223.00 **Principle of Prime Number Inherency and Constant Relative Abundance of the Topology of Symmetrical Structural Systems**

223.01 **Definition:** The number of vertexes of every omnitriangulated structural system is rationally and differentially accountable, first, by selecting and separating out the always *additive two* polar vertexes that must accommodate the neutral axis of spin inherent in all individual structural systems to permit and account for their independent motional freedom relationship from the rest of Universe. The number of nonpolar vertexes is called the base number. Second, we identify the always *multiplicative* duality factor of *two* characterizing the always coexistent insideness-outsideness of systems and their inherently positively and negatively congruent disparity of convexity and concavity. Third, we find the multiplicative duality factor of two to be multiplied by one of the first four prime numbers, 1, 2, 3, or 5 (multiplied by 1 if the structural system is tetrahedral, by 2 if it is octahedral, by 3 if it is the triangularly structured cube, or by 5 if it is the icosahedron or the triangularly stabilized vector equilibrium), or factored by a variety of multiples comprised of combinations of only those first four prime numbers, whether the polyhedra are, in the Platonic, Archimedean, or any other progression of symmetrical structural systems. When the vector edges of the symmetrical systems are modularly subdivided, all of the foregoing products are found to be multiplied again to the second power by the frequency of uniform modular subdivisions of the vector edges of the symmetrical structural system. In respect to the original base number of nonpolar vertexes, there will always be twice as many openings ("faces") and three times as many vector edges of the symmetrical structural system, always remembering that the two polar vertexes were first extracted from the inventory of topological characteristics before multiplying the remaining number of vertexes in the manner described and in relation to which the number of nonpolar vertexes and the relative abundance of the other topological characteristics are accurately derived and operationally described.

223.02 **Axis of Spin:** Any two vertexes may be selected as the axis of spin, whether or not the axis described by them is immediately conceivable as the logical axis of spinnability, i.e., the axis need not be statically symmetrical. (You can take hold of a boy by his two hands and, holding one above the other and leaning backward spin him centrifugally around you. Although his two hands do not represent the symmetrical static axis of the boy’s body, their dynamic positions defined the axis of your mutual spinning.)

223.03 **Equation of Prime Number Inherency of All Symmetrical Structural Omnitriangulated Systems:**

$X = 2NF^2 + 2$

Where:

X = number of vertexes (crossings) or spheres in the outer layer or shell of any symmetrical system;

N = one of the first four prime numbers: 1, 2, 3, or 5; and

F = edge frequency, i.e., the number of outer layer edge modules.

223.04 **Equation of Constant Relative Abundance of Topological Aspects of All Symmetrical Structural Systems:** Multiplication of one of the first four prime numbers or their powers or multiples by the constant of relative topological characteristics abundance:

1 + 2 = 3

1 Nonpolar vertex

2 Faces

3 Edges

In addition to the product of such multiplication of the constant relative abundance equation by one of the first four prime numbers—1, 2, 3, or 5—or their powers or multiples, there will always be two additional vertexes assigned as the poles of the axial spinnability of the system.

223.05 **Two Kinds of Twoness:** There are two kinds of twoness:

(1) the numerical, or morphationally unbalanced twoness; and

(2) the balanced twoness.

The vector equilibrium is the central symmetry through which both balanced and unbalanced asymmetries pulsatingly and complexedly intercompensate and synchronize. The vector equilibrium's frequency modulatability accommodates the numerically differentiated twonesses.

223.06 There are four kinds of positive and negative:

(1) the eternal, equilibrium-disturbing plurality of differentially unique, only-positively-and-negatively-balanced aberratings;

(2) the north and south poles;

(3) the concave and convex; and

(4) the inside (microcosm) and outside (macrocosm), always cosmically complementing the local system's inside-concave and outside-convex limits.

223.07 There is a fourfold twoness: one of the exterior, cosmic, finite ("nothingness") tetrahedron—i.e., the macrocosm outwardly complementing all ("something") systems—and one of the interior microcosmic tetrahedron of nothingness complementing all conceptually thinkable and cosmically isolatable "something" systems. (See Sec. 1070.)

223.08 A pebble dropped into water precessionally produces waves that move both outwardly from the circle's center—i.e., circumferentially of the Earth sphere—and reprecessionally outwardly and inwardly from the center of the Earth—i.e., radially in respect to the Earth sphere. Altogether, this interregeneratively demonstrates (1) the twoness of local precessional system effects at 90 degrees, and (2) the Universe-cohering gravitational effects at 180 degrees. These are the two kinds of interacting forces constituting the regenerative structural integrity of both subsystem local twonesses and nonunitarily conceptual Scenario Universe. The *four* cosmically complementary twonesses and the *four* local system twonesses altogether eternally regenerate the scientific generalization known as complementarity. Complementarity is sum-totally eightfoldedly operative: four definitive local system complementations and four cosmically synergetic finitive accountabilities.

223.09 Topologically the additive twoness identifies the opposite poles of spinnability of all systems; the multiplicative twoness identifies the concave-insideness and convex-outsideness of all systems: these four are the four unique twonesses of the eternally regenerative, nonunitarily conceptual Scenario Universe whose conceptual think- aboutedness is differentially confined to local "something" systems whose insideness-and- outsideness-differentiating foci consist at minimum of four event "stars." (See Secs. 510.04 and 510.09.)

223.10 **Constant Relative Abundance:** Topological systems that are structurally stabilized by omnitriangulation reveal a constant relative abundance of certain fundamental characteristics deriving from the additive twoness and the multiplicative twoness of all finite systems.

223.11 The *additive* twoness derives from the polar vertexes of the neutral axis of spin of all systems. This twoness is the beginning and essence of consciousness, with which human awareness begins: consciousness of the other, the other experience, the other being, the child's mother. To describe that of which we are aware, we employ comparison to previous experience. That which we are aware of is hotter, or bigger, or sharper than the other experience or experiences. The a priori otherness of comparative awareness inherently requires time. Early humanity's concept of the minimum increment of time was the *second*, because time and awareness *begin* with the second experience, the prime *other*. If there is only one think, one think is naught. Life and Universe that goes with it begins with two spheres: you and me . . . and you are always prior to me. I have just become by my awareness of you.

223.12 The *multiplicative* twoness is inherent in the disparity of the congruent convexity and concavity of the system. The multiplicative twoness is because both you and I have insideness and outsideness, and they are not the same: one is convex and one is concave.

223.13 Conceptual systems having inherent insideness and outsideness are defined at minimum by four event foci and are, ergo, tetrahedral; at maximum symmetrical complexity, they are superficially "spherical"—that is, they are a spherelike array of event foci too minute for casual resolution into the plurality of individual event foci of which, in experiential fact, they must consist, each being approximately equidistant from one approximately identifiable event focus at the spherical array's center. Since all the "surface" event foci may be triangularly interconnected with one another by chords that are shorter than arcs, all spherical experience arrays are, in fact, polyhedra. And all spheres are polyhedra. Spherical polyhedra may at minimum consist of the four vertexes of the regular tetrahedron.

223.14 We discover that the additive twoness of the two polar (and a priori awareness) spheres at most economical minimum definition of event foci are two congruent tetrahedra, and that the insideness and outsideness of complementary tetrahedra altogether represent the two invisible complementary twoness that balances the visible twoness of the polar pair. This insideouting tetrahedron is the minimum compound curve—ergo, minimum sphere. (See Sec. 624.)

223.15 When the additive twoness and the multiplicative twoness are extracted from any symmetrical and omnitriangulated system, the number of vertexes will always be a rational product of one or more of the first four prime numbers, 1, 2, 3, or 5, or their powers or multiples.

223.16 The number of openings (or "faces") will be twice that of the vertexes, minus two.

223.17 The number of vector edges will be three times the number of vertexes, minus two.

223.18 When we reduce the topological inventory of basic vertexes, areas, and edges of all omnitriangulated structural systems in Universe—whether symmetrical or asymmetrical—by taking away the two poles and dividing the remaining inventory by two, we discover a constant relative abundance of *two faces* and *three lines* for *every one vertex.* This is to say that there is a constant topological abundance characterizing all systems in Universe in which for every *nonpolar* vertex there are always *two faces* and *three (vectorial) edges.*

223.19 In an omnitriangulated structural system:

a. the number of vertexes ("crossings" or "points") is always evenly divisible by two;
b. the number of faces ("areas" or "openings") is always evenly divisible by four; and
c. the number of edges ("lines," "vectors," or "trajectories") is always evenly divisible by six.

223.20 **Primary Systems:** Only four primary systems or contours can be developed by closest packing of spheres in omnisymmetrical concentric layers. The exterior contours of these points are in the chart:

	After subtracting the two Polar vertices: the Additive two	And dividing by the Duality Factor Two	Outer Layer of Two Frequency	Outer Layer of Three Frequency
(a) Tetrahedron (four sides): $2+[(2\times\mathbf{1})\times F^2]=4$ vertexes (crossings)	2	1	10	20

(b) Octahedron (eight sides):				
$2+[(2\times\mathbf{2})\times F^2]=6$ vertexes	4	2	18	38
(crossings)				
(c) Cube (six sides):				
$2+[(2\times\mathbf{3})\times F^2]=8$ vertexes	6	3	26	56
(crossings)				
(d) Vector Equilibrium (fourteen sides):				
$2+[(2\times\mathbf{5})\times F^2]=12$ vertexes	10	5	42	92
(crossings)				

223.21 **Primary Systems:** Equations: The formulas for the number of spheres in the outer layer of closest packed spheres in primary systems is as follows:

(a) *Tetrahedron*:

$X = 2F^2 + 2$

(b) *Octahedron*:

$X = 4F^2 + 2$

(c) *Cube*:

$X = 6F^2 + 2$

(d) *Vector Equilibrium (Icosahedron)*:

$X = 10F^2 + 2$

Where:

X = the number of spheres in the outer layer or shell of the primary system;

F = edge frequency, i.e., the number of outer-layer edge modules.

223.30 **Symmetrical Analysis of Topological Hierarchies:** Symmetrical means having no local asymmetries. Omnisymmetrical permits local asymmetries .

223.31 The following omnitriangulated systems are symmetrical:

Tetrahedron

Octahedron

Icosahedron

223.32 The following omnitriangulated systems are omnisymmetrical:

Cube

Diagonal Rhombic Dodecahedron

Rhombic Dodecahedron

Dodecahedron

Tetraxidecahedron

Triacontahedron

Enenicontrahedron

223.33 The vector equilibrium is locally mixed symmetrical and asymmetrical.

223.34 **Symmetrical Analysis of Topological Hierarchies:** Whenever we refer to an entity, it has to be structurally valid, and therefore it has to be triangulated. Being locally mixed, vectorially symmetrical but facially asymmetrical, being triangulated but not omnitriangulated, vector equilibrium may function as a system but not as a structure.

223.40 **Powering:** Second powering in the topology of synergetics is identifiable only with the vertexes of the system and not with something called the "surface area." Surfaces imply experimentally nondemonstrable continuums. There are no topologically indicated or implied *surfaces* or *solids*. The vertexes are the external points of the system. The higher the frequency of the system, the denser the number of external points. We discover then that second powering does not refer to "squaring" or to surface amplification. Second powering refers to the number of the system's external vertexes in which equating the second power and the radial or circumferential modular subdivisions of the system multiplied by the prime number *one* if a tetrahedral system; by the prime number *two* if an octahedral system; by the prime number *three* if a triangulated cubical system; and by the prime number *five* if an icosahedral system; each, multiplied by two, and added to by two, will accurately predict the number of superficial points of the system.

223.41 This principle eliminates our dilemma of having to think of *second* and *third* powers of systems as referring exclusively to continuum *surfaces* or *solids* of the systems, neither of which states have been evidenced by experimental science. The frequencies of systems modify their prime rational integer characteristics. The second power and third power point aggregations identify the energy quanta of systems and their radiational growth or their gravitational contraction. They eliminate the dilemma in which physics failed to identify simultaneously the wave and the particle. The dilemma grew from the misconceived necessity to identify omnidirectional wave growth exclusively with the rate of a nonexperimentally existent spherical surface continuum growth, the second power of radiational growth being in fact the exterior quanta and not the spherical surface being considered as a continuum.

223.50 **Prime Number Inherency:** All structurally stabilized polyhedra are characterized by a constant relative abundance of Euler's topological aspects in which there will always be twice as many areas and three times as many lines as the number of points in the system, minus two (which is assigned to the polar axis of spin of the system).

223.51 The number of the topological aspects of the Eulerian system will always be an *even* number, and when the frequency of the edge modulation of the system is reduced to its second root and the number of vertexes is divided by two, the remainder will be found to consist exclusively of a prime number or a number that is a product exclusively of two or more intermultiplied prime numbers, which identify the prime inherency characteristics of that system in the synergetic topological hierarchy of cosmically simplest systems.

223.52 All other known regular symmetrical polyhedra (other than the tetrahedron and the octahedron) are described quantitatively by compounding rational fraction elements of the tetrahedron and the octahedron. These elements are known as the A and B Quanta Modules (see Sec.920 through 940). They each have a volume of one-twenty-fourth of a tetrahedron.

223.60 **Analysis of Topological Hierarchies: Omnitriangulation:** The areas and lines produced by omnitriangularly and circumferentially interconnecting the points of the system will always follow the rule of constant relative abundance of points, faces, and lines.

223.61 Only triangles are structures, as will be shown in Sec. 610. Systems have insideness and outsideness ergo, structural systems must have omnitriangulated isolation of the outsideness from the insideness. Flexibly jointed cubes collapse because they are not structures. To structure a cubical form, the cube's six square faces must be diagonally divided at minimum into 12 triangles by *one* of the two inscribable tetrahedra, or at maximum into 24 triangles by *both* the inherently inscribable positive-negative tetrahedra of the cube's six faces.

223.62 Lacking triangulation, there is no structural integrity. Therefore, all the polyhedra must become omnitriangulated to be considered in the Table. Without triangulation, they have no validity of consideration. (See Sec. 608, "Necklace.")

223.64 **Table: Synergetics Hierarchy of Topological Characteristics of Omnitriangulated Polyhedral Systems** (See pp. 46-47.)

223.65 The systems as described in *Columns 1 through 5* are in the prime state of conceptuality independent of size: metaphysical. Size is physical and is manifest by frequency of "points-defined" modular subdivisions of lengths, areas, and volumes. Size is manifest in the three variables of relative length, area, and volume; these are all expressible in terms of frequency. Frequency is operationally realized by modular subdivision of the system.

223.66 *Column 1* provides a statement of the true rational volume of the figure when the A and B Quanta Modules are taken as unity.
Column 2 provides a statement of the true rational volume of the figure when the tetrahedron is taken as unity.
Columns 1 and 2 describe the rationality by complementation of two selected pairs of polyhedra considered together. These are (a) the vector-edged icosahedron and the vector-edged cube; and (b) the vector-edged rhombic dodecahedron and the vector-edged dodecahedron.
Column 3 provides the ratio of area-to-volume for selected polyhedra.
Column 4 denotes self-packing, allspace-filling polyhedra.
Column 5 identifies complementary allspace-filling polyhedra. These are: (a) the A and B Quanta Modules in combination with each other; (b) the tetrahedron and octahedron in combination with each other; and (c) the octahedron and vector equilibrium in combination with each other.
Column 6 presents the topological analysis in terms of Euler.
Columns 7 through 15 present the topological analysis in terms of synergetics, that is, with the polar vertexes extracted from the system and with the remainder divided by two.

Column 7 accounts the extraction of the polar vertexes. All systems have axes of spin. The axes have two poles. Synergetics extracts two vertexes from all Euler topological formulas to function as the poles of the axis of spin. Synergetics speaks of these two polar vertexes as the additive two. It also permits polar coupling with other rotative systems. Therefore a motion system can have associability.
Column 9 recapitulates *Columns 7 and 8* in terms of the equation of constant relative abundance.
Column 10 accounts synergetics multiplicative two.
Column 11. The synergetics constants of all systems of Universe are the additive two and the multiplicative two—the Holy Ghost; the Heavenly Twins; a pair of twins.
Columns 12 and 15 identify which of the first four prime numbers are applicable to the system considered.
Column 13 recapitulates *Columns 11 and 12.*

223.67 **Synergetics Hierarchy:** The Table of Synergetics Hierarchy (223.64) makes it possible for us to dispense with the areas and lines of Euler's topological accounting; the hierarchy provides a definitive description of all omnitriangulated polyhedral systems exclusively in terms of points and prime numbers.

223.70 **Planck's Constant**

223.71 Planck's constant: symbol = *h*. *h* = 6.6—multiplied by 10^{-27} grams per square centimeters per each second of time. The constant *h* is the invariable number found empirically by Planck by which the experimentally discovered, uniformly energized, *minimum increment of all radiation,* the *photon,* must be multiplied to equate the photon’s energy value as rated by humans' energy-rating technique, with the effort expended in lifting weights vertically against gravity given distances in given times. Thus automotive horsepower or electromagnetic kilowatts per hour performance of stationary prime movers, engines, and mobile motors are rated.

223.72 Max Planck's photons of light are separately packaged at the radiation source and travel in a group-coordinated flight formation spherical surface pattern which is ever expanding outwardly as they gradually separate from one another. Every photon always travels radially away from the common origin. This group-developed pattern produces a sum-totally expanding spherical wave-surface determined by the plurality of outwardly traveling photons, although any single photon travels linearly outwardly in only one radial direction. This total energy effort is exactly expressed in terms of the exponential second-power, or areal "squaring," rate of surface growth of the overall spherical wave; i.e., as the second power of the energy effort expended in lifting one gram in each second of time a distance of one "vertical" centimeter radially outward away from the origin center.

223.73 *Whereas:* All the volumes of all the equi-edged regular polyhedra are irrational numbers when expressed in the terms of the volume of a cube = 1;
Whereas: The volume of the cube and the volumes of the other regular polyhedra, taken singly or in simple groups, are entirely rational;
Whereas: Planck's constant was evaluated in terms of the cube as volumetric unity and upon the second-power rate of surface expansion of a cube per each second of time;
Whereas: Exploring experimentally, synergetics finds the tetrahedron, whose volume is one-third that of the cube, to be the prime structural system of Universe: *prime structure* because stabilized exclusively by triangles that are experimentally demonstrable as being the only self-stabilizing polygons; and *prime system* because accomplishing the subdivision of all Universe into an interior microcosm and an external macrocosm; and doing so structurally with only the minimum four vertexes topologically defining insideness and outsideness;
Whereas: Structuring stability is accomplished by triangularly balanced energy investments;
Whereas: Cubes are unstable;
Whereas: The radial arrangement of unit tetrahedral volumes around an absolute radiation center (the vector equilibrium) constitutes a prime radiational-gravitational energy proclivity model with a containment value of 20 tetrahedra (where cube is 3 and tetrahedron 1);
Whereas: Max Planck wished to express the empirically emerged value of the photon, which constantly remanifested itself as a unit-value energy entity in the energy-measuring terms of his contemporary scientists;
Wherefore: Planck employed the XYZ rectilinear frame of shape, weight, volume, surface, time, distance, antigravity effort, and metric enumeration, mensuration

tools adopted prior to the discovery of the photon value.

223.74 Planck's constant emerged empirically, and to reconvert it to conformity with synergetics the 6.6ness is canceled out:

$$6.6 = \frac{20}{3} = \frac{\text{volume of vector equilibrium}}{\text{volume of cube}}$$

Therefore, to convert to synergetics accounting, we multiply Planck's $6.6 \times 3 = 20$. As seen elsewhere in synergetics' topology, the number of surface points of the identically vector-radiused and vector-chorded system's vector equilibrium—as well as of its spherical icosahedron counterpart—always multiplies at a second-power rate of the frequency (of modular subdivision of the radius vector of the system) times 10 to the product of which is added the number 2 to account for the axial rotation poles of the system, which twoness, at the relatively high megacycle frequencies of general electromagnetic wave phenomena, becomes an undetectable addition.

223.75 In synergetics' topological accounting, surface areas are always structural triangles of the systems, which systems, being vectorially structured, are inherently energy- investment systems. As synergetics' topology also shows, the number of triangular surface areas of the system increases at twice the rate of the nonpolar surface points, ergo the rate of energetic system’s surface increase is accounted in terms of the number of the triangular areas of the system's surface, which rate of system surface increase is $20F^2$, where F = frequency; while the rate of volumetric increase is $20F^3$. The vector is inherent in the synergetics system since it is structured with the vector as unity. Because vectors = mass × velocity, all the factors of time, distance, and energy, as both mass and effort as well as angular direction, are inherent; and *E* as energy quantum of one photon = $20F^2$.

223.80 **Energy Has Shape**

223.81 I recognize the experimentally derived validity of the *coordinate invariant* the result does not depend on the coordinate system used. Planck's constant is just what it says it is: an experimentally ascertained constant cosmic relationship. Planck's constant as expressed is inherently an irrational number, and the irrationality relates to the invariant quantum of energy being constantly expressed exclusively in the volume-weight terms of a special-case *shape* which, in the geometrical shape-variant field of weight-strength and surface-volume ratio limits of local structural science containment of energy, as mass or effort, by energy-as-structure, is neither maximum nor minimum. The special-case geometrical shape chosen arbitrarily by the engineering-structures-eschewing pure scientists for their energy-measurement accommodation, that of the cube, is structurally unstable; so much so as to be too unstable to be classified as a structure. Unwitting of this mensural shortcoming, Planck's constant inadvertently refers to the cube, implicit to the gram, as originally adopted to provide an integrated unit of weight-to-volume mensuration, as was the “knot” adopted by navigators as a velocity unit which integrates time-space incrementation values. The volume and weight integrate as a gram. The gram was arbitrarily assumed to be constituted by a cubic centimeter of water at a specific temperature, 4 degrees centigrade.

223.82 Relationship constants are always predicated on limits. Only limits are invariable. (This is the very essence of the calculus.) Variation is between limits. Though Planck's constant is indirectly predicated on a limit condition of physical phenomena, it is directly expressed numerically only as a prefabricated, constantly irrational number- proportionality to that limit, but it is not the inherently rational unit number of that limit condition. This is because the cube was nonstructural as well as occurring structurally between the specific limit cases of surface-to-volume ratio between whose limits of 1 → 20, the cube rates as 3.

223.83 Max Planck found a constant energy-value relationship emergent in all the photon-discovery experimental work of others. A great variety of exploratory work with measurements of energy behaviors in the field of radiation disclosed a hitherto unexpected, but persistent, minimum limit in relation to such energy phenomena. Planck expressed the constant, or limit condition, in the scientifically prevailing numerical terms of the physical and metaphysical equipment used to make the measuring. The measuring system included:

- the decimal system;
- the CG_tS and;
- XYZ coordinate analysis,

which themselves were procedurally assumed to present the comprehensively constant limit set of mensuration systems' input factors.

223.84 Let us assume hypothetically that Ponce de Leon did find the well of eternal- youth-sustaining water, and that the well had no "spring" to replenish it, and that social demand occasioned its being bailed out and poured into evaporation-proof containers; and that the scientists who bailed out that precious well of water used a cubically-shaped, fine- tolerance, machined and dimensioned one-inch-thick shelled, stainless steel bucket to do their carefully measured bailing and conserving task. They did so because they knew that cubes close-pack to fill allspace, and because water is a constant substance with a given weight per volume at a given temperature. And having ten fingers each, they decided to enumerate in the metric system without any evidence that meters are whole rational linear increments of a cosmic nature. Thus organized, the Ponce de Leon scientists soon exhausted the well, after taking out only six and two-thirds cubic bucket loads—with a little infinitely unaccountable, plus-or-minus, spillage or overestimate.

223.85 Planck's constant, *h*, denotes the minimum energy-as-radiation increment known experimentally by humans to be employed by nature, but the photon's energy value could and should be expressed in terms of a whole number as referenced directly by physical experiment to nature's limit-case transforming states.

223.86 Had, for instance, the well-of-youth-measuring scientists happened to be in a hurry and had they impatiently used a cubical container of the same size made of a thin- wall plastic such as the cubically shaped motel waste containers, they would have noticed when they stood their waterfilled plastic cube bucket on the ground beside the well that its sides bulged and that the level of the water lowered perceptibly below the container's rim; though this clearly was not caused by leaking, nor by evaporating, but because its shape was changing, and because its volume-to-container-surface ratio was changing.

223.87 Of all regular polyhedra, the sphere (i.e., the high-frequency, omnitriangulated, geodesic, spheroidal polyhedron) encloses the most volume with the least surface. Whereas the tetrahedron encloses the least volume with the most surface. The contained energy is at minimum in the tetrahedron. The structure capability is at maximum in the tetrahedron.

223.88 Planck did not deliberately start with the cube. He found empirically that the amount of the photon's energy could be expressed in terms of the CG_tS-XYZ decimal- enumeration coordinate system already employed by science as the "frame of reference"[3] for his photon evaluation which, all inadvertently, was characterized by awkwardness and irrationality.

(Footnote 3: For "frame of reference" synergetics speaks of the "multi-optioned omni-orderly scheme of behavioral reference." See sec. 540.)

223.89 Energy has shape. Energy transforms and trans-shapes in an evoluting way. Planck's contemporary scientists were not paying any attention to that. Science has been thinking shapelessly. The predicament occurred that way. It's not the size of the bucket—size is special case—they had the wrong shape. If they had had the right shape, they would have found a whole-rational-number constant. And if the whole number found was greater than unity, or a rational fraction of unity, they would simply have had to divide or multiply to find unity itself.

223.90 The multiplier 10^{-27} is required to reduce the centimeter magnitude of energy accounting to that of the tuned wavelength of the photon reception. Frequency and wave are covariably coupled; detection of one discloses the other. Since synergetics' vector equilibrium's energy converging or dispersing vector is both radially and chordally subdivided evenly by frequency—whatever that frequency may be—the frequency fractionates the unit vector energy involvement by one-to-one correspondence.

223.91 If they had taken the same amount of water at the same temperature in the form of a regular tetrahedron, they would have come out with a rational fraction of unity. They happened to be enumerating with congruence in modulo 10, which does not include any prime numbers other than 1, 2, and 5. The rational three-ness of the cube in relation to the tetrahedron is not accommodated by the decimal system; nor is the prime 7 inherent in modulo 10. Therefore, Planck's constant, while identifying a hitherto undiscovered invariant limit condition of nature, was described in the wrong frame of reference in awkward—albeit in a constantly awkward—term, which works, because it is the truth; but at the same time it befogs the otherwise lucid and rational simplicity covering this phenomenon of nature, just as does nature's whole number of utterly rational atoms exchanging rates in all her chemical combining and separating transactions accounting.

Next Section: 234.00
