, in perpetual conjunction” (p. 95).

This invocation has resonances of the cosmic extension of Iamblichus' (2000/1911) treatise, *On the Mysteries of Egypt*, in which he sought to explain the relationship between the divine order and the rites and ceremonies used to influence and affirm that order on earth. Iamblichus discussed the planting of phallic images as “representing of the procreative power by conventional symbols, and that we regard this practice as an invocation to the generative energy of the universe,” which were consecrated in the spring “when all the world is receiving from the

gods the prolific force of the whole creation” (chap. 4). The translator, Alexander Wilson, in a footnote claimed “the custom here described was universal in ancient times, and it is still found in parts of India” (note 4). The universality of such a custom supports Iamblichus’s point that “the gods have one common essence” and “comprehending their essential being as divine, they govern the whole sky by one infinite energy” (chap. 4, “The Gods Have One Common Essence” section). Holy rites performed by human beings copy “the order of the gods” and everything is accomplished by a sole Divine Cause, which is so far remote from passive conditions that no reasoning faculty can reach to it (chap. 4, “Classification Rejected” section). He then noted that those “who are unable to acquire the deeper knowledge of the reasonings themselves, yet who imagine themselves able, are entirely carried away by their own peculiar human emotions, and form their judgment of matters relating to the gods from things incident to themselves” (chap. 4, “Classification Rejected” section).

Here, amid a Roman culture about to collapse into sectarian anarchy, rooted in a human tendency to respond to misunderstanding the divine, an ill-omen of the Dark Ages soon to descend on the West, came a call for cosmic transcendence.

Julian's Call to Freedom

As emperor, Julian was a man of his word. On February 4, 362 CE, he shocked the Christian-Roman and "pagan-heathen" world with the issuance of his "Edict of Religious Toleration." In this edict, he extended to all citizens the benefits of religious freedom.

Edward Gibbon (2004), in his classic study, *History of the Decline and Fall of the Roman Empire*, saw the import of Julian's visionary call to freedom. “The only hardship which he inflicted on the Christians, was to deprive them of the power of tormenting their fellow [Roman] subjects, whom they stigmatized with the odious titles of idolaters and heretics” (p. 436).

Gibbon (2004) later presented a prescription for world survival that our planet, given to self-righteous zeal, ignores at its peril in this time of the insidious threat of terror: “Philosophy alone... is able to eradicate from the human mind the latent and deadly principle of fanaticism” (p. 559).

[These] ancient psychologies had their last official recognition in the waning days of the Roman Empire, before their violent suppression by almost two millennia of monotheistic dogma. But, before Nature philosophy's light was snuffed out, the flame on Delphi's altar burned, if only in spirit, but briefly, under the aegis of the much anathematized visionary Roman emperor, Julian. (Athanasiasi-Fowden, 1981, p. 145)

The Boundless in the Arts

At this point we shift from a focus on nature philosophy to a broader consideration of its inspiration of works of high dramatic art and scientific advancement. The expression of the mystery beyond the Boundless is often found in great works of art. It might be suggested there is a deep connection between the furthest reaches of philosophical thought and works of art that

probe the utmost reaches of theoretical speculation. Indeed, this scientific/aesthetic symbiosis would appear to have been the mark of the great age of dramatic art.

For example, Shakespeare's *Hamlet* was being written (in 1600 CE) while the visionary monk, Giordano Bruno, was being immolated on a fiery pyre in Rome's Field of Flowers for proposing a boundless universe in contravention of the narrow dogma of the religious hierarchy. Aesthetics and science meet on common ground in ages of inspired vision. This is borne out by the awakening in the minds of leading contemporary visionaries of science, as evidenced by the soaring spirit of Erwin Schrodinger (1996) in his *Nature and the Greeks*:

The scientific world-picture vouchsafes a very complete understanding of all that happens—it makes it just a little too understandable. ...[For] the purpose of constructing the picture of the external world, we have ...[cut] our own personality out ...[as] ostensibly not needed. This is reason why the scientific world-view contains of itself no ethical values, no aesthetical values.... Science cannot tell us a word about why music delights up, of why and how an old song can move us to tears. (p. 96)

Greek nature philosophers recognized that psychic ecstasy was essential to the creative process. The Romantic scholar, Goethe (1949/1848), recognized this psychic experience. He wrote in his *Autobiography* of daemonic energies: "A tremendous power issues from them, and they exercise an incredible dominion over all creatures, indeed, even over the elements, and who can say how far such influence will extend."

This brings to mind the Vedic *parabrahman*, the formless chaos before creation. In original chaos, the cyclic rhythm of life is transcended by the hero when matter emerges from primal chaos—when it is cleaved from the state beyond being, beyond knowing. Such a fusing of oppositional creative and destructive forces is to be found in the dance of the androgynous Hindu god, *Shiva*, fusing "his" male with "his" female power, *Shakti*. In their dance, light and darkness coalesce in a world-creating (and destroying) cosmic shadow play. "The unlike is joined together, and from differences results the most beautiful harmony, and all things take place by strife" (Heraclitus of Ephesus, 2001/1899, part 46).

Contrast such Eastern wholeness with the Western world's *agon* between light and dark, in which the dark is vanquished and ultimately banished by light. This East/West dichotomy was not always so. As we saw in the philosophy of Anaximander and Pythagoras, during the all-too-brief period of pre-Socratic enlightenment, the light of the East penetrated the West.

Transcendent Order in Sophocles' *Oedipus*

The age of Greek high tragedy began within a century of Pythagoras' passing (c. 490 BCE) with the performance of Sophocles' Oedipal trilogy, culminating in his *Oedipus at Colonus* (completed 406 BCE.). Produced in 401 BCE by his grandson after Sophocles' death at the age of ninety, *Oedipus at Colonus* was the playwright's last work and it celebrated the hallowed place of his birth, Colonus. The sacred and transcendental geometric schema of Delphi can be discovered here in the works dramatic form and moving imagery.

Sophocles (1939) has the chorus urge Oedipus to “make expiation to these divinities whose ground you violated when you came” (p. 105). Oedipus asks for clarification of how he should seek this expiation, and the chorus instructs him to “bring libations from the spring” and “Facing the quarter of the morning light, pour your libations out ... in three streams. (p. 106). He is then instructed to “Lay three times nine young shoots of olive on” the spot where the earth soaked up the libations “with both your hands” and repeat the prayer, “That as we call them Eumenides, which means the gentle of heart, may they accept with gentleness the suppliant and his wish” (p. 107).

Recall that 27 (3 x 9) is the ratio of the sun's wheel of fire to the breadth of disc-shaped Earth in Anaximander's first cosmic scheme. Numerologically, 27 (2 + 7) is nine, the fateful penultimate number of Saturn (ruler of time) in Philolaus' Pythagorean Table of Planetary Spheres. Time, according to Anaximander's fragment, governs all (McEvelley, 2002, p. 31) and in the eternal round occupies the penultimate position before completion of the decad (10). Therein, the sphere of stars is transcended, the Boundless, the infinite, *apeiron*, is attained.

Numeric symbolism pervades *Oedipus the King*. In Jocasta's fateful assumption that the Delphic oracle was erroneous, we see that its prophecy points to the fateful number three. She says that Laius was killed “where three roads meet,” and that “before three days were out after” Oedipus' birth “King Laius pierced his ankles, cast him forth on a pathless hillside” (Sophocles, 1991, p. 41-42).

The following geometric schema, put forward by the chorus in *Oedipus at Colonus*, is most interestingly suggestive of Oedipus' apotheosis and symbolically pins down the four-quarter cross of Nature's fury:

CHORUS:

Think of some shore in the north
 Concussive waves make stream
 This way and that in the gales of winter:
 It is like that with him:
 The wild wrack breaking over him
 From head to foot, and coming on forever;
 Now from the plunging down of the sun,
 Now from the sunrise quarter,
 Now from where the noontime gleams,
 Now from the night and the north.
 (Sophocles, 1939, p. 146)

Imagery of waves breaking over Oedipus extend the theme of Nature's fury in *Oedipus at Colonus*:

Oedipus to Theseus:
 I'll lead you to the place where I must die;
 But you must never tell it to any man...
 These things are mysteries not to be explained. (p. 158)

O sunlight of no light! Once you were mine!
 This is the last my flesh will feel of you;
 For now I go to shade my ending day
 In the dark underworld.
 (Sophocles, 1939, p. 159)

Here, we have the gnosis, or mystic knowledge, at the heart of the mystery of transcendence: in light there is darkness. In the darkness following the blinding light, as Nietzsche (1999) remarked, we see the dark after-image of the sun (p. 46).

This is the secret to tragic *anagnorisis* (discovery, enlightenment, revelation) as seen in *King Lear*, when the dark secret is revealed to the blind Gloucester on the hearth: "I stumbled when I saw" (Shakespeare, 1974, IV.i.19).

Below, Sophocles (1939) in *Oedipus at Colonus* gives full recognition to the inexorable force countering the Mind's limiting reason, and the thrust of Dionysos' transcendent abandon: ecstasy.

MESSENGER:

It was not lightning,
 Bearing its fire from Zeus, that took him off;
 No hurricane was blowing.
 But some attendant from the train of Heaven
 Came for him; or else the underworld
 Opened in love the unlit door of earth.
 For he was taken without lamentation,
 Illness or suffering; indeed his end
 Was wonderful if mortal's ever was. (p. 163)

Antigone, daughter of Oedipus' incestuous union with Jocasta, explained to the chorus what has become of her father, describing it as a "bewildering mystery" (p. 164):

It was not war
 Nor the deep sea that overtook him,
 But something invisible and strange
 Caught him up—or down—
 into a space unseen. (p. 164)

Oedipus, whether conducted to the underworld by an escort sent by the gods or swallowed by a fissure in the earth, transcends the antagonistic forces of the psyche, of very existence. With *Oedipus at Colonus*, morality is transcended in a sublime psychic fusion affecting the hero's apotheosis. The antagonism at the heart of the world—the psychic split in the tension between suffering-restraint and joy-release—is resolved. The cosmic wound, incurred when matter and energy separated from original chaos, is healed. The tragic hero's profound nostalgia is to attain the beyond, the chaos beyond creation—to transcend existence.

This mystic longing has been brought to modern Western attention by an influx of Eastern philosophy. Karl Shapiro (1960) observed this regard in "Cosmic Consciousness:"

It appears that in the twentieth century we have reached the point at which Oriental "ways of life" are about to penetrate the West. At the same time it appears that science has reached that frontier at which it meets up with what is called mysticism. The deep vein of mysticism has been opened again, and the age of pure rationalism seems to be on the wane. A tremendous synthesis is in the making between modern science [and] the ancient psychologies of the past. (p. 29)

Symbolic Significance of the *Periaktoi* Flanking the Stage at Delphi

Having considered the profound symbolic depth of vision of the great age of Greek high tragedy, let us explore the symbolic significance of the literal stage, on which the tragic vision was physically realized. It is generally believed Anaximander introduced, among other technological advances of the Persians, the *gnomon* (sundial) to Greece, having set one up at Sparta to mark the vernal equinox and the passing of the hours. The Theater of Dionysos at Delphi was both a sundial marking the diurnal round of the sun, and a zodiacal calendar, marking the yearly round of the sun and the firmament. (Figure. 8)

Two *periaktoi* were believed by many theater historians to have flanked the Hellenistic stage, marking changes of scene. However, by carefully considering the etymology of *periaktoi* (from the Greek, *peri* meaning "round" or "beyond; and *aktoi* meaning "rays") we see that rather than being simply a visual aid to help the audience follow the action, the *periaktoi* were markers of "round" of time.

By day, they served as a clock, marking the passage of the sun's rays from sunrise (red dotted line) to high noon (blue dotted line), aiding the priestly morning ritual preparation leading up to the performance of the tragic trilogy and the satyr play afterpiece. By night, they were a zodiacal compass. At midnight, the stage-left *periaktos* lined up for the spirit's flight from the mystic launch site in the center of Sanctuary XXXI.

The *periaktos* lines up along the meridian (blue dotted line) through the fire altar of Hestia in the orchestral center, to the Pole Star, and beyond beyond, transcendently, to the *apeiron*. Building XXXI, with two sets of steps leading up from it to the theater, was the sanctuary of the god of nature, Dionysos.

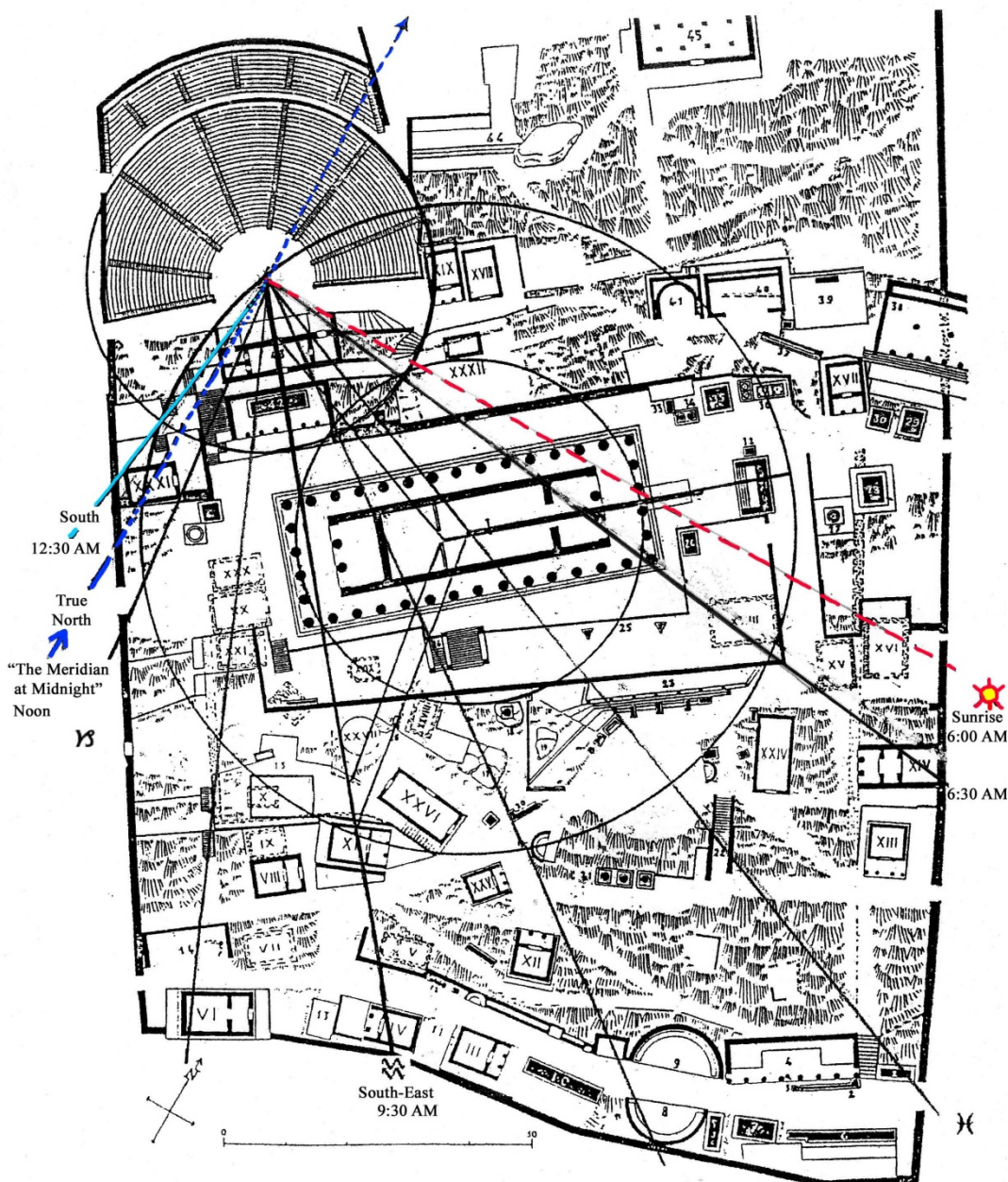


Figure 8. Periaktoi Lines up Along the Meridian Through the Fire Altar of Hestia (“Themenos of Apollon in Delphi,” Coste-Messeliere, 1936, foldout)

At Delphi, the year was quartered when Apollo sojourned in the hyperborean North and Dionysos rejoined his mother, Semele, in the *omphalos* within the temple for the winter quarter. In the same manner, the day was quartered at the vernal equinox, marking the trieteric rite of spring. At this time of renewal, the day was quartered in the Delphic theater of Dionysos, of the god triadically divided in the trieteric rite, within the sacred precincts of Apollo and of Dionysos.

Thus, at high noon, as the hero fell, having retired within to face his fate, the sun was aligned along the meridian running through the center Sanctuary XXXI, the seat of the dying (to be

reborn) gods, Dionysos. The sun also aligned with the orchestral center's fire altar of Hestia, goddess of the hearth of the universe, marking the apotheosis of the tragic hero. A half-hour after noon, on the completion of the Dionysian satyr play afterpiece, the *periaktos'* shadow lines up with the western corner of the god of the theater's (Dionysos') Sanctuary XXXI's roof, marking the completion of the satyrs' half-hour comedic revels of renewal.

At the midnight ceremony of the vernal equinox — the soul of the initiate was then borne beyond the dark of night, beyond time, beyond space into the astral firmament.

The Ultimate Tone: The Sound Not Heard

As we draw to a close in this discussion of the Delphic Temple and Theater, it is significant to note the complex has a deflection of 7.5 degrees (light blue line Figure 8) — 1/12th the 90 degree gravitational fall of all existents, the inexorable gravitational angular factor in physics at which a top falls. It is, as well, the gravitational factor in music theory (as in the Pythagorean "Harmony of the Spheres") in the 12-tone scale's octaval fall.

The ultimate placement of the Boundless, *apeiron*, at the pinnacle of the sacred *tetractys* testifies to the trieteric rite's profound reach beyond the empyrean. German musicologist Hans Kayser (1970) was startled to discover in his analysis of the Pythagorean Table of Tones, the ultimate tone is "the sound not heard." This is the sound of silence—the void is from whence all came, and to which all shall return.

In the perennial philosophy of nature, this gravitational descending glissando of all that exists symbolizes the stark imperative of Anaximander's fragment: Each must pay restitution for its existence according to the dictates of time. The revels over, the seed of Dionysos inseminates the womb of Gaia/Earth, first holder of the Delphic seat. The course of Phoebus Apollo above her in summer's heat is to herald nature's autumnal bounty. Nature philosophy, though born of tragic awareness, is a philosophy of Emersonian hope, of transcendence, a transcendence the Sage of Concord mystically sensed in creation's infinite symmetries—and in the ineffable Mystery of Nature emanating from deep within the sacred stones of Delphi.

Yet, Hans Kayser (1970) wrote *Akroasis* with "the note not heard" in the harmony of the spheres, the thirteenth overtone commencing the new octave, the spirit mystically attains the apex of the sacred *Tetractys*. And in the trieteric rite, the winnowed seed of infant Dionysos falls to the womb of Gaia/Earth, there mystically to strike the fire of rebirth at the altar of Hestia, "Hearth of the Universe," in the center of the theater of Dionysos. Then, in the mystery beyond knowing, the spirit of the initiate gains release from the wheel of Being, vaulting, transcendentally—beyond the Pole Star—beyond the Boundless *apeiron*, "beyond beyond"—in the mystery of *paranada*, which comes from the Sanskrit and conveys a sense of "the soundless sound" beyond creation ("Soundless Sound," 2008).

Shakespearean Transcendence

When sun, at noon, had aligned along the meridian, Dionysos was in the center of his sanctuary and Hestia was at her central fire of creation altar in the center of the god of ecstatic

release's theater orchestra. The day had been quartered, as the year had been quartered in the Delphic temple, Dionysos intimately rejoined his mortal mother, Semele, for the winter quarter within the *omphalos*.

Then, at high noon, beneath Apollo's solar glare, as in the midnight dark of the *Trieterica* rite, as the meridian passed through the center of Dionysos' sanctuary (signaling the fall of Fate's decree on the tragic hero) and the still point in the celestial whirl obscured by the solar disc's blinding glare, and the Boundless *apeiron* rang with the "sound of silence," the Harmony of the Spheres — at this culminatory moment Oedipus vanished.

In contemplating the heights of high tragedy that realized the transcendent vision, my thoughts naturally turned to the master of tragic form, Shakespeare. Could Shakespeare have been aware of Sophocles' masterwork, *Oedipus at Colonus*? Was it in English translation, and if so, had he access to it? It seems unlikely, but according to John Harvey (1977), it was entirely possible. Yet, might he have sensed, at the climax of Sophocles' *Oedipus at Colonus*, the tragic hero's apotheosis?

The inspired vision of Edouard Schure (1918) pointed the way on this journey into the unknown when he asserted, "Observation and reason are not sufficient. In addition to and above all else is intuition" (p. 114). Pythagoras sought to develop intuition in his students and initiates (p. 49); and intuition was at the root of his efforts to revive the mission of the Delphic priests and bring back the art of divination at Delphi (p. 31, 34). And Pythagoras was successful. According to Meletzis and Papadakis (1964), during his year at Delphi he "revolutionized the art of prophecy" (p. vii).

I felt — there's no explaining how — Delphi's "sound-of-silence" extended somehow beyond our "knowing," infusing our very Being, as had Sophocles' profound tragedy of transcendence. Then, the answer came to me: the answer was to be discovered in that other towering tragic masterwork, *Hamlet*.

The "sound of silence" at the climax of Sophocles' *Oedipus at Colonus* is sensed in the dramatic pause in the opening line of Hamlet's deep-probing soliloquy, "To be, or not to be?" and is sensed as well in the fading sibilance of the final word of his farewell to earthly existence: "The rest is silence" (Shakespeare, 1974, III.i.55, V.ii.358).

This suggests the primal silence of *Creation Veda* X. 129: "Then was neither being, nor non-being." And well it might, for the soliloquy echoes its form (if not its substance), "To be, or not to be: That is the question" (Shakespeare, 1974, III.i.55). At this point in the action Hamlet is trammled by "the pale cast of thought," enmeshed in "Words, words, words" (III.i.84, II.ii.192). Horatio's pious benediction at Hamlet's death only contributes more words, "Good night, sweet prince. And flights of angels sing thee to thy rest!" (V.ii.359-360).

An unkind fate had seen to it that Hamlet had long since moved far beyond such pious homilies, "There are more things in heaven and earth, Horatio, than are dreamt of in thy philosophy" (Shakespeare, 1974, I.v.). Our tragic hero has faced the Great Unknown, and accepted Fate's decree, as is clear from his final utterance, "The rest is silence" (V.ii.358). Given

Hamlet's complex nature, it is hard to believe that "rest" is to be taken as an allusion to the sleep of the just, to death's repose, as in Horatio's all-too-conventional resort to a heavenly hereafter. Rather, it would seem to suggest a line from earlier in the play when Hamlet confronts the ghost of his father, "We fools of nature... with thoughts beyond the reaches of our souls" (I.iv.56) are here in an encounter with the spirit's destiny, we are engaged in a mystic transport to, and beyond, the "undiscover'd country"—and to its ineffable silence (III.i.78).

The finding of a kindred transcendence in Oedipus and Hamlet may seem wondrous and strange: Yet, closing *Hamlet* on "silence" suggests a mystical, deep, profound, Sophoclean vision. Upon reflecting on Shakespeare's works, a Sophoclean-Shakespearean connection, tenuous though it may seem, emerges. It appears in, of all places, his frothy satire on philosophic obfuscation, *Love's Labour's Lost*.

The play is a witty bagatelle, as its title suggests. The title is an all too clever alliterative play on the seductively lingual "L," the twelfth letter, numerologically reducible to 3, repeated thrice. Thus we have 3 x 3—*voilà!*—the ubiquitous number nine, the fateful number of Anaximander's inexorable controller, time.

Love's Labour's Lost was first performed in the late 1590s, a mere decade after the visionary friar, Giordano Bruno, had sojourned (1583-1585) into the heady intellectual atmosphere of London's Inns of Court. There he had charmed such literary luminaries as Raleigh, Sidney, and Fulke-Greville with his "heretical" philosophy of an infinite cosmos. Such was the ripple he created that it has been proposed by Dorothy Waley Singer (1950) that Shakespeare fashioned the play's witty *raisonneur*, Berowne—an early *Hamlet* if you will—on Bruno (p. 249).

In 1600, between *Love's Labour's Lost* (c. 1595) and *Hamlet* (1601), there transpired an event of cataclysmic moment: Bruno's fiery death for his intransigent philosophy of transcendence. It must have shaken Shakespeare. How could it not? While the reed of connection between Hamlet and Bruno is slender, a reed it is nonetheless. There is more than a trace of Hamlet (and of Pythagoras, as well, for that matter) in Berowne of *Love's Labour's Lost*.

Let Dorothea Waley Singer's perceptive biography and the text of *Love's Labour's Lost* make the case. Commenting on Bruno's heroic frenzies, Singer (1950) stated what could be considered the theme of the play: "Bruno exalts the love of philosophy above that of woman" (p. 36)

According to Singer (1950), "The whole of Bruno's philosophy is based on his view of an infinite universe with an infinity of worlds. He conceived the universe as a vast interrelationship throughout space and time, comprehending all phenomena, material and spiritual" (p. 50) For Bruno, wisdom is at the center of this philosophy, she quoted his valedictory address at Wittenberg University, which is a "paean of praise of Wisdom:"

If all things are in common among friends, the most precious is Wisdom. What can Juno give which thou canst not receive from Wisdom? What mayest thou admire in Venus which thou mayest not also contemplate in Wisdom? Her beauty is not small, for the lord of all things taketh delight in her. Her I have loved and diligently sought from my youth up. (p. 59)

Singer sees Bruno as a kind of a prophet for the changes in the conception of reality later developed by Johannes Kepler and Rene Descartes,

by which discussion of the nature of material reality yields place to the conception of an Order of the Universe. For Bruno's passionate assertion of the infinity of space was not merely denial of boundary. He conceived Infinite Space as the field of all motion, the vehicle of an Infinite Power which is the expression of the Infinite Life of the Universe. (p. 88)

In this conception of the infinite, Bruno struggled against Aristotle's arguments against the void, seeing no "distinction between the three infinities of Space, Time and Matter. They merge into one another as does his conception of Infinite Space, Nature and the Infinite World Soul" (p. 89). This "World Soul" for Bruno is "an infinite continuum in which all things partake; yet in another sense discontinuous and divisible and even (on the analogy of number though not with unvarying consistency) infinitely divisible" (p. 91).

The appreciation and understanding of the Boundless, the infinite universe of Bruno's conception, is far more precious than mere human love, as Bruno noted when he put the love of wisdom above erotic or married love (Venus and Juno) (Singer, 1950, p. 36). This is the *Love's Labour's Lost's* cosmic premise and its comic purpose. The play opens with Ferdinand, king of Naples, discussing a pact he has made with three scholars to abstain from romantic involvement for three years. One of the scholars, Berowne, resists this condition of the pact, and questions the king.

Berowne: What is the end of study, let me know.

King Ferdinand: Why, that to know which we should not know.

Berowne: Things hid and barr'd (you mean) from common sense?

King Ferdinand: Ay, that is study's godlike recompense (I.i.55-58)

Ferdinand here asserts, as Bruno did before him, that contemplation of the mysteries of the universe pays a divine dividend greater than the rewards of erotic love.

The play closes with a reassertion of the need to understand the great mystery at the heart of existence, and the superiority of this understanding to other forms of human knowledge, "The words of Mercury are harsh after the songs of Apollo" (V.ii.930-931).

According to Malcolm Evans (1975), the precise meaning of the line regarding Mercury and Apollo has never been established, but have "Delphic ambiguity," and "might be expected to bear a more decisive reference to the central thematic considerations of the play itself" (p. 114). "The rhyme of Apollo confronts the reason of Mercury, a faculty ostensibly divorced from the limitations of time, place, and personality, and exposes it for what it is — the instrument of illusion" (p. 118-119). Mercury is linked to writing, and Apollo to "true discourse" greater than that achieved through writing, which Pythagoras had achieved (p. 124). "The Princess and her companions," who are victorious in the play's romantic contest, "stand for the Apollonian world of the play" in contradistinction to the Mercurian males (p. 125). The closing "Delphic aphorism" asserts that there is a mystery to the world that must be understood, but it cannot be

achieved through conventional book learning (p. 127), an assertion that connects with the premise of this article that Pythagoras encoded a conception of the ineffable in the design of the Temple of Delphi.

Berowne is an Ur-Hamlet, Hamlet, a late Oedipus. A few years later after *Love's Labour's Lost* was first performed, Apollo's aetheric arrow bore the sweet prince's spirit beyond the Pythagorean-Berowneian nine of Saturn, beyond time, beyond the reach of gross matter, beyond the stage of the Globe, beyond the circle of Dionysos' theater. Hamlet became transcendent.

Hamlet's question is the quandary all thoughtful mortals must at some point confront, "To be, or not to be, that is the question." Such are the deep thoughts stirred by the Bard of Avon. They put one in the mind of the profundity found at the very inception of deep speculative thought as framed by Dirghatamas in the opening line of the Vedic Creation Hymn, X. 129: "Then was neither Being, nor Non-being."

Transcendentalism in American Art and Thought

The transcendentalist movement in American philosophy reached its zenith in the 1830s with Emerson's publication of his journal, *The Dial*, the title of which referenced the sundial (Ripley, 184). It may have alluded to the sundial-*periaktos* at Delphi.

Frederic Henry Hedge's (2008/1841) "Questionings" closes, with, "Losing still, that I may find / This bounded self in boundless Mind." This deeply moving transcendental aspiration was to be echoed by Emerson in both his "Nature" essays, where he makes an homage to nature's ability to render infinite variety in the world, "All changes pass without violence, by reason of the two cardinal conditions of boundless space and boundless time" (1903-1904a, p. 179). This boundless infinity calls to Emerson as the standpoint from which to observe and meld with the divine:

Standing on the bare ground, — my head bathed by the blithe air, and uplifted into infinite space, — all mean egotism vanishes. I become a transparent eye-ball. I am nothing. I see all. The currents of the Universal Being circulate through me; I am part or particle of God. (1903-1904a, p. 109)

Decades before Emerson wrote, Thomas Paine (1884/1794) proved a prescient revolutionary spirit in transcendentalist thinking. He would have free-thinking spirits venturing courageously beyond the limits of space and time that would trammel the imagination. Paine asserted that the ultimate reality of the universe was beyond knowing because not only is

the power and wisdom He has manifested in the structure of the Creation that I behold is to me incomprehensible, but because even this manifestation, great as it is, is probably but a small display of that immensity of power and wisdom by which millions of other worlds, to me invisible by their distance, were created and continue to exist. (p. 46)

In David Frawley's (1992) more contemporary framing of the age-old challenge:

It is the archetype of transcendence alone which makes man, which allows us to go beyond the manipulations of our environment to awareness, from which alone true and harmonious action is possible. If we cannot get beyond our conditioning, we are only machines or animals, reflections of our environment, in contradiction and conflict with reflections of different environments. (p. 119)

Frawley (2000) further asserted, “The highest knowing is going beyond knowledge” (p. 128).

Vedic Transcendence and Scientific Theory

Modern physics reveals that all matter originated in, and eventually will return to, energy. Atomic theory envisioned energetic action as charged particles schematized in a wave-form pattern. Again, with reference to the transcendent nature of tragedy, this concept seems insufficient: Inherent in wave-form structures is a dualism. Cosmic consciousness transcends all dichotomies of existence — indeed, it transcends existence itself.

In science today we are witnessing a general shift away from the assumption that the fundamental nature of matter can be considered from the point of view of substance (particles, quanta) to the concept that the fundamental nature of the material world is knowable only through its underlying patterns of wave forms. Therefore, when many ancient cultures chose to examine reality through the metaphors of geometry and music (music being the study of the proportional laws of sound frequency), they were already very close to the position of our most contemporary science. (Lawlor, 1982, p. 4)

On the Significance of Zero at Delphi

Perhaps no one has embraced nothing as strongly as the Indians who, [Charles] Seife notes [in *Zero: the Biography of a Dangerous Idea*], “never had a fear of the infinite or of the void.” Hinduism has embedded within it, a complex philosophy of nothingness, seeing everything in the world as arising from the pregnant void, known as Sunya. (Wertheim, 2001, p. 3)

While the numeric symbol for zero (0) came to the West from the Indian and Arabic cultures almost a millennium after Pythagoras, the *apeiron* — The Boundless — was its equivalent. The sacred *Tetractys*, with its rotary *triskelion*, and its apex in the center of Dionysos' theater orchestra (a place for dancing) brings to mind Anaximander's ethereal whirl impelling the generative “breath” of the cosmos from the void. At the *tetractyl* apex-point, the Central Fire, we see a symbol of origin, 0, as well, the tenth celestial sphere, a symbol of Being in the zodiacal rotation of the stars/constellations.

The altar flame at the center of the Delphic orchestra symbolizes the Pythagorean-Philolaus Central Fire at the point of origin. The periphery beyond the orchestral circle, where the chorus whirled, suggests “the Boundless” *apeiron*. Beyond the spheres of Being and Non-being, the boundless *apeiron* may be seen as symbolic of transcendent release. It is in this light that we, like Edouard Schure, may see the ‘0’ at Delphi as the ouroboros, the serpent endlessly swallowing its tail, endlessly coming to be, then passing away. “The ancients represented the course of the stars,

by the winding of a snake; but if this snake was so placed as to have the tail in her mouth, it then represented eternity” (Costa, 2007/1820, p. 4).

The *Vedas* tell us that at time-zero there was no mass-energy in the universe. It was a complete void.

In the beginning there was no mass-energy in the universe because there was no space. Mass-energy is created due to expansion of the universe. The universe cannot expand without creating mass-energy and universe cannot contract without annihilating mass-energy. Thus the universe started with zero mass energy and will end up with zero mass-energy as well. Thus there was no singularity in the beginning and there will be no singularity at the end (Roy, 1999, p. 205)

Beyond the Zero

Nature does not know extinction; all it knows is transformation. Everything science has taught me strengthens my belief in the continuity of our spiritual existence after death. (as quoted in Pynchon, 1973, p. 1)

Part I of Thomas Pynchon's *Gravity's Rainbow* is titled "Beyond the Zero." The title of Pynchon's novel refers first to the arc of the V2 rockets launched on London by the German Wehrmacht. The chromatic arc of the rainbow is a source of delight and yet suggests, as Pynchon noticed, the elliptical trajectory of weapons of mass destruction, of annihilation, of zero. *Paranada* goes beyond the positive/negative quandary to the transcendent mystery beyond knowing. In this regard, a kind letter from Shaikh Llewellyn Vaughan-Lea (personal communication, January 28, 2006) of the Golden Sufi Center at Inverness, California confided, "One of the Sufi definitions of God is 'beyond even our idea of beyond.'"

Early Scientific Thought: Nicholas of Cusa and Giordano Bruno

The thought of Nicholas of Cusa, also known as Cusanus, opened the way for the infinite universes of Giordano Bruno. In his essay "Of Learned Ignorance," (1440 CE), modeled after "On the Nature of Things" (c. 55 BCE) by the Roman epicurean Lucretius, Cusanus challenged the limits of ecclesiastical tolerance. He showed a prevision of the micro/macro-cosmos that modern science is currently exploring, a cosmos of atoms in an infinite void endlessly forming, dissolving, and forming matter. As the outcome of his ardent meditations on the Deity, Nicholas of Cusa (1954) was gifted with a paradoxical vision of a universe whose "center is everywhere; its periphery, nowhere" (book 2, chapter 12).

In the late 1500s, yet another wearer of the cloth, Giordano Bruno, had a caring concept: the universe is infinite. According to Brooke (1991), Giordano Bruno, who was attracted to both the atomic theories of antiquity and to Cusanus' reasoning, became "an advocate of Copernican astronomy, of an infinite universe, and a plurality of worlds...[a position then] considered heretical" (p. 39).

Bruno gave impassioned expression to his vision in *On the Infinite Universe and Worlds*' "Introductory Epistle," wherein he identified Apollo with the Sun:

With whose blood [the Python] he [Apollo] hath dyed the waters of the sea,
 Hath put to flight the Fury that pursued me.
 To thee I turn, I soar, O my sustaining Voice;
 I render thanks to thee, my Sun, my divine Light.
 (quoted in Singer, 1959, p. 248)

According to Singer (1959) Bruno ascended "to heights of mystic exaltation in the apprehension of an Infinite universe" (p. 3). Singer asserted that Bruno understood the limitations of the human mind, but put forward the idea that the humankind could still "yield an apprehension of beauty, of symmetry, of Mind without end" (p. 3).

Bruno felt superior to Copernicus, for whereas Copernicus understood his theory as a mathematician, "Bruno claimed he could interpret the Copernican celestial diagram as a hieroglyph of divine mysteries" (Eliade, 1976, p. 57). The vision at the heart of Bruno's major work: "All life, indeed all Being, he regards as an expression . . . of Immanent Necessity" (Singer, 1959, p. 87).

Hawkins (1983) in *Mindsteps to the Cosmos* describes Bruno's discoveries. Bruno "had written about the boundless size of the cosmos and the immortality of the human soul. He proposed that there might be an infinity of worlds" (p. 218). The good Friar's punishment for his heterodoxy? Burning at the stake. Hawkins noted, "Ten years after the burning, [Galileo] saw through his new telescope what no one had seen before: an infinity of stars" (p. 219). Galileo's infinity was Bruno's infinity. According to Hawkins, "Bruno said the field of stars was 3-dimensional and stretched to infinity, and beyond infinity was another infinity. ... unseen" (p. 277).

This is a vision of a god who, in Paul Davies (1981) words, though not specifically addressing Bruno's vision, is "not part of the stunning beauty contained in nature's mathematical laws;" only such a god "that transcends space-time, that is above causality and manipulation, can have any real relevance for the natural activity that blazes all around us" (p. 171).

Transcendent Consciousness and Quantum Theory

Most modern speculation or theories about time and space are on a par with those of the ancient Hindus. Time is merely a sequence of events with no beginning or ending. The material universe extends beyond the greatest distances we can observe by optical or radio means. It is boundless. In 1982, "Alexander Vilekin proposed the universe was created by quantum processes starting from 'literally nothing' meaning not only the absence of matter, but the absence of space and time as well, in the totally empty geometry" (Pandian, 2003).

On the other hand, the Big Bang singularity theory is time-bound. According to Ramesh N. Rao (2004), the Big Bang model "proposes that the mass-energy before the universe came into being was concentrated at a single point. The Vedas instead tell us that in the beginning there

was no mass-energy. It was a complete void.” Rao quoted Subhash Kak’s foreword to Raja Ram Mohan Roy’s (1999) *Vedic Physics, Scientific Origins of Hinduism* to further this point, “In quantum mechanics the state changes in an abrupt fashion when an observation is made, and this has prompted some physicists to claim consciousness should be the primary category of the universe, distinct from physical matter” (p. xiv).

In support of the primacy of consciousness in quantum theory, Amit Goswami contended that “consciousness is the ground of all being” (Hamilton, 2007, part 1). Goswami (1989) developed an idealistic interpretation of quantum mechanics “supported by the ancient East Indian philosophy of Advaita Vedanta, which states that materiality is manifested from consciousness” (Swift, 2000, note 3).

In 1998, in “The Great Debate: Cosmology Solved?” at the Smithsonian, Michael S. Turner (1999) of Fermilab stated, “Quantum fluctuations seeded all the structure in the universe” (p. 1). Might this not be taken as saying all is energy, all is rhythm, reminiscent of the “coming to be and passing away” found in Anaximander’s fragment? (cited in Classen, 1977, p. 92). Can we conceive of existence beginning not with a bang, but mystically, being in a para-state, an unfathomable mystery? In the Pythagorean “theory of the breathing universe ... the evolution of the cosmos starts with a primordial unity, which is opposed to an undetermined Void” (Sinnige, 1968, p. 59).

In this endless, beginningless rhythm of Being and Non-Being to the nth degree, who or what gave the downbeat to the “sound not heard” which Hans Kayser (1970) found to be the para-ultimate soundless sound in the Pythagorean table of tones? Many physicists believe nothingness is the basis of everything. “Indeed, it might be said that one way of characterizing the history of modern physics is the gradual rise in the status of nothing from anathema to supreme principle” (Wertheim, 2001, p. 1). As Quentin Smith (1993) put it, “We should instead acknowledge our foundation in nothingness and feel awe at the marvelous fact that we have a chance to participate briefly in this incredible sunburst that interrupts without reason the reign of non-being” (p. 135).

Quantum's Leap Into the Microcosm

Late in my ruminations on the mystery of spiritual renewal in nature, I was skimming through the website of the University of Pittsburgh's Physics Department. The university housed the editorial office of *Theatre Survey*, a journal where one of my articles, “The Symmetry of Delphi” was published in 1971. On the Physics Department site (which has since been changed), I happened across the image of the *Tetractys*. It was not the familiar planar two-dimensional *Tetractys*. It was in 3-D, and it was not the earth-bound planar diagram that conventionally plots the ten Pythagorean *tetractyl* points. Rather, it was a tetrahedron, a “solid” form, with Pythagoras’ ten spheres/planets as its base. There was wonder beyond its form — its context. Its thrust was not out toward and beyond the stars; the thrust of its Apollonian arrow was in, toward the subatomic zero-point.

The image comes from Particle Data Group's Review of Particle Properties and has been reproduced by University of Pittsburgh physics professor Eric Swanson (2003) in an article titled,

planetary spheres, zero culminated in a return to the apex, and its spiritual arrow-flight beyond the *apeiron*.

The Omega Point:

Life is a constant at the omega point.

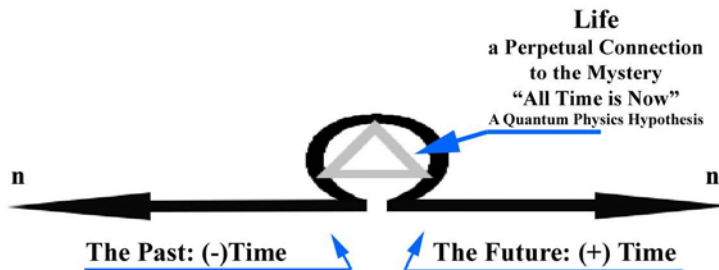


Figure 10. The Omega Point (© Hector Currie and Juan Pacheco 2007)

The omega point at the apex of Gell-Mann's and Ne'eman's three-dimensional *tetractys* is the inspiration for the graphic design of co-author Juan Pacheco above. This symbol of transcendence, at the apex of Pythagoras' sacred *Tetractys*, encapsulates Delphi's mystic power. This symbol, it is our contention, illustrates what Benjamin Libet serendipitously stumbled upon in his 1970's experiments attempting to measure the impulse of a simultaneous reaction (McCrone, 2006).

Given that a simultaneous reaction is (according to the laws of physics) impossible, Libet was amazed to find the simultaneous reaction was, in fact, simultaneous.

One is put in mind of the Delphic injunction, "Know thyself." Mystically, might knowing oneself not come down to a mysterious deepening of the apparent meaning of Delphi's gnomic utterance? On sober (and, at times, giddy) reflection, it might come down to, "Know that thou art the mystery, and possess within thee the secret to the Cosmos."

This is the secret Eugene O'Neill (2002) revealed to us in his tragic masterpiece, *Long Day's Journey into Night* in Edmund's moving monologue,

And several other times in my life, when I was swimming far out, or lying alone on the beach, I have had the same experience. Became the sun, the hot sand, green seaweed anchored to a rock, swaying in the tide. Like a saint's vision of beatitude. Like the veil of things as they seem drawn back by an unseen hand. For a second you see — and seeing the secret, are the secret. (p. 156)

On the Boundless Frontier of Science's Limits

Current scientific thought holds that space cannot be indefinitely divided. "Most physicists suspect there is a granularity on a scale of scale of 10^{33} centimetres. This is twenty powers of ten smaller than an atomic nucleus. ... If there were still tinier structures, they would transcend our

concepts of space and time" (Rees, 1999, p. 12). Yet this is precisely what Anaximander and Pythagoras did, and, before them, Dirghatamas.

Cosmic Consciousness

Cosmic consciousness bestows a bliss that is past all words to describe and it also quickens the sympathies and attunes the soul to the vibrations of the heart-cries of the struggling evolving ones who are still travailing in the pains of the new birth. We must be willing to endure the suffering *in order that we may realize the joy*; not because joy is the reward for suffering, but because it is only by losing sight of the personal self that we become aware of that inner Self which is immortal and blissful; and when we become aware of the reality of that inner Self, we know that we are united with *the all*, and must feel with all. (Nomad, 2007, p. 175; original emphasis)

While definitions for and articles about cosmic consciousness permeate cyberspace, only a passing mention in this "Digital Age" is given to cybernetic binary bits, of the "zero – one – zero – one" sequence of energy-entropy, of one-none, *ad infinitum*. This brings us back to the remarkable insight of the "obscure," in more ways than one, anonymous 12th-century monk who inscribed this mind-searing, metaphysical vision in *The Salem Codex*: "Every number arises from One, and this in turn from the Zero. In this lies a great and sacred mystery" (quoted in Kaplan, 1999, p. 207).

Beyond Knowing: The Call for Transcendence and Tolerance

A connection to the Great Mystery Beyond is a concept that the West has, over the years, embraced but sporadically. The general consensus in the West has been that ours is a material universe, and the heavenly hereafter is our avenue of escape from its mortal coils.

We — each of us, individual (from the Latin, *in-dividuus*, undivided, one), one in selfhood — are inculcated to see a state of unmanifest immateriality as counter to the basic human instinct for personal survival. Our apparent physical singularity impels us to seek refuge in the bond of family, community, and faith in a protective deity. Few have the courage to resist this impulse to seek refuge in submission to a providential authority. Those who do are adjudged heretical and suffer ostracism or calumination.

Pythagoreanism was born in the axial age, when the venturesome turned from abasement before the gods to an assertion of intellectual freedom. In breaking free of the herd mentality, Pythagoreans were the Tom Paines of their day, "accusing religion of being the source of dogmatism, fanaticism, prejudice, ignorance, repression, and persecution" (Martin, 1997, p. 4).

As lone voices, they, like Paine, paid a heavy price for their convictions. With the triumph of authoritarian materialism in the Hellenistic and Roman cultures, their esoteric secret was lost, or more precisely, buried. The age-old impulse to submit to a greater power triumphed; man had resorted to religion (from the Latin, *religare*, bind together). With conviction in the superiority of one's belief system arose the specter of religious fanaticism. The age of religious/political wars

— already familiar in the classic Greek world where there been at least three "holy" wars to wrest control of the oracle — was upon us.

Religious Fervour and Rancour

Throughout human history, religious zeal has all too frequently been channeled into violent conflict, barbaric cruelty. All too often religious organizations promote hatred, war and arrogance. Still, "new" movements arise, again and again, many of which "emphasize the importance of mysticism and quiet inner exploration, as opposed to evangelical fervor" (Davies, 1983, p. 4).

John Michell (1988), in the closing of *The Dimensions of Paradise*, calls for a "structured harmony," for world concord (p. 213). Pythagorean harmony extended beyond worldly concord. Rather than a dualistic moral judgment, Delphic rites sought a dynamic equipoise between Apollonian and Dionysian psychic forces, transcending the Self/Boundless dichotomy. "The East takes the cosmos as the starting point. ... the West emphasizes sin, and the gulf that has to be bridged between God and humans" (Borchert, 1994, p. 95).

But the answer to the Great Mystery cannot be found in religious dogma or fanaticism. Rather, we must turn to the solace of silence. Silence gives a caesura to the surge of sound, it is a breathless cosmic Grace. As the Creation Veda X.129 professed, confounding reason, "the breathless breathed breathlessly." Jamie James (1993) in *The Music of the Spheres* asserted that "the key is to find one's center outside one's self, in the whole cosmos, paradoxically to become centerless; and that, it would seem, is the very last thing that mankind is now capable of" and concluded, "Yet now that science permits us to actually hear the soundtrack of the cosmos, in the form of random blips and howls picked up by radio telescopes, how we long for silence" (p. 240-241, 241).

The Synchronicity of It All

"Synchronicity suggests that mind and matter, along with past, present and future, exist in a potentially meaningful continuum. As such, it compels us to rethink everyday assumptions about self and environment, causality and time" (Clark, 2008). Carl Gustav Jung held that "synchronicity involves an acausal relationship between ego consciousness and the other environment. That is, synchronicity just happens, [it is] not caused by any single event" (Clark, 2008).

There is an ongoing debate over when life begins. "The Native American attitude is that everything is animated by divinity [has a Spirit/is connected to the Mystery]. Hence ordinary people, animals and places are divine" (Eddy, 2001). That is, they have consciousness and are cognizant. The synchronicity of this is manifested in the quantum double-split experiment, and also the observer experiment, in which electron particles change their behavior when viewed by an observer. As Dr. Fred Alan Wolf, a.k.a. Dr. Quantum, put it, "the electron decided to act differently as if it was aware it was being watched," which seems to imply cognizance on the part of the particle (quoted in Arntz, Chasse, & Hoffman, 2006).

At conception, cells undergo rapid growth and change as they develop into being. But the being is not attained until the being achieves self-awareness as in: I am/ego/spirit/yin; I want/ambition/materialism/survival/yang. The balance is life, synchronistic with the connection to the Mystery that "Thou art the Mystery."

On Intuition as *The Key to The Secret*

Intuition guided Kant to his discovery that transcendentalism was the key to opening the spirit to the wonder which inspired the ancients. Emerson's (1903-1904a) rapturous connection with nature moved him to a transcendent vision: "All mean egotism vanishes. I become a transparent eye-ball; I am nothing; I see all; the currents of the Universal Being circulate through me" (p. 109).

Elsewhere, in the other essay titled "Nature," Emerson (1903-1904b) moved beyond the immediate and expresses what appears to be a recension of Anaximander's breakthrough concept of the Boundless *apeiron*: "Efficient Nature, *Natura naturans* ... publishes itself ... through transformation on transformation to the highest symmetries ... All changes pass without violence by mean of boundless space and boundless time" (p. 179).

Synchronicity in Transcending Time

Time present and time past
 Are both perhaps present in time future.
 And time future contained in time past.
 If all time is eternally present
 All time is unredeemable.
 (Elliot, 2008a)

This passage from Elliot's "Burnt Norton" quartet exemplifies the schemata inherent within synchronicity. The future carrying the past as an expectant mother carries the child within the womb.

Deciphering the archetypal schemata around us is to interpret the synchronicity of it all, in the fleeting moment that encompasses all time, and becomes all things, and beyond all things.

We shall not cease from exploration
 And the end of all our exploring
 Will be to arrive where we started
 And know the place for the first time.
 Through the unknown, unremembered gate
 When the last of earth left to discover
 Is that which was the beginning;
 At the source of the longest river
 The voice of the hidden waterfall
 And the children in the apple-tree
 Not known, because not looked for

But heard, half-heard, in the stillness
 Between two waves of the sea.
 Quick now, here, now, always—
 A condition of complete simplicity
 (Costing not less than everything)
 And all shall be well and
 All manner of thing shall be well
 When the tongues of flame are in-folded
 Into the crowned knot of fire
 And the fire and the rose are one.
 (Elliot, 2008b)

Synchronicity and the End (Beginning)

It has been a long journey back to our lost roots in ancient India and Greece. Its inspirators have been a quadrivium of visionaries: Dirghatamas, Anaximander, Pythagoras; and at the center of this mystic triad, Pherecydes, who brought the wisdom of the East to Greece and who inspired the Pythagorean doctrine of reincarnation (Knight, 1958, p. 230).

The image of Pherecydes levitating, an illustration of a Johannes Amos Comenius woodcut from his epochal publication of *Orbis Pictus* (1658) appears to have an ouroboran serpentine coil framing the sage: dark scales sinister, light scales, dexter. Legend tells of Pythagoras performing phenomenal feat of bilocation, levitating at both Croton and Metaontum. Likewise, Pherecydes is pictured here, apparently ascending into the boundless *apeiron*. These legendary feats point to the thrust of *Paranada* — loss of selfhood in a mystery beyond knowing, and the recovery of the secret lost (or rather suppressed) for two millennia.

As can be seen in the picture below (Figure 11), Pherecydes is levitating, framed by what appears to be an ouroboros, a serpent about to swallow its tail, the dark scale-like etching and the very faint almost imaginative head off the right shoulder, swallowing the light but still faint scale-like etching of a tail.

This illustration of Pherecydes was rendered in a woodcut by John Amos Comenius (1592-1670), the same artist who created the representation of Pythagoras meditating by his astrolabe (final illustration). Comenius is known as the father of modern education, and was a theologian as well as an educator. Comenius was the first to create illustrated texts for children (and adults who delight in imaginative approaches to the world around and within us). He was a tragic figure, a Moravian without a country, who spent his peregrinous life darting from country to country in Europe's seemingly endless sectarian wars. His *Labyrinth of the World and Paradise of the Heart* was a *Pilgrim's Progress* half a century before Bunyon and beings to mind the key lines of the *Vedic Creation hymn X. 129*: “Sages, searching in their hearts, with wisdom found the bond between being and non-being.”

Today, the Comenius Medal is a prestigious award of UNESCO, honoring high achievement in education. Comenius' lofty pedagogic goal was to lead the way on what he termed the *Via*

Lucis (The Way of the Light). Such high idealism led Harvard, in 1640, to offer Comenius the honor of being its first president.

Surely it appears he was sending a message of love and transcendence when he wrote on the subject of the mystic and pre-Socratic philosophers.

Here, at the mouth of the ouroboros we come to the dizzying end/beginning of this work. There is more than is dreamed of in the Nature philosophy our all too-materialistic world forgot after the flame of Delphi burned no more. We find ourselves back at the birth of universal innocence, of all that is defined in the word *agape*.

Huston Smith and Jeffrey Mishlove discuss this concept in “The Primordial Tradition” an episode of *Thinking Allowed, Conversations On the Leading Edge of Knowledge and Discovery*, which ran on PBS.

MISHLOVE: That's true. That universe, the space-time world, fits into the primordial tradition but does not exhaust it. There are reaches beyond the physical.

SMITH: To the divine and the infinite. I think that's true. I think that the soul is at one and the same time the final locus of our individuality. It is what makes you, Jeffrey Mishlove, unlike any other person who ever has been or will be, and yet is constant with you throughout your career. That's one thing, but it also has a tropism, a kind of dynamism in it, in which it is forever reaching beyond anything you have ever attained thus far, and it will never stop that reaching until, we're told, it finally loses its individuality by merging with the infinite.

MISHLOVE: That seems to be a good ending point, in a sense to realize where we end is where we start.
(Mishlove, 1996)

This has been a long journey — and a sad one. It has been a journey marked by a deep sense of loss. For the world, in its embrace of material substantiality, worldly matter and matters, has been seemingly oblivious to Pythagoras' searing vision of an unbounded, transcendent cosmos of ever-renewing energies. Yet, it is the hope of the author of this essay on the unapproachable mystery, that the world might awaken to Pythagoras' dream and see that for which his soul ached — the eternal return, the return to the point-beyond-knowing, to the beyond beyond-sensing.

"The most beautiful thing we can experience is the mysterious." (Einstein, 1994)

Divided, into East and West, the world stands in desperate need of the transcendent vision of Dirghatamas, who 'saw' far, far, beyond the light, beyond the darkness of *Creation Veda* X. 129:

Then was neither Being nor Non-being....
darkness wrapt in darkness....
The breathless breathed breathlessly....

Sages searching in their hearts, with wisdom,
Found the bond between Being and Non-Being.



<http://en.wikipedia.org/wiki/Image:Pherecydes.jpg>

Figure 11. Pherecydes (“Pherecydes ex Scyro Philosophus,” Geldsetzer, 2001)

Postlude

“Paranada: Beyond Beyond” has been a repressed obsession of mine for well over fifty years. In its many by-ways of the spirit, my journey has been Nietzschean. It all came to a head back in 1952, while making a promotional film for St. Mary's College, Moraga, home of the Galloping Gaels. One bright spring morning, before starting the shoot, I happened to be in the library with the good Brothers, and asked, "What's the Church's view of zero?" A day later the answer came down from on high: "It is the Devil – Satan."

My jaw dropped, having expected the response would have involved an appreciation of the mystery of creation. Might it not have reflected a dark Nietzschean awareness of the shadow, the black sun after-image one senses after a quick glance at the sun?

Now, on having finally (at least for now) settled on the final draft, I know that the reader, like my idol, Jean-Luc Godard, whose habit is first to read the last passage of a book — any book — may well be wondering "What is *Paranada's* ‘Big Idea’? Where does it end up?"

Quite simply, it is to stress the discovery, that is to say rediscovery, of what Huxley (2004) called the "perennial philosophy" of the East in Pythagoras' plot, his cosmic plan, of Delphi.

In effect, I found spiritual liberation in Delphi's rite of spring, in the mind of Apollo, and in the ecstatic heart of Dionysos.

After everything has been said and done, the key to it all may be there is neither key, nor lock, nor door, nor jamb, at the mystic threshold. One need not utter "Open." One need only ecstatically sense The Mystery.

As Strohmeier and Westbrook (1999) sagely suggest in *Divine Harmony: The Life and Teachings of Pythagoras*: "The challenge of our time may be to revive it, and make divine harmony 'the great theme' of the next millennium" (Epilogue).



Figure 12. Pythagoras (Aamodt, Hatlem, & Smebye, 1999)

References

- Aamodt, S., Hatlem, E, and Smebye, M. (1999, January 22). *Pythagoras*. Retrieved December 12, 2007, from <http://home.c2i.net/greaker/comenius/9899/pythagoras/pythagoras.html>
- Arntz, W. (Producer/Director/Screenwriter), Chasse, B. (Producer/Director/Screenwriter), & Hoffman, M. (Director/Director of Photography). (2006). *What the bleep!?! Down the rabbit hole* [Motion picture] (Quantum ed.). United States: 20th Century Fox.
- Athanassiadi-Fowden, P. (1981). *Julian and Hellenism: An intellectual biography*. Oxford: Clarendon Press.
- Bakalis, N. (2005). *Handbook of Greek philosophy: From Thales to the stoics, analysis and fragments*. Bloomington, IN: Trafford Publishing, 2005.
- Bates, R., & Bates, S. (1987). Fiery speech in a world of shadows: Rosebud's impact on early audiences. *Cinema Journal*, 26 (2), 3-26. Retrieved May 21, 2009, from JSTOR database.
- Birley, A.R. (1997a). *Hadrian: The restless emperor*. New York: Routledge.
- Birley, A. R. (1997b). Hadrian and Greek senators. *Zeitschrift für Papyrologie und Epigraphik*, 116, 209-245. Retrieved May 18, 2009, from www.uni-koeln.de/phil-fak/ifa/zpe/downloads/1997/116pdf/116209.pdf
- Bloomfield, M. (1908). *The religion of the Veda: The ancient religion of India (from Rig-Veda to Upanishads)*. New York: G.P. Putnam.
- Borchert, B. (1994). *Mysticism: Its history and challenge*. York Beach, ME: S. Weiser.
- Brooke, J. H. (1991). *Science and religion*. Cambridge: Cambridge University Press.
- Burnet, J. (1908). *Early Greek philosophy* (2nd ed). London: A. & C. Black.
- Burton, D., & Grandy, D. (2003). *Magic, mystery, and science: The occult in Western civilization*. Bloomington: Indiana University Press, 2003.
- Calvert, J. B. (1999, July 25). *Another Delphic mystery*. Retrieved May 21, 2009, from <http://mysite.du.edu/~etuttle/classics/h180.htm>
- Clark, M. (2008, May 24.). *Synchronicity: New age fantasy or face of the future?* Message posted to <http://epages.wordpress.com/2008/05/24/synchronicity-new-age-fantasy-or-face-of-the-future>
- Classen, C. J. (1977). Anaximander and Anaximenes: The earliest Greek theories of change? *Phronesis*, 22 (2), 89-102.
- Cleve, F.M. (1965). *The giants of pre-Socratic philosophy* (Vol. 2). The Hague: M. Nijhoff.
- Costa, H. J. da. (2007). *The Dionysian Artificers*. Charleston, SC: Forgotten Books. (Original work published 1820).
- Coste-Messelière, P. de la. (1936). *Au Musée de Delphes : recherches sur quelques monuments archaïques et leur décor sculpté*. Paris: E. de Boccard.
- Danielou, A. (1992). *Gods of love and ecstasy: The traditions of Shiva and Dionysus*. Rochester, VT: Inner Traditions.
- Davies, P.C.W. (1981). *The edge of infinity: Where the universe came from and how it will end*. New York: Simon and Schuster.
- Davies, P.C.W. (1983). *God and the new physics*. New York: Simon and Schuster.
- De Santillana, G. (1961). *The origins of scientific thought: From Anaximander to Proclus, 600 B.C. to 300 A.D.* New York: New American Library.
- Dempsey, T. (2003). *Delphic Oracle: Its Early History, Influence and Fall*. White Fish, MT: Kessinger Publishing. (Original work published 1918).

- Diels, H., & Kranz, W. (1951). *Die fragments der vorsokratiker*. Berlin: Weidmannsche Verlagbuchhandlung.
- Eddy, S. (2001). *Native American myths: Native American spirituality*. Retrieved August 13, 2008, from <http://www.livingmyths.com/Native.htm>
- Einstein, A. (1994). *Quotation #1388 from Michael Moncur's (cynical) quotations*. Retrieved June 6, 2008, from <http://www.quotationspage.com/quote/1388.html>
- Eliade, M. (1976). *Occultism, witchcraft and cultural fashions: Essays in comparative religions*. Chicago: University of Chicago Press.
- Elliot, T.S. (2000a). *Burnt Norton*. Retrieved September 14, 2008, from <http://www.tristan.icom43.net/quartets/norton.html>
- Elliot, T.S. (2000b). *Little Gidding*. Retrieved May 14, 2009, from <http://www.tristan.icom43.net/quartets/gidding.html>
- Emerson, R. W. (1903-1904a). *The complete works of Ralph Waldo Emerson: Nature addresses and lectures* (Vol. 1). New York: Houghton, Mifflin.
- Emerson, R. W. (1903-1904b). *The complete works of Ralph Waldo Emerson: Essays. Second series*. (Vol. 3). New York: Houghton, Mifflin.
- Emperor Julian. (1793). *Two orations of the Emperor Julian: One to the sovereign sun and the other to the mother of the gods* (T. Taylor, Ed. & Trans.). Retrieved November 16, 2006, from <http://www.sacred-texts.com/cla/toj/index.htm>
- Evans, E. (1975). Mercury versus Apollo: A reading of *Love's Labour's Lost*. *Shakespeare Quarterly*, 26 (2), 113-127. Retrieved May 18, 2009, from JSTOR database.
- Feuerstein, G. (1996). *Archaic yoga*. Retrieved May 10, 2005, from http://www.cycleoftime.com/articles_view.php?codArtigo=49
- Feuerstein, G., Kak, S., & Frawley, D. (1995). *In search of the cradle of civilization*. Wheaton, IL: Theosophical Publishing House.
- Frawley, D. (1992). *Wisdom of the ancient seers: Mantras of the Rig Veda*. Salt Lake City: Passage Press.
- Frawley, D. (2000). *Vedantic meditation: Lighting the flame of awareness*. Berkeley, CA.: North Atlantic Books.
- Frawley, D. (2006). *Vedic origins of the zodiac: The hymns of Dirghatamas*. Retrieved September 15, 2007, from http://www.vedanet.com/index.php?option=com_content&task=view&id=31&Itemid=2
- Gardner, M. (2000). *Did Adam and Eve have navels?: Discourses on reflexology, numerology, urine therapy, and other dubious subjects*. New York: W.W. Norton.
- Geldsetzer, L. (2001, May 11). *Philosophengalerie: Portraits zur Philosophie der Antike*. Retrieved June 12, 2008, from <http://www.phil-fak.uni-duesseldorf.de/philo/galerie/antike/pherecyd.html>
- Gibbon, E. (2004). *History of the decline and fall of the Roman Empire* (Vol. 2). White Fish, MT: Kessinger Publishing.
- Goethe, J. W. von. (1949) *Goethe's autobiography: Poetry and Truth* (R. O. Moon, Trans.). Washington, DC: Public Affairs Press. (Original work published 1848) (Original translation published 1883).
- Goswami, A. (1989). The idealistic interpretation of quantum mechanics. *Physics Essays*, 2, 385-400.
- Griffith, R. (2006). *The Hymns of the Rigveda* (Vol. 1) (2nd ed.). White Fish, MT: Kessinger Publishing. (Original work published 1896).

- Hamilton, C. (2007, December 14). *The self-aware universe: An interview with Amit Goswami*. Retrieved May 12, 2009, from <http://twm.co.nz/goswam1.htm>
- Hawkins, G.S. (1983). *Mindsteps to the cosmos*. New York: Harper & Row.
- Harvey, J. (1977). A note on Shakespeare and Sophocles. *Essays in Criticism*, 27, 259-270.
- Hedge, F. H. (2008). Questionings. (Original work published 1841). Retrieved May 13, 2007, from <http://www.vcu.edu/engweb/transcendentalism/authors/questionings.html>
- Heebner, M. (1995). Home away from Rome. *Travel Holiday*. Retrieved December 17, 2006, from <http://www.maryheebner.com/thework/editorial/hadrian/hadrian.html>
- Heraclitus of Ephesus. (2001). *The fragments of the work of Heraclitus of Ephesus on nature* (C.W.T. Patrick, Trans.). (Original translation published 1889). Retrieved January 5, 2007, from <http://classicpersuasion.org/pw/heraclitus/herpatu.htm>
- Huxley, A. (2004). *The perennial philosophy*. New York: HarperCollins.
- Iamblichus. (1986). *Iamblichus' life of Pythagoras, or, Pythagoric life: Accompanied by fragments of the ethical writings of certain Pythagoreans in the Doric dialect and a collection of Pythagoric sentences from Stobaeus and others which are omitted by Gale in his Opuscula Mythologica, and have not been noticed by any editor* (T. Taylor, Trans). Rochester, VT: Inner Traditions / Bear & Company. (Original work published 1818).
- Iamblichus. (2000). *Theurgia, or on the mysteries of Egypt* (A.Wilder, Trans.). (Original translation published 1911). Retrieved November 13, 2006, from http://www.esotericarchives.com/oracle/iamb1_th.htm
- India Holiday. (2009, Feb 19). *An East-West synthesis: The India connection*. Retrieved May 14, 2009, from <http://www.indiaprofile.com/religion-culture/cosmology.htm>
- James, J. (1993). *The music of the spheres: Music, science, and the natural order of the universe*. New York: Grove Press.
- Roy, R. R. M. (1999). *Vedic physics: Scientific origins of Hinduism*. Toronto: Golden Egg Publishing.
- Kaplan, R. (2000). *The nothing that is: A natural history of zero*. New York: Oxford University Press.
- Kayser, H. (1970). *Akroasis: The theory of world harmonics* (R. Lilienfeld, Trans.). Boston: Plowshare.
- Kingsley, P. (1995). *Ancient philosophy, mystery and magic: Empedocles and Pythagorean tradition*. New York: Oxford University Press.
- Klein, E. (1966). Klein's comprehensive etymological dictionary of the English language. Amsterdam: Elsevier.
- Knight, W. F. J. (1958). The after-life in Greek and Roman antiquity. *Folklore*, 69 (4), 217-236. Retrieved May 21, 2009, from JSTOR database.
- Lambert, R. (1984). *Beloved and God: The story of Hadrian and Antinous*. London: Weidenfeld and Nicolson.
- Lawlor, R. (1982). *Sacred geometry: Philosophy and practice*. London: Thames and Hudson.
- Londhe, S. (2008, December 26). *Hindu cosmology*. Retrieved May 14, 2009, from http://www.hinduwisdom.info/Hindu_Cosmology.htm
- Long, H.S. (1948). *A study of the doctrine of metempsychosis in Greece*. Unpublished doctoral dissertation, Princeton University.
- Mallinson, J. (2007). Introduction. In *The Shiva Samhita* (pp. ix-xiv) (J. Mallinson, Trans.). Retrieved March 26, 2008, from www.yogavidya.com/Yoga/ShivaSamhita.pdf

- Marlow, A.N. (April, 1954). Hinduism and Buddhism in Greek philosophy. *Philosophy East and West*, 4,1. Retrieved April 2, 2008, from <http://ccbs.ntu.edu.tw/FULLTEXT/JR-PHIL/marlow.htm>
- Martin, D. (1997). *Does Christianity cause war?* New York: Oxford University Press.
- McCrone, J. (2006). Benjamin Libet's half second. Retrieved April 2, 2008, from http://www.dichotomistic.com/mind_readings_chapter%20on%20libet.html
- McEvelley, T. (2002). *The shape of ancient thought: Comparative studies in Greek and Indian philosophies*. New York: Allworth.
- Mead, G.R.S. (1965). *Orpheus*. London: Watkins.
- Meletzis, S., & Papadakis, H. (1964). *Delphi: Sanctuary and museum*. Zurich: Schnell & Steiner.
- Mayer, K. (1997). An engraving of Plutarch from the 16th century Amyot edition. *Chaironeia: Plutarch's home on the web*. Retrieved March 12, 2006, from <http://www.utexas.edu/depts/classics/chaironeia/plutarch.gif>. Image from: Plutarch (1929-1930). *The lives of the noble Grecians & Romanes* (J. Amyot, Trans.). London, Nonesuch Press. (Original work published 1565).
- Mishlove, J. (1996). The primordial tradition with Huston Smith, ph.d. [Transcript]. In J. Mishlove & A. Bloch (Producers), *Thinking allowed, conversations on the leading edge of knowledge*. Thinking Allowed Productions. Retrieved May 5, 2006, from <http://www.intuition.org/txt/smith3.htm>
- Michell, J. (1988). *The dimensions of paradise: The proportions and symbolic numbers of ancient cosmology*. London: Thames and Hudson.
- Moore, C., & Radhakrishnan, S. (Eds.). (1957). *A source book in Indian philosophy*. Princeton, NJ: Princeton University Press.
- Navia, L.E. (1990). *Pythagoras: An annotated bibliography*. New York: Garland.
- Nicholas of Cusa (Cusanus). (1954). *Of learned ignorance* (G. Heron, Trans.). London: Routledge and Kegan Paul.
- Nietzsche, F.W. (1999). *The birth of tragedy and other writings* (R. Speirs, Trans.). New York: Cambridge University Press.
- Nietzsche, F.W. (2001). *The pre-Platonic philosophers* (G. Whitlock, Trans.). Urbana: University of Illinois Press.
- Nomad, A. (2007). *Cosmic consciousness*. Charleston, SC: BiblioBazaar
- Occhiogrosso, P. (1994). *The joy of sects: A spirited guide to the world's religious traditions*. New York: Doubleday.
- Omega Institute for Holistic Studies. (2006). *Yoga terms*. Retrieved June 7, 2007, from <http://eomega.org/omega/knowledge/yogatерms>
- O'Neill, E. (2002). *Long day's journey into night*. New Haven: Yale University Press.
- Opsopaus, J. (2004, November 26). *A summary of Pythagorean theology*. Retrieved July 9, 2007, from www.cs.utk.edu/~Mclennan/BA/ETP/index.html
- Paine, T. (1884). *The age of reason*. London, Freethought Publishing. (Original work published 1794).
- Pandian, J.D. (2003, June). *Where did the universe come from?* Retrieved March 7, 2006, from <http://curious.astro.cornell.edu/question.php?number=541>> para. 4.
- Parker, F. (2001). The Pantheon. *Roundup: Journal of the Monolithic Dome Institute*, 14 (2), 13-17. Retrieved February 16, 2007, from <http://static.monolithic.com/roundup/pdfs/200104L.pdf>

- Pengelly, R. (2005). *Pythagoras of Samos*. Retrieved January 15, 2006, from www.greecegreek.com/Philosophers/pythagoras-biography.html
- Plutarch. (2006). *On the 'E' at Delphi* (A.O. Prickard & J. Eason, Trans.). Retrieved July 12, 2006, from <http://penelope.uchicago.edu/misctracts/plutarchE.html>
- Pynchon, T. (1995). *Gravity's rainbow*. New York: Penguin Books.
- Rao, R. (2004). Vedic physics: Scientific origin of Hinduism. [Review of the book *Vedic physics: Scientific origins of Hinduism*]. *Indiastar Review of Books*. Retrieved December 14, 2005, from <http://www.indiastar.com/closepet5.html>
- Riedweg, C., & Rendall, S. (2005). *Pythagoras: his life, teaching, and influence* (S. Rendall, Trans.). Ithaca: Cornell University Press.
- Rees, M. Sir (2000) *Just six numbers: The deep forces that shape the universe*. New York: Basic Books.
- Ripley, G. (1840). Manifesto. *The Dial*, 1(1). Retrieved May 20, 2009, from <http://www.vcu.edu/engweb/transcendentalism/ideas/dialhistory.html>
- Roy, R. R. M. (1999). *Vedic physics: Scientific origins of Hinduism*. Toronto: Golden Egg Publishing.
- Schibli, H.S. (1990). *Pherekydes of Syros*. New York: Oxford University Press.
- Schrodinger, E. (1954). *Nature and the Greeks: And, science and humanism* New York: Cambridge University Press, 1996.
- Schure, E. (1918). *Pythagoras and the Delphic Mysteries* (F. Rothwell, Trans.). London: W. Rider & Sons.
- Sedlar, J.W. (1980). *India and the Greek world*. Totowa, NJ: Rowman & Littlefield.
- Shapiro, K. (1960). Cosmic consciousness. In J.E. Miller, B. Slote, & K. Shapiro (Eds.), *Start with the sun: Studies in cosmic poetry* (pp. 29-42). Lincoln: University of Nebraska Press
- Shakespeare, W. (1974). *The Riverside Shakespeare* (G. B. Evans, Ed.). Boston: Houghton-Mifflin.
- Singer, D. W. (1950). *Giordano Bruno: His life and thought*. New York: Greenwood.
- Sinnige, T. G. (1968). *Matter and infinity in the presocratic schools and Plato*. Assen, Netherlands: Van Gorcum.
- Smith, Q. (1993). The uncaused being of the universe. In W. L. Craig & Q. Smith (Eds), *Theism, atheism, and the big bang* (pp. 108-140). Oxford: Clarendon Press.
- Sophocles. (1992). *The Complete Greek Tragedies: Sophocles* (Vol. 2) (D. Grene, Trans.). Chicago: University of Chicago Press.
- Sophocles. (1939). *The Oedipus cycle: An English version* (D. Fitts & R. Fitzgerald, Trans.). New York: Harcourt, Brace, Jovanovich.
- Soundless sound. (2008). In *Hinduism dictionary*. Retrieved May 9, 2009, from http://www.experiencefestival.com/soundless_sound
- Strohmeier, J., & Westbrook, P. (1999). *Divine harmony: the life and teachings of Pythagoras*. Berkeley: Berkeley Hills. Retrieved May 14, 2009, from <http://www.sacredscience.com/pythagorasselections.htm>
- Swanson, E. (2003, September 23). *Constructing the universe: The particle explosion*. Retrieved May 15, 2009, from <http://fafnir.phyast.pitt.edu/particles/>
- Swift, H. (2000, June 13). On science within consciousness. Retrieved May 13, 2009, from <http://www.kjf.ca/26-R2MCF.htm>
- To Pythian Apollo. (1914). In *Hesiod, the Homeric hymns and Homerica* (H. G. Evelyn-White, Trans.). Cambridge: Harvard University Press.

- Turner, M. (1999). *Cosmology solved? Quite possibly!* Retrieved May 13, 2009, from <http://xxx.lanl.gov/abs/astro-ph/9811364>
- Wertheim, M. (1999). *The pearly gates of cyberspace: A history of space from Dante to the Internet*. New York: W.W. Norton.
- Wertheim, M. (2001, March 25). Something from nothing. *Los Angeles Times*. Retrieved May 18, 2007, from <http://articles.latimes.com/2001/mar/25/books/bk-42265>
- White, D. (2002). *The 12 golden notes is all it takes*. Retrieved June 19, 2006, from <http://www.skytopia.com/project/scale.html#microtonal>
- West, M.L. (1971). *Early Greek philosophy and the Orient*. Oxford: Clarendon Press.
- Wyss, E. (1996). *The myth of Apollo and Marsyas in the art of the Italian Renaissance: An inquiry into the meaning of images*. Newark, NJ: University of Delaware Press.

Hector Currie Ph. D., is Professor Emeritus of dramatic literature from Stanford University. He authored several articles and books, including *Film Encounter (1972)* (with Donald Staples). His other work is *Cinema Drama Schema: Eastern Metaphisic in Western Art (1985)*.

Email: currierh@ucmail.uc.edu

Juan Pacheco came to Professor Currie as a health worker with a cultivated interest in history, science and religion. At the professor's behest Mr. Pacheco researched, read books and lively discussed with Professor Currie many points of interest and insight related to this article. To this extent Dr. Currie called Mr. Pacheco his apprentice. After two years of shared labor, and with the publication of this article, the professor as writer considers Mr. Pacheco as associate.

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