Euclid's First Proposition and Joyce's Womb with a View

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As the only diagram in *Finnegans Wake* (II: 2), the emended illustration of Euclid's first proposition has naturally invited and received considerable interpretive commentary. Motivated by the desire to get to the bottom of things, readings have pursued a narrow stratum of inquiry, knowingly excluding the diametrically opposed versions that usually present themselves in Jyoce's text. Such readings have proven "correct" within self-imposed limitations, yet in the process have reaffirmed the coexistence in the *Wake* of paired opposites, of seen and unseen. Most commentary has been reserved for the shadowy doubling of Euclid's inscribed triangle or especially for the intersecting circles which have inspired an inventory of conjectural shapes, from !assies in arm to a vicocyclometer of eons. The almond-shaped space that emerges as a result of intersection – a secondary space of remainder— has received less attention, although suggested comparison with the mystical vesica piscis of Christ can be provocative when taken to its mythological roots as a prism on the world. I propose to trace those roots. For convinience, examples of symbolic geometry are adduced from the two most influential myth families in Western culture, Semitic and Indo-Aryan.

From Plato's geometrical relations as properties of ideal objects to Kant's synthetic a priori, the Western tradition of philosophical rationalism had insisted that all knowledge should be constructed after the pattern of geometry. This was to privilege Euclid whose initial assumptions, derived by purely deductive method, were supposedly unquestionableuntil the mid-nineteenth century when non-Euclidean geometry began to reveal that space is not a form of order by which the human observer constructs his world. What a philosophermathematician may regard as a law of reason is actually a conditioning of imagination by the physical structure of environment; the power of reason stems from the inheres in the ability to free the mind from rules established through experience and tradition: "you must, in undivided reality draw the line somewhere." From Euclid's purveyor John Dee FW 299: 21) to the neo-Kantian conventionalism of Henri Poincare and Einsteinian relativity - in which the natural geometry of space in astronomic dimensions is non-Euclidean (FW 293: 4; 304: 25) - the context of the Wake shakes loose the accretions of presumed Euclidean certainty. It restores the considerable debt of Euclidean geometry to the Pythagorean mysticism of numbers and to Platonic metaphysics (see "Jyoclid" 's Platonic Year, FW 282: 23; 292: 30).

Drawing on the Sumerian and Babylonian association of the decade (as a "limit" number) with the beginning and close of an eon of time. Pythagoras raised the basic division Journal of Comparative Literature and Aesthetics. Vol.XXV: Nes. 1-2: 2002

of odd and even numbers to a cosmic understanding of Same (unity) and Other (duality) given a Yeatsian cast on FW 300: 20-23. The relationship he established between the denary and tetrad (1+2+3+4=10) was played on by early gnostic and hermetic Christian for the transformation of the Roman X into a new era ("aosch," FW 282: 2), as Eva is reversed to Ave, in which all directions, all pairs of opposites will be lodged and reconciled at one point in time. In this scheme, I is the logograph for unity, the disembodied principle of numbering, whereas 2 represents the potential for the extension of numerical principle and relationship to the dimensions of the material world. Euclid's proposition begins "Protasis" on a given finite straight line to construct an equilateral triangle." for 3 is the first number - as A-L-P define the three points of a surface - with a beginning, middle and end: "Anna was. Livia is. Plurabelle's to be." The "mamafesta" itself locates Pythagoras in an anamorphic mirror where his weighty pronouncements are reduced to the grunts ("... uggamyg...")² of primeval couples: "So hath been, love: tis tis: and will be" (FW 116: 30-36). The 1-2-3 of Pythagoras corresponds in cabalism to the primary unity of Aleph. realization of duality in Beth, and Gimel as the hieroglyph of rebirth into a new order of time: "MacAuliffe... MacBeth... MacGhimley" (FW 290: 6-7).

Notably in the Timaeus, Plato reveals his Pythagorean learning by proposing a model for the soul comprised of the reconciled opposition of active and passive attributes (which is also filtered through Yeats on FW 300: 20-23). As Plato's prime interlocutor asserts, it is actually two sorts of triangles that constitute the universal elements and the template for the Good. True and Beautiful in the fashioning of the material world by form and number. For Macrobius and other commentators, this was the origin of the Platonic lambda (FW 294; 4: 297: 10), by which two legs of an open cone descend from the monadal point of a pair of calipers showing, on the one leg, the arithmetical progression from 2 and, on the other, geometrical progression from 3. Most interesting – for the almond (or vulva [FW 297: 27]) form and for the Joycean emphasis on the spinning roles of the tergemina Heavenly Mother, Great Earth Mother and Femme Fatale alike? - is the hypothesis of Timaeus that the circles of heaven and the zodiac revolve uniformly around a diamond spindle at the core of the universe by which all of the planetary orbits are measured and. thus, from which all human fates are conceived and spun out. Hence, the triangle and kindred geometric shapes have lent themselves to calculations of practical geometry; in measuring angles between two distant objects. sighting is made through a magnifying lens attached to a sextant or similar framing instrument, so that light rays traveling from objects to the sighting device may be used to define the sides of a triangle. At the same time. triangular shapes have lent themselves to the speculative geometry of metaphysical trinities in which the natural language for articulating the ineffable is the universal imagery of mythology: "On the name of the tizzer and off the tongs and off the mythametical tripods" (FW 186: 23-24).

Only the language of myth abides and flourishes in the coexistence of contrary propositions, of sacred and profane; can synthesize monochrome readings of 11: 2 offered seriation by Joyce criticism; and can simultaneously embrace the property of Wakean

language through which any assured reading automatically presumes the validity of a contrary proposition. For instance, just after the Euclidean design we encounter "old Sare Isaac's universal of specious aristmystic" (293: 27-28) and the "loose corollaries ever Ellis threw his cookingclass" (294:7-8). Blending Issac the father of Jacob with Newton the father of gravitational laws and particle theory of light rays sustains the chapter's characteristic amalgam of "science" with theology, fantasy and legend: "Dawn gives rise ... Eve takes fall" (293: 30-31). The second fragment weds Alice and the author of Algebra Identified with Geometry. The balance of this essay will probe the mythopoeic logic of the intersectional space housing the triangles in order to trace the basis on which disparate cultures find common cause in a universal mythic image: at the same time, it will subvert prospects for final attribution or localizing of mythogenesis.

The conjectural attributions to the vesica piscis of the almond-like interstice/ricorso between circling eons in the Euclidean proposition are reinforced by textual echoes (297: 6: 299: 34) and by the association with the Second Coming. The importance of the attribution is not just that it fits the motif of incarnation, death and resurrection which threads through Joyce's chapter from one end to the other: but also that it enjoyed immense popularity throughout the Middle ages, that it joined Christian and pagan stories with ease, and that its originary rationale was lost at an early date to the minds of the artists and artisans who plied its polymorphous forms. In fourteenth and fifteenth-century Tuscany alone, the churches of Siena. Pisa and Florence abound with Christs housed in the twin circles in infinity, in the mandorla (ft. "almond"), and in a diamond superposed on four intersecting circles, as in Taddeo Gaddi's paintings in the Academia or on Ghiberti's Baptistry doors. In many of these instances, as on the tympanum of the "Sunset" portal of Chartres Cathedral, Christ of the Apocalypse is attended by the symbols of the zodiac or - which is much the samethingby the four gospeists whose symbols correspond to the stations at the quadrants of the zodiac. And most provocative of all are the Vatican Pinacoteca's Peruginos in which Christ in the mandoria sits in majesty above a squared circle.

By the late Romanesque florescence in Normandy and North Armorica sculptors had forgotten that the *mandorla* originated in early Byzantine renditions of the Son of God crowned by a squared-circle halo, a common symbolic expression for the marriage of the circular heaven with the four directions of earth: "One recalls Byzantium. The mystery repeats itself to date" (FW 294: 28-29)⁵. There is a lesson to be learned here about the risky business of attributing mythic origins outside of a specific cultural tradition. For the *hierosgamos* wedding the four corners of earth with the zodiac wheeling eternally around Polaris – consummated through sexualized ritual of renewal at the apex of a pyramid – takes us back at least to the ziggurats of ancient Sumer in the fourth millennium B.C. But so too does the lore of the Djed-pillar of Osiris ("Le hélos tombaut," FW 280: 25). In the principal tale of this myth, the primeval couple Isis and her brother-consort Osris are separated when the latter is imprisoned in a coffin by 72 assailants (72: the number of years required for the precession of the equinoxes to move one degree) which was ultimately lodged in the base of a Tree of Life, symbolizing the world Mountain Mother – tree (HCE)

and stone (ALP) alike - which eats back into the earth the life it has borne.

The Tree of Life is symbolized in the lifeless stone of the Djed-pillar: at the juncture of rectangular world with solar sphere are a pair of almond eyes for sight beyond life's illusory pairs of opposite qualities, surmounted by interlocking ram and cow horns (symbolic of the sexes in union, as of death and life), which in turn cradle the sun. It is the conical rays of the sun that protect the slumbering Osiris. Following the *sparagmos* of the missing sun god. Isis goes in search of her lord who is restored intact, except that his penis has been devoured by a fish. Osiris returns to his glory as judge of the quick and the dead after the exchange of the testacle of Seth for the left eye of Horus – the two contending sons of Osiris (cf. Odin who is protected by the Sophia-like Volva, sacrifices his left eye, and hangs for 9 days on the World Tree Yggdrasil). The hieroglyph for the circle of the iris with the pupil as center (wadza) is known as "the sun in the mouth" (or the creative Word). Thus, on classical papyri Osiris is attended by the four sons of Horus riding atop the corolla of a water lify, the mythic image – like the Hindu lotus or Christian rose – of the matrix from which all incarnate life is made flesh: "la rose in che 'I verbo divino carne si fece" (cf. FW 292).

This complete mythic symbology operates with great complexity - amid elm. stone, almond forms and four gospelists - throughout the Wake (e.g., pp. 94, 234-35). Horus is outflued with the head of the sun-hawk and the tail of a buil, for daily he is the ever-dying, ever-reborn sun and hence is identified with the father is various ways (FW 328: 34); for one, since he is apparently regenerated spontaneously, he is known (as was Pharaoh) as the "bull of his own mother." Likewise the Mesopotamian moon god Sin mediated the wedding of earth and sun, and thus was endowed with exceptional procreative powers. His attributes are, then, the intersecting earthly and heavenly triangles of "fire and water" in addition to "strong horns" which east the reflection of intersecting arcs, in token of the waxing and waning lunar phases (FW 212: 25-26: 365: 09-10); thus, he is known as mother womb, begetter of all things." The companion scene in the Wake occurs toward the end when all-wise ALP, beneath the nimbus of "the clothing moon" tells of the march of the constellations and of how she came armed with the elixir of life (urine or beer) to console her old man, beset by "emotional volvular," in his guardroom confinement. Amid fractured references to Crimea, the history of Ireland and England, peace symbols, Isis and Osiris (after HCE produces his "propendiculous loadpoker"), ALP's inquisitor intones "Let Eivin be member for Gates of Gold for their tadeless suns betrayed:her. Irise, Osirises! Be thy mouth given unto thee" (493: 27-28). Soon after, HCE lies in state but elevated to the status of world figure, amid his splendid titles and holdings, including "Jordan almonders" (497: 31).

Clearly, an attempt to restore the Christian *mandorla* to its quasi-official source in the hierogamy of square and circle in the Byzantine aureole – the intersection of all moments of time and all points of space – simply mimics the continual transposition and variations-on-theme that have characterized mythopoeic logic since the earliest strata of the *Rig Veda*. Joyce geometrically complicates the inextricable problem. An obvious and significant

limiting context for close scrutiny would be the passage in 11: 2 from Issy's footnote. following her professor's analysis of sex and politics, until chapter's end (pp. 279-308): i.e., we handily begin at the interstice between the two major study periods. The daughter at once of ALP and Eve. Issy in her private note purportedly deals with her budding sexual urges ("wait till spring has sprung" 279: 22), but her language anticipates the metaphysical implications of the geometry lesson: "Quick erit faciofacey (Q.E.F.). When we will conjugate ... verbe de vie and verve de vie." At the outset the note is placed against the backdrop of "the thrills and ills of laylock blossoms." The scenic detail and its context require several initial observations, which inform the balance of the study of Triv and Quad. First, the question of conjugating the Logos through the incarnation of Spirit and flesh poses the fundamental theological and metaphysical problem of the chapter, one that reverberates through the Wake in jest ("Hasitatense?" 296: 36 [hesitancy]) as well as solenin earnest ("DIVINITY NOT DEITY...inexcissible as thy by God ways." 282: 285: 33-34). Shortly before the first formulation in the Byzantine Church of the square-plus-circle mandorla of Christ, the argument raged in gnostic and proto-hermetic sects on the immanence of God's Word and on the legibility and understanding of the Creator's writing in the liber mundi. In the thick of this controversy. Justin Martyr cited the lesson that Pythagoras had supposedly learned in Egypt: "God is one. And He is not, as some think, outside the world, but in it, for He is entirely in the whole circle looking over all generations." The ambivalent description of godhead leaves us between mysticism - tracking the penumbral traces of a deity who inhabits the humblest objects but whose essence is best known by the evidence of its absenceand empiricism - puzzling through rules of order and solving the geometry conceived the nous of the masterbuilder and illustrated according to weight, shape and measure.

A second observation on Issy's footnote setting not only underscores the pervasiveness and mutations of the lilac blossom in the linguistic subtlety of the pubescent footnotes:8 but from cover to cover it also substantializes the legendary fall and scandalous arrest of HCE, beset by the devil in the flesh ("There are 29 sweet reasons why biossomtime's the best. Elders fall for green almonds when they're raised on bruised stone... (FW 64: 36), and the dart of desire at the end (FW 599-600) that "has gored the heart of secret waters." thus precipitating the regeneration of life and the cycle of eons. In the latter episode, "the old man of the sea and the old woman in the sky," Father Time and Mother Space rejoin in the images of rock slab and almond tree ("There an alomdree begins to green." FW 600: 20; cf. 293: 24) to renew the world of forms. The almond (blossom) is an archaic symbol of divine immanence and rebirth in Near-Eastern mystery religions and in matrilineal cults of the Great Mother throughout the Fertile Crescent. The dying god Attis, for instance, was the son of Cybele in her generalized and divine aspect and of his particular mother, the virginal Nana, who conceived by placing ripe almond (or a pomegranate in some versions. like Persephone) in her bosom. But it is in Hebrew texts where tree and stone figure most prominently.

The ritualized description of the Ark of the Covenant in Exodus 25: 33-34 reaches to a folkloric stratum in the oral tradition of the *Hubiru* which is much older than the books

of laws. There the proper disposition of almond cups around the seven-branch candelabra is prescribed, but is obviously more recent than later instances, such as the rod of Aaron which sprouted almond blossoms as a sign of his election as well as a death threat for those who might break Yahweh's laws (Numbers 17: 8-10). It was the rod of Aaron, not that of Moses, which was placed in the Ark of the Covenant, together with the Tables of the Law and the pot of manna (Heb. 9: 4). Like the Babylonian serpent god who was deposed in Eden but who persistently grew from the staffs of Hebrew leaders as a trace of early ophidian worship and was eventually pictured hanging from a cross (Exod. 4: 2-4: 17: 1-7: Num. 21: 5-9: 11 Kings 18: 4: FW 289: 7), emergence from a branch as a sign of God's wrath or benevolence belongs to a familiar, ancient typology. Threat and benefaction are simultaneously assured much later in God's election of Jeremiah who, on seeing a branch of the flowering almond tree, hears the voice of the Lord: "You have seen well, for I am watching over my word to perform it" (Jer. 1: 11-12). Both overseer and judge, here Yahweh puns significantly on the phonic resemblances (shaqedh/shoquedh...) among the words for almond, perception and awakening, since the almond tree was the first to bloom in the spring.

But by far the most important mention in Hebrew lore of the shape and properties of the almond is also a unifying knot for many disparate illusions in 11: 2 and elsewhere. Genesis 28: 17-19 is a fundamental text for establishing the attiliation of the patriarchs and kings from Noah to Solomon in the margin of FW 307. That Biblical passage relates the epiphany of God to the dreaming Jacob who, on awakening, proclaimed "This is none other than the house of God, and this is the gate of heaven" – a common mythic image-term for the paradoxical point of passage from one mode of being to a qualitatively different one. Jacob then annointed a pyramidal pillar of stone with oil: "He called the name of that place Bethel: but the name of the city was Luz at the first."10 Bab-llu, "Gate of Heaven," in Hebraic tradition became synonymous with confusion and arrogance: the Babylon recension of Eastern (sunrise) and Western (sunset) gates is also the origin of Penelope's gates of the dream in Odvssey 19: 562. The mysterious indigo city of Luz, the mythical forerunner of Beth-El and eventually Bethlehem, derives from another Hebrew word meaning 'almond," "blossoming almond tree." and by extrapolation the almond nut itself which reveals its fruit at the same time that it hides its essence and safeguards its inviolacy: "doubleviewed seeds" (FW 296: 1), as it were: hence, the almond tree has come to symbolize the Holy Virgin. 11 Coincidence of corner stone and tree originates (and here the dim recesses of folklore hardly authorize such as assertive verb) from the legends of the proximity of the City to an almond tree whose bark was so bone-like that the Angel of Death could penetrate neither walls nor wood (lignum vitae). The conjectural etymology of Luz ties it variously to infinitesimal corporeality (represented symbolically by hard bone (Ezekiel: "Son of man. can these bones live?") which adheres to the soul after death and assists in resurrection¹²; and it seems to derive from the root of a tree where the horizon mediates between the downward and upward directions of the apexes - as in the triangular Fire (Chokmah) and Water (Binah) of the cabala. Simultaneous emphasis in the legend of Luz on the manifest and the hidden is essential, in as much as a hollow near the base of the tree allows entry into a cave which in turn is the lone access to the City buried in Mother Earth. This detail has been instrumental in the formulation of theologies of the resurrection of fallen man, of reversal of the established order, and of the reflection of the celestial in the subterranean (e.g., Daniel 12: 2-10: 1 Cor. 15: 42-49). It also takes the mythological imagery of Genesis 28 into areas that both diffuse and center otherwise inexplicable mythic allusions in 11: 2. According to medieval "legends of the cross," the X of Christ (XPI) stemmed from the Tree of Knowledge, so that the agency of the Fall became that of redemption; Adam's skull was supposed to have been buried on Golgotha, "the place of the skull." One could argue, then, that the "Interplay of Bones in the Womb" in the margin just below Joyce's Euclidean figure with its almond space, generative of innumerable meanings, might be associated with the *os crucis* located behind the uterus: if so, it thus informs our understanding of the crossed bones beneath the illustration of the cabalistic Great Father at the close of 11: 2.

The problem and mystery of attribution of the *mandorla* – whether in its use as all-seeing eye or all-bearing womb – is that the image and related sacred narrative are of worldwide diffusion and recede to time out of mind: examples of "doublends jined" are ready at hand from all quarters. The City beneath the Tree of Life belongs to the larger class of narratives catalogued in *The Golden Bough* where an *axis mundi* is endowed with numinous presence. To the degree that the diamond can be viewed as a stylized *mandorla*, as the wedding of square and circle of Joyce's inset double triangle would suggest, the North American Indian legends become germane in which the first parents issued through the hollow trunk of a venerated tree from their subterranean birth vault. Erich Neumann cites numerous neolithic female figurines from matriarchal Thrace and Crete whose unifying characteristic is a pair of diamond shapes with apexes tangent at the vulva or womb. The Cretan example is instructive since the double axe blades (*labrys*), intersecting to reproduce a *mandorla* as do Euclid's circles, symbolized the Great Goddess whose hegemony was evinced by her control of the lunar rhythms (cf. *FW* 244: 5: 485: 26) and mastery of the subterranean labyrinth.

In the Western tradition some of these legends have had an immense longevity due to the adaptability of their mythic imagery. Such is the Phrygian tale of the All-Father Amygdalos (almond tree) who harbored "the perfect fruit pulsating and stirring in the depths" and who gave birth to the "invisible, thousand-eyed unnameable One." Secreted like Moses amid the roots from which all life springs, and affiliated with the Logos and *pneuma* of the Annunciation, it was natural for early Christians to see in him the "mustard-seed, the invisible point ... which none know save the spiritual alone." Similarly, the Greeks of Indo-Aryan provenance synthesized the mythology of the archaic mother cult attached to Aphrodite, the Ewig-Weibliche (cf. FW 116: 36-117: 1). Like the yarn-spinning Penelope, the webweaving Eve ("madameen spinning watersilts," FW 21: 6) and the Virgin who is often pictured holding the strand of the universe which intersects the *mandorla* of her womb. ¹⁵ early accounts of Aphrodite link her as Clotho with the three spinning fates, and (like her counterparts in Pima, Zuni and Mayan myth) assign her the task of weaving rainclouds

from the skein of the moon. Here the grounds of metaphor were the similarity of thread of life to umbilical cord, whirling movement of the spindle to the perpetual "word in progress" of the vital *pneuma* flowing over the surface of all life, and of course the proximate resemblance of the spindle shape to the vulva: "Problems ye ferst, construct ann aquilittoral dryankle Probe loom!" (FW 286: 20). In the *Timaeus* (36b-39b) and especially in the myth of Er the Armenian in the *Republic* (X: 616:617b) Plato imagined that the axis or naval of the cosmos was huge diamond-shaped spindle of necessity that measured and regulated the dance of the planets. In some instances, the whirling spindle is styled as a conical seed pod of the lotus (seen as triangular from the side and circular from the top). The form evolved from the Mesopotamian lunar cone emblematic of the sanctity of a city's walls, or as a spiral ("gyrotundo" FW 295: 24), embodying both the generative power of Norme and the texture of her handiwork. She is even portrayed with a serpentine double helix encircling her spinal column and issuing from the dome of her head as locks of Medusa, ¹⁶

At the necessary risk of oversimplification, perspective requires that the examples above, drawn mainly from the Eastern Mediterranean and Fertile Crescent, be illumined by the Indo-Aryan and Sanskrit marginalia scattered through the balance of 11: 2: "Asia in Ireland." Shortly after the presentation of the geometric diagram. Joyce's pedantic "Sarga, or the path of outgoing" appears in the left-hand margin as shorthand for a fundamental. complementary process of the cosmos. On the one hand, it denotes creation of the prima materia seen only in Maya's web of illusion: on the other, it is the voiding in the moment of Shiva's cataclysmic dance or, in the microcosm, the breathless less hush following the utterance of the cosmic syllable OM. Often transcribed as AUM (as in "Salam, salms, salaum," FW 360: 27), the three elements of the diphthong (surrounded by silence as the fourth component) correspond to the stages of wakening and dream and thus may be likened to three Vichian stages of mythical history, along with ricorso. OM is the germ seed of speech and manifestation of the Logos. It embodies the indestructible essence of the triple Vedas and is symbolically present in the *mandorla* shaped enclosure of the hands in prayerful attitude, which is also a symbol of Maya. Hence, OM shares the same symbol as the woven texture of the world's appearance, and in Devanagari transcription is seen in the outline of Shiva's dance spelling the closure of the cosmic circle of time. The syllable echoes in the pages following the diagram – "something ... figuratively the home of your eternal geomater ... the logos of someone ... her undecribables ... my omination" – and informs our understanding of the diagram's permutations in a way that is not apparent from the conventions of Western readings.

Renè Guénon discusses a late fifteenth-century transcendental symbol of the Order of Carmelites () which has some starting implications for the philosophy of symbolic forms and, thus, for Joycean geometry. Guénon reminds us that the Cernelites entered Western horizons through their affiliation with the Order of Elijah and with Pythagorean and Solomonic learning. The symbol Guénon continues, is an abbreviation for Ave Maria and, at its roots, of the Logos – alpha and omega. Most interesting is his demonstration that the geometric configuration is also a rebus for AUM, and in its various

tormal inflections is seen in conjunction with the superimposition of twin circles which forms the Star of Solomon; a line through the horizontal median marks the reflection of the upper eight lines in the lower eight.¹⁷ One of the most durable symbols of Thomism and medieval hermeticism in general was the six-pointed Seal of Solomon (symbol of Christ) of which the joined triangles were taken to represent the *hierosgamos* of Spirit and matter and the reflection of the creative breath (*ruach Adonai*) on the oceanic chaos of Genesis 1: 2: "Salmonson set his seel on a hexengown ... distinct and isoplural in its (your sow to the double) sixuous parts. flument, fluvey and fluteous" (*FW* 297: 3, 21-22). Without doubt, separation of the "waters from the waters" of Genesis 1: 6 originated from Mesopotamian cosmological texts, as did the "earth-diver" motif in the creation of Adam from mud (Genesis 2: 7). Thus, the creation re-enactment of "Anny little mud which cometh out of Mam" may indeed conjure up Matthew 15: 11¹⁸ but, through Joyce's brilliant refraction of Biblical texts, it also points to the Hebrew *maim*, the waters which in Genesis 1:6 take the grammatical form of the dual, allowing for the idea of "double chaos" of form and formlessness as shared potentiality.

The divine reflection on and inflection of the water directly informs not only Joyce's emendation of Euclid but also the marginal Sanskrit notation following "Sarga" on page 294: "Maya-Thaya. Tamas-Rajas-Sattvas." The initial pair of terms deals with the infusion of cosmic appearance into prima materia (Thaya/Thea), while the triad of gunas can be abruptly summarized as inertia, activity, resolution - roughly comparable to Plato's desire, emotion, and intelligence, and to the roles assigned by tradition to the three Graces. In Hindu creation myths (as in the Book of the Dead), the incarnation of spirit (purusha) in matter (prakriti) weds immutability with becoming, which share the same noun in Sanskrit (bhu; cf. FW 394: 31-35.) Illusion of identity is merely the appearance of maya, just as solar and lunar illumination, when viewed at the opposite poles of the horizon during a moonrise, appear equal in size and intensity: "As the image of the sun reflected in water quivers and fluctuates in accordance with the undulations of the water" (Brahma-Sutras 2: 3. 46-53). Like Joyce's Euclidean relativity, the water represents the potential sum of all formal possibilities emanating in conical rays from the single source of illumination, as in the Rig Veda. 19 In primitive mythologies, the sun at moonrise shoots its solar shaft, wounding and causing the moon to wane and disappear for three days - like Christ in the tomb, before rising at Easter when the superposed waning and waxing lunar crescents form the inner space of the mandorla. So it is that the Euclidean drawing is surrounded by verbal and symbolic figurations (e.g., FW 292: 11-12: 298: 1, 13) of opposed or attracted vertices which in mythological systems articulate imminent reversal of the established order and symbolize the World Mountain (alp pla), in combination with the divine twins in their subterranean cavern-city or of the expanding branches and roots of the World Tree. The progressive transformation of the gunas in schematized in triangular form, as the three theological virtues are framed in the gothic mandorla.

The hourglass drum of Shiva sounds the pulsebeat which draws the veil of temporality across the face of the eternal void: this conventional symbol is sanctioned by

the inverted cones of the World Tree in *Rig Veda* 3: 7. 1-3 (cf. *FW* 80: 23). Symbols merge into language as the geometrical symbols form the Pythagorean quincunx, corner stone of the material world and promise of quintessential transcendence: "Quaint a quincidence". ²⁰ In Mesopotamian myth the quincunx represented the five "void" days of *ricorso* following the 360-day year and the tip of the pyramidal ziggurat to which the four directional sides rise, site of the sacred marriage of heaven and earth. Sumerian astronomers attempted to solve the enigma of the "navel of the goddess," i.e., the mystery of the 360-degree revolution of the zodiac around Polaris and the derivation through mathematics of multiplicity from unity. Their discovery that the equinoxes process as the approximate rate of 52 sedonds per year ultimately led to the cipher 432 (St. Patrick's arrival in Eire, etc.) as the key to beginning and completion of cosmic rounds. Their other revelation was the key number 3.1416. The connection is clear, in the figuration of the mother, with Shem/Dolph's assignment of Pi to the navel and P to the fruitful womb.

Illumination (sattvas) as the ultimate goal of the three qualities of personality is implicitly carried into the marginal notation (page 303) on the seven "force centers" of yoga, which continues the foliation of triangles from the universal matrix. The serpent represents the rise of spiritual heat, along and around the spinal column from the genital seeds and "Holy Bone" (sacral) at the base to the "intertemporal eye." The first station at the heart is represented in conventional symbolism by a lotus containing a double triangle, identical with the Seal of Solomon, within which is a stylized form of a yoni housing a shining lingam; here we are in perfect balance, as opposed to the fighting words in the text ("Upanishadem ... Eregobragh") and brother battle (FW 303: 13-15; cf. 404: 18). Illumination is reserved for the intertemporal eye of Shiva, which sees beyond limitations of water and fire, "solar past" and "lunar future." Seeing beyond space/time constraints, the eye reduces all maya appearance to ashes from which it is reborn Phoenix-like in greater illumination. Thus, it abides in an eternal present as the epitome of all time; and as a mere geometrical point without dimension in the spatial order, it bears the potential for all extension through space.

By far the most pertinent configuration of Shiva's insight in Hindu symbology, for comparison with Joyce's Euclid, is the endlessly reborn, triangular exfoliation from the cosmic lotus known as Shri Yantra (cf. FW 80: 24-25; 292: 11-12). The geometric pattern shows a square with a portal on each directional side, drawn with triple serrated lines marking the figure's dimensional orientation in space. Inside the square is an eight-petaled lotus, such as the heart chakra of the "Force Centres of the Fire Serpentine," signifying regeneration. The lotus is actually part of a triple aureole, signifying the "subtle" world that is intermediate in a three-part cosmos between matter and spirit. And inside the lotus circle are five triangles with apexes pointed down, interwoven with four triangles with apexes upward; the upward triangles (vahni) symbolize the renewable life-potential that is epitomized in semen ("the seim anew"), whereas the four triangles (shakti) symbolize the eternal feminine, for Shakti is the consort of the transcendental Shiva." The overlayed triangles create the optical illusion of progressive expansion from or graduated reduction to an imaginary point (bindu) in the

smallest, central triangle. This is the metaphysical point from which primordial energy radiates, and so its presence is in the eye of the enlightened beholder. At the heart of the squared circle, then we find the formlessness that is symbolic of the cosmic void.

Like the well known Shri Yantra, examples of the interwoven square/cube (hemi-) sphere, and trigon could be reproduced geometrically, as by mitosis, without furthering principal arguments. Since a spate of texts and icons could be cited from mythologies that not even Joyce could have known, critical discourse would risk degenerating into openended speculation on basic forms of fermented language. Inadvertently, the reproduction (or "foliation") of kindred images that undergird disparate beliefs would paraphrase in scholar's language the proliferation of mythology in its more natural habitat. The necessary wager, however, is this: aided by an encyclopaedia of comparable forms and investments of meaning, in both stylized miniaturization and elaborated cosmic projection, the microscopy of deconstruction may enhance our understanding of the sustained expansion and reduction of mythic language in the Wake. Critical commentary saturated with scholarly apparatus might be necessary in the supersaturated depths of "Triv and Quad" in order to reconstruct a modest fraction of any of the chapter's "grids." It should be evident that in marshalling appropriate texts for comparison, the limiting yet labyrinthine paradigm of Graeco-Roman mythology should be diminished, although it is frequently the main reference point of Western readers. Meticulously peeling through the layers of Joyce's text to archaic and forgotten strata in the language of myth will illumine forms that have survived the life and death cycles of mythological systems, since theirs is the obscure and inexhaustible source of energy and illumination for the mind's eye.

Notes

'Exegeses of the diagram's link with Yeats's "A Vision" or with the sigla of the Doodles family inscribed in its entirety can easily be found in the literature. The scattershot analogies of Roland Mc Hugh are probably the most incisive (*The Sigla of "Finnegans Wake"* [Arnold: London, 1976], pp. 67-76).

*Literally "awe-almondlike," according to I.E. etymology.

³Cf. Stephen's fantasy of navel cords linking humanity with the original mother, in *Ulysses* (Random House: New York, 1961), p. 38. From the etymology of her name Penelope is veiled by the yarn the spins, materially evident in matronymic attribute (*pene* = "spindle"). The first "Oxen of the Sun" Notesheet shows a progression of concentric almond shapes exfoliating from a single point; cf. the inter-sectional *mandorla* and similar progression from the mouth of the sun (*ruach Elohim*) in the Gene (I Plan of Cabalistic Doctrine, cited in Eliphas Levi's *History of Magic* (Weiser: New York, 1973), p. 325.

⁴Macrobius, Somnium Scipionis expositio, 11.2. Cf. FW 293: 7-8.

⁵Rene Guenon discusses exchange of vegetal for mineral, circle for square in Heavenly Jerusalem (L'Esoterisme de Dante [Gallimard: Paris, 1957], p. 67.

*See R.W. Rogers, *The Religion of Baylonia and Assyria* (Eaton and Mains: New York, 1908), p. 164. Scholars have attempted to unite these two cults into one hypothetical ur-cult. The eye of Horus atop the pyramid on the verso of the American dollar bill surmounts a Latin legend ("A new order of time begins well"). Revolutionary golden ages (e.g., the Krita Yuga) begin thus.

Exhortation to the Greeks (19) in Writings of Samt Justin Martyr, (Catholic University of America Press: Washington, 1943), p. 396.

*-Indiana Blues" of p. 285 refers to the mandorla-shaped double arc of the chapter's various rainbows; at the same time, the etymology of this indigo stems from Sanskrit nula – also the word for the blossom of the almond

Frazer attributes the legend to the Phrygian cosmogony in which the almond stands as the image of the All-Father and "springs from the genitals of a man-monster," *The Golden Bough* (McMillan: New York, 1951), 5: 263-269.

¹⁸Cf. FW 139: 12 and the closing scene where St. Kevin rises from the lake of night to mark the dawn of Christianity in Eire: "Jakob van der Bethel... with Essav of Messagepostumia" (607: 8-9). See also Grace Eckley, Children's Lore in Finnegans Wake (Syracuse University Press: Syracuse, 1985), p. 73.

"Bethelehem: "House of Bread"; cf. the Devil's command that Christ turn stones to bread as proof of his divinity (Matt. 4: 3) and Christ as the manna from heaven admonishing that "man does not live by bread alone but by each word that comes from God's mouth." See Joseph Campbell on the "house of food" and Anna-maya-kosha ("appearance-in the aspect-of food") in Skeleton Key to "Finnegans Wake" (Penguin: New York, 1980), p. 166; Brihadaranyaka Upanishad (Br. 2) where the fiery creator hovers over the surface of primeval waters, and creative speech and knowledge are "food" for thought; and FW 300: 23.

¹²Cf. Buck Mulligan's parodistic "What's bred in the bone cannot fail me to fly," *Ullysses*, p. 19. Leibnitz's atomistic reduction after death of perpetually living matter comes to mind, and, as always, Blake of the *Four zous* and *Milton*: "The nature of a Female Space is thus: it shrinks the Organs / Of Life till they become Finite and Itself seems Infinite" (*Milton* 1, 10, 6-7). Cf. FW: 57: 1-7 and 298: 8-9: "her littlenist to no magnetude."

From North America and the twin diamonds enclosed in the trunk of an axis mundi (ca. 200 B.C.) cited by Joseph Campbell in The Way of the Animal Powers (Harper & Row: San Franscisco, 1983), pp. 76, 213. Robert Gessain cities similar figurations from clinical dreamwork involving patients suffering from severe castration anxiety or neurotic obsession with the threatening appearance of the mother's genitals ("Vagina dentata dans la clinique et la mythologie," Psychanalyse 3 [1957], 258). Indeed, dreamwork has been invoked for insight into the Wake's oneiric scenes and language. Insofar as intersecting circles may be read as a prism affording refracted views of Dublin, like a philosopher's stone capable of enhancing our vision beyond appearances, consider Jung's rapprochement of a Roman temple floor near Carthage and the drawing of a patient suffering from an inordinate maternal impact on his life. Both show an almond-shaped eye with serpents "rampant" at the corners. The emendation of Jung's patient is to draw in a water line so that one orbital arc is submerged and at the same time reflected in the other (Collected Works) [Princeton University Press: Princeton, 1959], vol. 9, figs. 43, 44). Equation of eye and genital is familiar to myth both Western (the temporary "blindness" of Achilles with Patrocles; the condign punishment of Oedipus) and Eastern (Amaterasu, born from the almond eye of her solar father).

¹⁴See Hippolytus, *Philosophumena: Refuation of All Heresies* (Translations of Christian Literature: London, 1921), 1: 140-42. Aimd the whisperings of tree and stone, the story of HCE is rehearsed from A to 0, complete with "A pair of sycopanties with amygdaleine eyes ... And that was how framm Sin to Son, acity rose" (94: 16-19; cf. 183: 12 and 296: 3; John 1: 1-3; Otto Rank, *The Myth of the Birth of the Hero* [Vintage Books: New York, 1964], p. 72).

¹⁵Cf. the juxtaposition of spindle and fish housed in the middle of a mandorla, in J.B. Pritchard, The Ancient Near East in Pictures (Princeton University Press: Princeton, 1954), p. 144.

¹ The last sentence draws substantially on Elmer Suhr, *The Spinning Aphrodite* (Helios: New York, 1969), pp. 34, 66, 140, 160. Cf. FW 292: 20-21.

¹⁷Le Roi du monde (Editions traditionnelles: Paris, 1950), pp. 19, 33-35.

**Ronald Mc Hugh, Annotations to Finnegans Wake (Johns Hopkins University Press: Baltimore, 1980), p. 287. See the crosshatching of Last Supper and 'pigeon's pneu' [breath of the Holy Spirit] "on the face of the waters" (FW 458: 16, 21. The "broad and hairy face" in the margin at the beginning of 11: 2 is sometimes shown as Macroprosopos at the apex of an upright triangle, whose darkened reflection on the waters appears as Microprosopos at the apex of an inverted triangle; the legs of the triangle symbolize the door pillars of Somomon's temple and hence the polarities of active/passive, Cain/Abel, right/duty (FW 260, 287: 11). In such configurations of cabalistic symbolism, the head of the Zohar is often shown inside a triangle, with the Star of Solomon between the two eyes; the almond shape circumscribing star and eyes is that of the brazen vessel of the Lemegeton (or

"Little Key of Solomon").

19See Luc Benoist, Art du monde (Gallimard: Paris, 1941), p. 56.

***PIV 299: 8; cf. 206: 35 where it follows a reference to Casey's Euclid and precedes an allusion to the inter-lock of eons.

²¹Wendy O'Flaherty has shown the obvious relationship in Shiva myth between the intertemporal eye and organs of generation (*Aesceticism and Eroticism in the Mythology of Shiva* [Oxford University Press: Oxford, 1973], pp. 247-250). Aramaic tradition relates *luz* to the *os coccyx*, the "nut" of the spinal column; see *The Jewish Encyclopaedia* (Funk and Wagnalls: New York and London, 1944), 8: 219. Cf. the mythic burial of the two ends of Osiris's spine.

²²Greek lexicography assign the delta as the symbol for the female.

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