905.00 **Equilibrium and Disequilibrium Modelability**

905.01 **Tetrahedron as Model:** Synergetics is the geometry of thinking. How we think is epistemology, and epistemology is modelable; which is to say that knowledge organizes itself geometrically, i.e., with models.

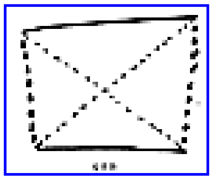


Fig. 905.02

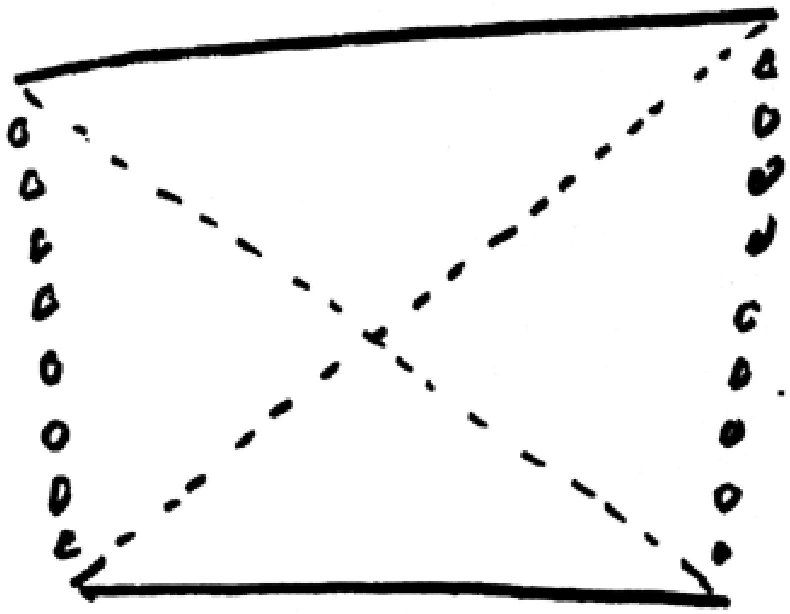
905.02 Unity as two is inherent in life and the resulting model is tetrahedral, the conceptuality of which derives as follows:

- life's inherent unity is two;
- no otherness = no awareness;
- life's awareness begins with otherness;
- otherness is twoness;
- *this* moment's awareness is different from previous awareness;
- differentiations of time are observed directionally;
- directions introduce vectors (lines);
- two time lines demonstrate the observer and the observed;
- the interconnection of two lines results in a tetrahedron;
- sixfold interrelatedness is conceptual:

905.10 **Doubleness of Unity**

905.11 The prime number twoness of the octahedron always occurs in structuring doubled together as four—i.e., 2^2 —a fourness which is also doubleness of unity. Unity is plural and, at minimum, is two. The unity volume 1 of the tetrahedron is, in structural verity, two, being both the outwardly displayed convex tetrahedron and the inwardly contained concave tetrahedron. (See Chart 223.64 , columns 2, 12, and 15)

905.12 The three-great-circle model of the spherical octahedron only "seems" to be three; it is in fact "double"; it is only foldably produceable in unbroken (whole) great-circle sheets by edge-combining *six* hemicircularly folded whole great circles (see Sec. 840). Thus it is seen that the octahedron—as in Iceland spar crystals—occurs only doubly, i.e., omnicongruent with itself, which is "quadrivalent."



Q.E.D.

Fig. 905.02.

905.13 Among the three possible omnisymmetrical prime structural systems—the tetrahedron, octahedron, and icosahedron—only the tetrahedron has each of its vertexes diametrically opposite a triangular opening. (See Illus. 610.2.) In the octahedron and icosahedron, each vertex is opposite another vertex; and each of their vertexes is diametrically blocked against articulating a self-inside-outing transformation. In both the octahedron and the icosahedron, each of the vertexes is tense-vector-restrained from escaping *outwardly* by the convergent vectorial strength of the system's other immediately surrounding—at minimum three—vertexial event neighbors. But contrariwise, each of the octahedron's and icosahedron's vertex events are constrainingly impulsed *inwardly* in an exact central-system direction and thence impelled toward diametric exit and inside-outing transformation; and their vertex events would do so were it not for their diametrically opposed vertexes, which are surroundingly tense-vector-restrained from permitting such outward egress.

905.14 As a consequence of its uniquely unopposed diametric vertexing—ergo permitted—diametric exit, only the tetrahedron among all the symmetric polyhedra can turn itself pulsatingly inside-out, and can do so in eight different ways (see Sec. 624); and in each instance, as it does so, one-half of its combined concave-convex unity "twoness" is always inherently invisible.

905.15 The octahedron, however, restrainingly vector-blocked as described, can only infold itself pulsatingly to a condition of hemispherical congruence like a deflated basketball. Thus the octahedron's concave-convex, unity-twoness state remains plurally obvious. You can see the concave infolded hemisphere nested into the as-yet outfolded convex hemisphere. Verifying the octahedron's *fourness* as being an evolutionary transformation of the tetrahedron's unity-twoness, we may take the four triangles of the tetrahedron which were edge-hinged together (bivalently) and reassemble them univalently (that is, corner-to-corner) and produce the octahedron, four of whose faces are triangular (ergo structurally stable) voids. This, incidentally, introduces the structural stability of the *triangle* as a visualizable yet physical nothingness.

905.16 The triangle is structure. Structure is spontaneous pattern stabilization of a complex of six individual events. Structure is an integral of six events. Structure is a pattern integrity. Pattern integrity is conceptual relationship independent of size. The integrity of the nuclear structuring of the atoms is conceptually thinkable, as are the associability and disassociability proclivities of chemistry, virology, biology, and all nonbiological structuring and mechanics.

905.17 Any and all of the icosahedron's vertexes pulsate individually and independently from the convex to concave state only in the form of local dimpling, because each only-from-outward-motion-restrained vertex—being free to articulate inwardly toward its system center, and having done so—becomes abruptly five-vector- restrained by its immediate neighboring vertexial event convergences; and the abrupt halting of its inward travel occurs before it reaches the system center. This means that one vertex cannot pulse inwardly more deeply than a local dimple similar to the popping in of a derby hat. (See Sec. 618.30 .)

905.18 Both the coexisting concave and convex aspects of the icosahedron—like those of the octahedron, but unlike those of the unique case of the tetrahedron—are always visually obvious on the inside and outside of the only locally dimpled-in, or nested- in, vertex. In both the octahedron and the icosahedron, the concave-convex, only inwardly pulsative self-transforming always produces visually asymmetrical transforming; whereas the tetrahedron's permitted inside-outing pulsatively results only in a visible symmetry, the quasiasymmetry being invisibly polarized with the remainder of Universe outside the tetrahedron, which, being omniradially outward, is inferentially—but not visually—symmetrical; the only asymmetrical consideration of the tetrahedron's inside- outing being that of an initial direction of vertexial exiting. Once exited, the visible remaining symmetrical tetrahedron is in verity the inside-outness of its previously visible aspects. (See Sec. 232.01 .)

905.19 In either of the two sets of four each as alternatively described, one of the polar states is always visible and the other complementarily invisible. This is a dynamic relationship. Dynamically, all four of each of the two sets of the tetrahedral potential are co-occurrently permitted and are required by omni-action-reaction-resultant synergetics. The seeming significance of the separately considered asymmetries are cancelled by the omnidirectional symmetry.

905.20 The vertexes are the unique, individual, ergo in-time events; and the nonvertex voids are the outdividual, ergo out, timeless, sizeless nonevents. The both outwardly and inwardly escaping nonevents complement the embryo, local-in-time, special-case, convergent-event, systemic pattern fixation of individual intercomplementary event identities. (See Sec. 524 .)

905.21 *In* is unidirectional, pointable. *Out* is omnidirectional, unpointable—go out, to-go-out, or go-in-to-go-out on the other side. Any direction from *here* is out; only one direction from *here* is in. Go either temporarily in to go diametrically out on the other side of the individually identical local *in*, or go anydirectionally out . . . to the complete, eternal, unidentifiable, nonness, noneness of the a priori mysterious, integrally regenerative, inherently complex Universe.

905.22 So-called edges and vectors are inherently only convergent or divergent interrelationships between multiply-identifiable, point-to-able, vertex fixes.

905.23 Because each tetrahedron has both four vertexes and four subtending nonvertex voids, we can identify those four diametrically complementary sets of all minimal cosmic structural systems as the four visible vertexes and the four nonvisible nonvertexes, i.e., the triangularly symmetrical, peripheral voids. The tetrahedron thus introduces experientially the cosmic principle of the visible and invisible pairs or couples; with the nonvisible vertex as the inside-out vertex, which nonvertex is a nonconvergence of events; whereas the vertexes are visible event convergences.

905.30 **Hierarchy of Pulsating Tetrahedral Arrays**

905.31 Among the exclusively, three and only, prime cosmic structural systems—the tetra, octa, and icosa—only the tetrahedron's pulsative transforming does not alter its overall, visually witnessable symmetry, as in the case of the "cheese tetrahedron" (see Sec. 623.00). It is important to comprehend that any one of the two sets of four each potential vertexial inside-outing pulsatabilities of the tetrahedron—considered only by themselves—constitutes polarized, but only invisible, asymmetry. In one of the two sets of four each potential inside-outings we have three-of-each-to-three-of-the-other (i.e., trivalent, triangular, base-to-base) vertexial bonding together of the visible and invisible, polarized pair of tetrahedra. In the other of the two sets of four each potential inside- outings we have one-vertex-to-one-vertex (i.e., univalent, apex-to-apex) interbonding of the visible and invisible polarized pair of tetrahedra.

905.32 Because each simplest, ergo prime, structural system tetrahedron has at minimum four vertexes (point-to-able, systemic, event-patterned fixes), and their four complementary system exit-outs, are symmetrically identified at mid-void equidistance between the three other convergent event identity vertexes; and because each of the two sets of these four half-visible/half-invisible, polar-paired tetrahedra have both three-vertex- to-three-vertex as well as single-vertex-to-single-vertex inside-out pulsatabilities; there are eight possible inside-outing pulsatabilities. We have learned (see Sec. 440) that the vector equilibrium is the nuclear-embracing phase of all eight "empty state" tetrahedra, all with common, central, single-vertex-to-single-vertex congruency, as well as with their mutual outward-radius-ends' vertexial congruency; ergo the vector equilibrium is bivalent.

905.33 The same vector equilibrium's eight, nuclear-embracing, bivalent tetrahedra's eight nuclear congruent vertexes may be simultaneously outwardly pulsed through their radially-opposite, outward, triangular exits to form eight externally pointing tetrahedra, which thus become only univalently, i.e., only-single-vertex interlinked, and altogether symmetrically arrayed around the vector equilibrium's eight outward "faces." The thus formed, eight-pointed star system consisting of the vector equilibrium's volume of 20 (tetrahedral unity), plus the eight star-point-arrayed tetrahedra, total volumetrically to 28. This number, 28, introduces the prime number *seven* factored exclusively with the prime number *two*, as already discovered in the unity-twoness of the tetrahedron's always and only, co-occurring, concave-convex inherently disparate, behavioral duality. This phenomenon may be compared with the 28-ness in the Coupler accounting (see Sec. 954.72).

905.34 We have also learned in the vector equilibrium jitterbugging that the vector equilibrium contracts symmetrically into the octahedral state, and we thus witness in the octahedron the eight tetrahedra—three-vertex-to-three-vertex (face-to-face, trivalent, triple-interbonded)—which condition elucidates the octahedron's having a volumetric *four* in respect to the tetrahedron's dual unity. Whereas the octahedron's prime number is *two* in respect to the tetrahedron's prime number one, it is experientially evidenced that the octahedron always occurs as both the double phase and the fourfold phase of the tetrahedron; i.e., as (a) the tetrahedral invisible/visible, (No-Yes), concave/convex; as well as (b) the octahedral visible/visible, (Yes-Yes), concave/convex: two different twoness manifestations. The tetrahedron has a unity-two duality in both its generalized dynamic potential and kinetic states, having always both the cosmic macro-tetrahedron and the cosmic micro-tetrahedron, both embracingly and inclusively defined by the four convergent event fixes of the minimum structural system of Universe. There is also the fundamental twoness of the tetrahedron's three sets of two-each, opposed, 90-degree- oriented edgevectors whose respective four ends are always most economically omni- interconnected by the four other vectors of the tetrahedron's total of six edge-vectors.

905.35 The jitterbug shows that the bivalent vector equilibrium contracts to the octahedral trivalent phase, going from a twentyness of volume to a fourness of volume, 20 $\rightarrow$ 4, i.e., a 5:1 contraction, which introduces the prime number *five* into the exclusively tetrahedrally evolved prime structural system intertransformabilities. We also witness that the octahedron state of the jitterbug transforms contractively even further with the 60- degree rotation of one of its triangular faces in respect to its nonrotating opposite triangular face—wherewith the octahedron collapses into one, flattened-out, two-vector- length, equiedged triangle, which in turn consists of four one-vector-edged, equiangled triangles, each of which in turn consists of two congruent, one-vector-long, equiedged triangles. All eight triangles lie together as two congruent sets of four small, one-vector- long, equiedged triangles. This centrally congruent axial force in turn plunges the two centrally congruent triangles through the inertia of the three sets of two congruent, edge- hinged triangles on the three sides of the congruent pair of central triangles which fold the big triangle's corners around the central triangle in the manner of the three petals folding into edge congruence with one another to produce a tetrahedrally shaped flower bud. Thus is produced one tetrahedron consisting of four quadrivalently congruent tetrahedra, with each of its six edges consisting of four congruent vectors. The tetrahedron thus formed, pulsatively reacts by turning itself inside-out to produce, in turn, another quadrivalent, four-tetrahedra congruence; which visible-to-visible, quadrivalent tetrahedral inside-outing/outside-inning is pulsatively regenerative. (See Illus. 461.08.)

905.36 Herewith we witness both visible and heretofore invisible phases of each of the single tetrahedra thus pulsatively involved. The univalent, apex-to-apex-bonded, four tetrahedra and the three-point-to-three-point, trivalent, base-bonded, four tetrahedra are both now made visible, because what was visible to the point-to-point four was invisible to the three-point-to-three-point four, and vice versa.

905.37 In the two extreme limit cases of jitterbug contraction—both the positive-negative and the negative-positive phases—the two cases become alternately visible, which results in the invisible phase of either case becoming congruent with the other's invisible phase: ergo rendering both states *visible.*

905.38 This pulsating congruence of both the alternately quadrivalent visible phases of the limit case contractions of the vector equilibrium results in an octavalent tetrahedron; i.e., with all the tetrahedron's eight pulsative intertransformabilities simultaneously realized and congruently oriented.

905.39 This hierarchy of events represents a 28-fold volumetric contraction from the extreme limit of univalently coherent expandability of the ever-integrally-unit system of the eight potential pulsative phases of self-intertransformability of the tetrahedron as the minimum structural system of all Universe. In summary we have:

—the 28-volume univalent;

—the 20-volume bivalent;

—the 8-volume quadrivalent;

—the two sets of 1-volume quadrivalent; and finally,

—the complex limit congruence of the 1-volume octavalent tetrahedron.

905.40 As we jitterbuggingly transform contractively and symmetrically from the 20-volume bivalent vector equilibrium phase to the 8-volume quadrivalent octahedral phase, we pass through the icosahedral phase, which is nonselfstabilizing and may be stabilized only by the insertion of six additional external vector connectors between the 12 external vertexes of the vector equilibrium travelling toward convergence as the six vertexes of the trivalent 4-volume octahedron. These six vectors represent the edge- vectors of one tetrahedron.

905.41 The 28-volume, univalent, nucleus-embracing, tetrahedral array extends its outer vertexes beyond the bounds of the nucleus-embracing, closest-packed, omnisymmetrical domain of the 24-volume cube formed by superimposing eight Eighth- Octahedra, asymmetrical, equiangle-based, three-convergent-90-degree-angle-apexed tetrahedra upon the eight outward equiangular triangle facets of the vector equilibrium. We find that the 28-ness of free-space expandability of the univalent, octahedral, nucleus embracement must lose a volume of 4 (i.e., four tetrahedra) when subjected to omniclosest-packing conditions. This means that the dynamic potential of omniinterconnected tetrahedral pulsation system's volumetric embracement capability of 28, upon being subjected to closest-packed domain conditions, will release an elsewhere- structurally-investable volume of 4. Ergo, under closest-packed conditions, each nuclear array of tetrahedra (each of which is identifiable energetically with one energy quantum) may lend out four quanta of energy for whatever tasks may employ them.

905.42 The dynamic vs. kinetic difference is the same difference as that of the generalized, sizeless, metaphysically abstract, eternal, constant sixness-of-edge, foumess- of-vertex, and fourness-of-void of the only-by-mind-conceptual tetrahedron vs. the only- in-time-sized, special-case, brain-sensed tetrahedron. This generalized quality of being dynamic, as being one of a plurality of inherent systemic conditions and potentials, parts of a whole set of eternally co-occurring, complex interaccommodations in pure, weightless, mathematical principle spontaneously producing the minimum structural systems, is indeed the prime governing epistemology of wave quantum physics.

905.43 In consideration of the tetrahedron's quantum intertransformabilities, we have thus far observed only the expandable-contractable, variable-bonding-permitted consequences. We will now consider other dynamical potentials, such as, for instance, the axial rotatabilities of the respective tetras, octas, and icosas.

905.44 By internally interconnecting its six vertexes with three polar axes: X, Y, and Z, and rotating the octahedron successively upon those three axes, three planes are internally generated that symmetrically subdivide the octahedron into eight uniformly equal, equiangle-triangle-based, asymmetrical tetrahedra, with three convergent, 90- degree-angle-surrounded apexes, each of whose volume is one-eighth of the volume of one octahedron: this is called the Eighth-Octahedron. (See also Sec. 912.) The octahedron, having a volume of four tetrahedra, allows each Eighth-Octahedron to have a volume of one-half of one tetrahedron. If we apply the equiangled-triangular base of one each of these eight Eighth-Octahedra to each of the vector equilibrium's eight equiangle- triangle facets, with the Eighth-Octahedra's three-90-degree-angle-surrounded vertexes pointing outwardly, they will exactly and symmetrically produce the 24-volume, nucleus- embracing cube symmetrically surrounding the 20-volume vector equilibrium; thus with 8 × 1/2 = 4 being added to the 20-volume vector equilibrium producing a 24-volume total.

905.45 A non-nucleus-embracing 3-volume cube may be produced by applying four of the Eighth-Octahedra to the four equiangled triangular facets of the tetrahedron. (See Illus. 950.30.) Thus we find the tetrahedral evolvement of the prime number three as identified with the cube. Ergo all the prime numbers—1, 2, 3, 5, 7—of the octave wave enumeration system, with its zero-nineness, are now clearly demonstrated as evolutionarily consequent upon tetrahedral intertransformabilities.

905.46 Since the tetrahedron becomes systematically subdivided into 24 uniformly dimensioned A Quanta Modules (one half of which are positive and the other half of which are negatively inside-out of the other); and since both the positive and negative A Quanta Modules may be folded from one whole triangle; and since, as will be shown in Sec. 905.62 the flattened-out triangle of the A Quanta Module corresponds with each of the 120 disequilibrious LCD triangles, it is evidenced that five tetrahedra of 24 A Quanta Modules each, may have their sum-total of 120 A Modules all unfolded, and that they may be edge-bonded to produce an icosahedral spherical array; and that 2 1/2 tetrahedra's 60 A Quanta Modules could be unfolded and univalently (single-bondedly) arrayed to produce the same spheric icosahedral polyhedron with 60 visible triangles and 60 invisible triangular voids of identical dimension.

905.47 Conversely, 60 positive and 60 negative A Quanta Modules could be folded from the 120 A Module triangles and, with their "sharpest" point pointed inward, could be admitted radially into the 60-positive-60-negative tetrahedral voids of the icosahedron. Thus we discover that the icosahedron, consisting of 120 A Quanta Modules (each of which is 1/24th of a tetrahedron) has a volume of 120/24 = 5 The icosahedron volume is 5 when the tetrahedron is 1; the octahedron 2^2 ; the cube 3; and the star-pointed, univalent, eight-tetrahedra nuclear embracement is 28, which is 4 × 7; 28 also being the maximum number of interrelationships of eight entities:

$$\frac{N^2 - N}{2} = \frac{8^2 - 8}{2} = 28$$

905.48 The three surrounding angles of the interior sharpest point of the A Quanta Module tetrahedron are each a fraction less than the three corresponding central angles of the icosahedron: being approximately one-half of a degree in the first case; one whole degree in the second case; and one and three-quarters of a degree in the third case. This loose-fit, volumetric-debit differential of the A Quanta Module volume is offset by its being slightly longer in radius than that of the icosahedron, the A Module's radial depth being that of the vector equilibrium's, which is greater than that of the icosahedron, as caused by the reduction in the radius of the 12 balls closest-packed around one nuclear ball of the vector equilibrium (which is eliminated from within the same closest-radially-packed 12 balls to reduce them to closest surface-packing, as well as by eliminating the nuclear ball and thereby mildly reducing the system radius). The plus volume of the fractionally protruded portion of the A Quanta Module beyond the icosahedron's surface may exactly equal the interior minus volume difference. The balancing out of the small plus and minus volumes is suggested as a possibility in view of the exact congruence of 15 of the 120 spherical icosahedra triangles with each of the spherical octahedron's eight spherical equiangle faces, as well as by the exact congruence of the octahedron and the vector equilibrium themselves. As the icosahedron's radius shortens, the central angles become enlarged.

905.49 This completes the polyhedral progression of the omni-phase-bond-integrated hierarchies of—1-2-3-4, 8—symmetrically expanded and symmetrically subdivided tetrahedra; from the 1/24th-tetrahedron (12 positive and 12 negative A Quanta Modules); through its octavalent 8-in-1 superficial volume-1; expanded progressively through the quadrivalent tetrahedron; to the quadrivalent octahedron; to the bivalent vector equilibrium; to the univalent, 28-volume, radiant, symmetrical, nucleus-embracing stage; and thence exploded through the volumeless, flatout-outfolded, double-bonded (edge-bonded), 120-A-Quanta-Module-triangular array remotely and symmetrically surrounding the nuclear volumetric group; to final dichotomizing into two such flatout half (positive triangular) film and half (negative triangular) void arrays, single-bonded (corner-bonded), icosahedrally shaped, symmetrically nuclear-surrounding systems.

905.50 **Rotatability and Split Personality of Tetrahedron**

905.51 Having completed the expansive-contractive, could-be, quantum jumps, we will now consider the rotatability of the tetrahedron's six-edge axes generation of both the two spherical tetrahedra and the spherical cube whose "split personality's" four-triangle- defining edges also perpendicularly bisect all of both of the spherical tetrahedron's four equiangled, equiedged triangles in a three-way grid, which converts each of the four equiangled triangles into six right-angle spherical triangles—for a total of 24, which are split again by the spherical octahedron's three great circles to produce 48 spherical triangles, which constitute the 48 equilibrious LCD Basic Triangles of omniequilibrious eventless eternity (see Sec. 453).

905.52 The spherical octahedron's eight faces become skew-subdivided by the icosahedron's 15 great circles' self-splitting of its 20 equiangular faces into six-each, right spherical triangles, for an LCD spherical triangle total of 120, of which 15 such right triangles occupy each of the spherical octahedron's eight equiangular faces—for a total of 120—which are the same 120 as the icosahedron's 15 great circles.

905.53 The disequilibrious 120 LCD triangle = the equilibrious 48 LCD triangle × 2½. This 2½ + 2½ = 5; which represents the icosahedron's basic *fiveness* as split-generated into 2½ by their perpendicular, mid-edge-bisecting 15 great circles. Recalling the six edge vectors of the tetrahedron as one quantum, we note that 6 + 6 + 6/2 is 1 + 1 + 1/2 = 2½ ; and that 2½ × 6 = 15 great circles. (This half-positive and half negative dichotomization of systems is discussed further at Sec. 1053.30ff.)

905.54 We find that the split personality of the icosahedron's 15-great-circle splittings of its own 20 triangles into 120, discloses a basic asymmetry caused by the incompleteness of the 2½, where it is to be seen in the superimposition of the spherical icosahedron upon the spherical vector equilibrium. In this arrangement the fundamental prime *number fiveness* of the icosahedron is always split two ways: 2½ positive phase and 2½ negative phase. This half-fiving induces an alternate combining of the half quantum on one side or the other: going to first *three* on one side and *two* on the other, and vice versa.

905.55 This half-one-side/half-on-the-other induces an oscillatory alternating 120- degree-arc, partial rotation of eight of the spherical tetrahedron's 20 equiangled triangles within the spherical octahedron's eight triangles: 8 × 2½ = 20. We also recall that the vector equilibrium has 24 internal radii (doubled together as 12 radii by the congruence of the four-great-circle's hexagonal radii) and 24 separate internal vector chords. These 24 external vector chords represent four quanta of six vectors each. When the vector equilibrium jitterbuggingly contracts toward the octahedral edge-vector doubling stage, it passes through the unstable icosahedral stage, which is unstable because it requires six more edge-vectors to hold fixed the short diagonal of the six diamond-shaped openings between the eight triangles. These six equilength vectors necessary to stabilize the icosahedron constitute one additional quantum which, when provided, adds 1 to the 4 of the vector equilibrium to equal 5, the basic quantum number of the icosahedron.

905.60 **The Disequilibrium 120 LCD Triangle**

905.61 The icosahedral spherical great-circle system displays:
12 vertexes surrounded by 10 converging angles;
20 vertexes surrounded by 6 converging angles;
30 vertexes surrounded by 4 converging angles

12 × 10 =	120
20 × 6 =	120
30 × 4 =	120
	------
	360 converging angle sinuses.

905.62 According to the Principle of Angular Topology (see Sec. 224), the 360 converging angle sinuses must share a 720-degree reduction from an absolute sphere to a chorded sphere: 720°/360° = 2°. An average of 2 degrees angular reduction for each comer means a 6 degrees angular reduction for each triangle. Therefore, as we see in each of the icosahedron's disequilibrious 120 LCD triangles, the well-known architects and engineers' 30°-60°-90° triangle has been spherically *opened* to 36°-60°-90° —a "spherical excess," as the Geodetic Survey calls it, of 6 degrees. All this spherical excess of 6 degrees has been massaged by the irreducibility of the 90-degree and 60-degree corners into the littlest corner. Therefore, 30 $\rightarrow$ 36 in each of the spherical icosahedron's 120 surface triangles.

905.63 In subsiding the 120 spherical triangles generated by the 15 great circles of the icosahedron from an omnispherical condition to a neospheric 120-planar-faceted polyhedron, we produce a condition where all the vertexes are equidistant from the same center and all of the edges are chords of the same spherical triangle, each edge having been shrunk from its previous arc length to the chord lengths without changing the central angles. In this condition the spherical excess of 6 degrees could be shared proportionately by the 90°, 60°, 30° flat triangle relationship which factors exactly to 3:2:1. Since 6° = 1/30 of 180° , the 30 quanta of six each in flatout triangles or in the 120 LCD spherical triangles' 186 degrees, means one additional quantum crowded in, producing 31 quanta.

905.64 Alternatively, the spherical excess of 6 degrees (one quantum) may be apportioned totally to the biggest and littlest corners of the triangle, leaving the 60-degree, vector equilibrium, neutral corner undisturbed. As we have discovered in the isotropic vector matrix nature coordinates crystallographically in 60 degrees and not in 90 degrees. Sixty degrees is the vector equilibrium neutral angle relative to which life-in-time aberrates.

Flatout A Quanta *Module Triangle*[1]		Basic Draftsman's *Triangle (Flat)*
35° 16'	(minus 5° 16') =	30° 00'
60° 00'	(unchanged) =	60° 00'
84° 44'	(plus 5° 16') =	90° 00'
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180° 00'		180° 00'

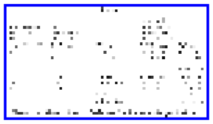
Table 905.65

905.65 By freezing the 60-degree center of the icosahedral triangle, and by sharing the 6-degree, spherical-planar, excess reduction between the 36-degree and 90-degree corners, we will find that the A Quanta Modules are exactly congruent with the 120 internal angles of the icosahedron. The minus 5° 16' closely approximates the one quantum 6 + of spherical excess apparent at the surface, with a comparable nuclear deficiency of 5° 16'. (See Table 905.65.)

905.66 The Earth crust-fault angles, steel plate fractionation angles, and ship's bow waves all are roughly the same, reading approximately 70-degree and 110-degree complementation.

Dihedral angle of octahedron =	109° 28'= 2 × 54° 44'
Dihedral angle of tetrahedron =	70° 32' --------- 180° 00'

54° 44'	60° 00'	5° 16'	70° 32'
+ 54° 44'	- 54° 44'	× 2	- 60° 00'
---------	---------	---------	---------
109° 28'	5° 16'	10° 32'	10° 32'

— If 5° 16' = unity; 54° 44' = 60°-1 quantum; and 70° 32' = 60° + 2 quanta.

— Obviously, the 70° 32' and 109° 28' relate to the "twinkle angle" differential from 60° (cosmic neutral) and to the 109° 28' central angle of the spherical tetrahedron. (See also Sec. 1051.20.)

Next Section: 905.70

Table 905.65

Decimal Magnitudes of VE 10-ness (Equil.)+Icosa 5-ness (Disequil.)	Angles around Sharp Vertex of A Quanta Module Tetrahedron		Differential		Central Angles of the Spherical Icosahedron's Disequilibrium 120 LCD Triangles	Differential	Decimal Magnitudes of VE 10-ness (Equil.)+Icosa 5-ness (Disequil.)
20°	19° 28'		26' 18.5"		20° 54' 18.57"	-00° 54' 18.57"	20°
30°	30°		1° 43' 02.9"		31° 43' 02.9"	- 1° 43' 02.9"	30°

						-2° 37' 21.47"	
40°	35° 16'		1° 06' 38.53"		37° 22' 38.53"	+ 2° 37' 21.47"	40°
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90°	84° 44'	+	5° 16'	=	90° 00' 00.00"	5° 14' 43.34"	90°
			This 5° 16' is one whole quantum-44'			This 2° 37' 21.47" is one quantum split in two	

(There is a basic difference between 5° 16' and approx. 5° 15'. It is obviously the same "twinkle angle" with residual calculation error of trigonometric irrational inexactitude.)
