

What Is Physics?

Wherein we learn how to understand the reality of the things we "know", creating space for the accommodation of "unknown" realities.

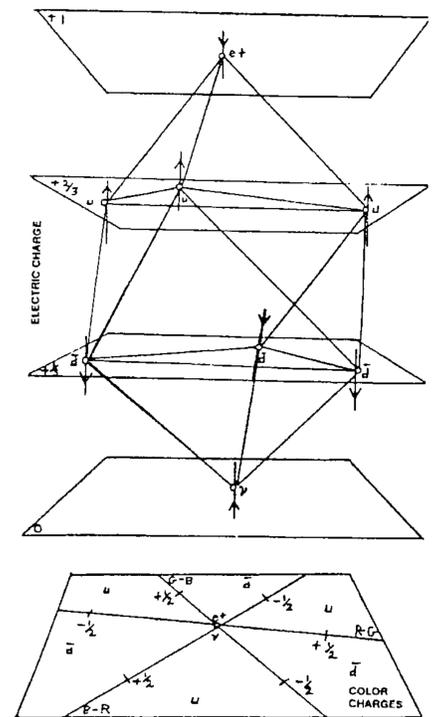
The principles behind UFO-Antigravity-Timetravel-Teleportation-Alien Technology-Beam Technology -Orgone/Pranic Energy-The Unified Field etc.

In order to understand the relation between "psyche" and "physics" (classically posed as "mind" and "matter") it is necessary to understand what physics is-not tease apart an analytic definition of "psyche". After all, it's *physics* which is taken for granted as somehow already known, and is therefore overlooked in any attempt to approach what appears to be its unknown "opposite number".

All energy, matter, forces and fields comprising the physics of material expression, are functions of an abstract geometry. The discipline of physics has *tended* toward the expression of its elements in terms of pure geometry, and quantum mechanics only furnished a momentary break in the continuity maintained by general relativity when it de-toured into statistical probability. That continuity was resumed when emphasis shifted to gauge theory, and the resolving allure of *symmetries*.

Despite the notorious "fuzziness" of quantum states, they're expressed in terms of spin, interval, charge and moment which are in fact *quantized*, i.e. assigned discrete properties - integer and half-integer values, rational fractions and ratios or non-constructable numbers functioning as constants. Though physics may not order itself macroscopically in takeout, styrofoam geometries as with Kepler's harmonics of planetary orbits styled after Pythagorean intervals, it exhibits a deep relationship with ideal properties in the Euclidean sense. Mapped schematically, it displays the types of integral values generated through those *most* schematic of "solid objects", the sacred polyhedra.

These stable lineafom volumes gestated into being on the basis of an "organically" frugal Noesis (through parity, axial rotation and mutually inverse symmetries) dice up their common internal spaces by angles, axes and edges so as to render the kinds of submultiples and constants operating in the abstract harmonies of elementary particles and fields. The counterchanging equivalents of particles and fields may not show in overt geometries or radial symmetries, from the trace-impressions registered across the uniform perceptual plane; by mass, weight, coupling constant, spin angular momentum and charge they may seem quite distinct. Yet these "differences" can testify to a deeper identity when their elements are schematically analyzed and re-arranged.



The plotted relations of quarks and leptons on a horizontal plane, displaced *vertically* proportional to their respective charges, polarize the angular coordinates of an ideal *cube*; the requirement of square-summing the "real" and "imaginary" parts of a field specifying spin states of particles and resonances in measuring angular momentum, plots a *straight line* in the Regge trajectory; the rotational identity of particles is established by the abstract operation of right-angled reflection through the space of "strangeness" and "isospin" mirrors, producing highly defined symmetry correlations. In the same way, conceptual rotations performed on the double-valued quality of fermions (matter particles) in an abstract "super-space" with anti-commutators, demonstrates deep angular identity with the class of bosons or force-particles (showing that, in theory, one is the self-same entity as the other only working the hyper-dimensional "nightshift").

In "heterotic string" theory, the summary familial group designated E8xE8 reflects a generalization of *crystal* symmetries, so that a strictly "abstract" pattern produced by categorial requirements applies directly to the macroscopic (observable) order of structures. Euclidean geometries peep from the apparent chaos of nature as occasional observables, sifted from the scales of micro-information to obtain some reflection of the abstract form governing all contributory processes: salts, honeycombs, seashells, pinecones, galaxies, viruses. As above, so below; the planning boards of those macro-forms may be observed by purely noetic reconstruction. Thus the field of perception and the field of cognition bear a deep relation. Thetic geometries in purely abstract space inform real constituents of experience, and are inseparable from them.

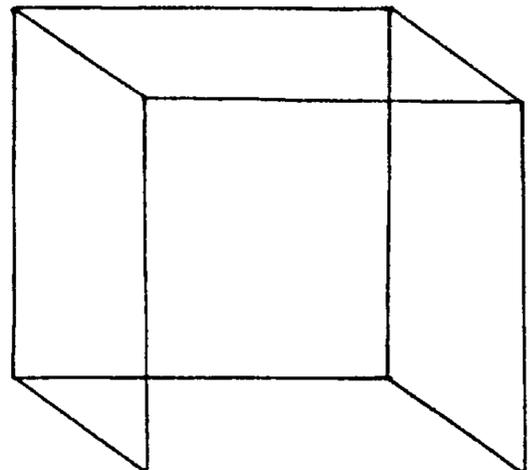
Down the Quadratic Rabbit Hole: The Curious Cube of Space

The inevitable conclusion is built *into* the very process whereby the evidence is collected, at the quantum-physical level. Physicists have however been reluctant, by specialization, to perceive the *ontologic* implications of their routine operatives. In order for example to make their predictive determinations (i.e. locating an electron in a specified spin state at a given moment), measurement must give the *differences* in the phase fields - parallel and antiparallel components of spin etc. - rather than specify some "absolute" phase. The "real" and "imaginary" parts of the wave-amplitude must be indistinguishable, i.e. they are constitutionally incapable of being separated in some absolute way. This doesn't point up a *defect* intrinsic to our relative perspective (as if there were fixed "real" signs that our perspective prevents us from determining). Such measurements aren't *constrained* by the presence of observer-consciousness; they are *functions* of it. There is (what physicists call) a deep *gauge symmetry* at work in the fact that adopted conventions specify the "signs" of complementary values. This is equivalent to the phenomenological circumstance that - for example - the foreground and background projections of a Necker cube are an arbitrary convention of focal alignment.

The comparison is in fact profound, for it involves common elements that give away the game as to exactly what we're dealing with in all cases; the reason it hasn't been universally recognized to date, is that physicists have adopted their conventions as practical tools without wanting to, believing they could, or *trying* to know what they mean.

The common denominator in our comparative example above, is *observer perspective* (electrons always align with the axis of the observer, no matter what conventions are adopted or angles selected). The relative ascription of plus and minus signs (i.e. in defining oscillations of wave amplitudes) requires the component of $\sqrt{-1}$, i.e. the imaginary value *i*. All such operations enlist the quadratics of complex numbers, those having real and imaginary components perpendicularly plotted such that the "negative" domains of the horizontal x-axis are obtained by squaring the coordinate points of the vertical y axis; such square-root relationship differs from the Cartesian coordinate-plane as a *dimensional perpendicularity* (i.e. a rotation of 90°). Such a dimensional relationship with respect to the negative, real-number axis resembles the mutually negating inversion-values belonging to the Necker cube, where the dimensionality of the object positively defined in "real" (preferred) space depends on the fluxing negative invagination occurring through that space (i.e. turning negative spaces, shaped by common boundaries, insideout relative to each other). The arbitrary "relief" of one set of coordinate planes or the other as a function of the "negative" potential assigning respective values, demonstrates the existence of those ambiguously-"doubling" coordinates as $x = \pm \sqrt{-1}$. They are interpretable as a function of *i*.

The value *i* represents "imaginary"; by implication it's the *idea* of the "thing", for it posits both a "thing" and its absence. It's easy for us to believe that a perceived "thing" exists *out there*, in itself independent of the observer; but the posited "absence" of a thing is self-evidently an expression of *consciousness*, an operation of the *ideoform* character of experience. That a "thing" and its negating obverse are given *together* in the Necker cube despite our tendency to align some angle of bias into preferential relief, shows by example the ideoform character of every object (surrounded as every object is with its inverse-focal envelope of coordinate negations, cf. "What Is Christ Consciousness?", Issue 6, Jan./Feb. 1990 pp. 17-18).



The relation of abstract to operative spaces, ideal symmetries to

functionally differentiated forces, and real to imaginary numbers involves the same conclusion. All energies, forces and fields comprising the physics of material expression, are functions of an abstract geometry.

Abstract geometry, in turn, is a function of *consciousness*.

Thinking Along the Same Line

Is the latter a leap that may appear to be missing its median term? Consider: when we think of "geometry" we presuppose forms of spatial configuration, or the temporal harmonics of sound etc. Yet geometry in itself is neither "spatial" nor "temporal", but simply loans itself to such descriptions secondarily. It is first of all a purely *noetic* system of rates, ratios, intervals, agreements and alignments; its components exist independent of "things" measured, as an abstract typology constituting a strictly internal self-description with no required reference.

Consider now, the way we determine what's "conscious" in the first place. As a self-evidently aware expression, we note the power of *abstraction* (which gives us our self-reflective ability to *recognize* the presence of such consciousness). We further perceive that there are purely noetic or ideal/rational values that make use of and *require* that power of abstraction. By definition, for example, a line (i.e. *ideal, or* straightline) is a continuously self-displacing point magnitude - a non-dimensional entity - extended in a single dimension, i.e. length, such that no divergence arises in the superposition of any arbitrary segment on any other; and likewise, a "circle" describes a closed-plane curve all points of which are equidistant from a mutual point. Where does any such ideal figure appear in the rough macroscopy of nature? (except perhaps in the crop circles, if we accept them as "organic" phenomena!)

The terms of geometry, then, are fundamentally *noetic* (regardless whether they trace back in temporal origin to the Mother-of-Invention, practical necessity): they're ordered in the domain of the ideal, partaking in prime part of rationality, abstraction and therefore consciousness. If in fact we turn momentarily from the Mother-of-Invention to Mother Terasu (issue 5, Dec. '89 TNTC), we'll perhaps recall that the phases of elementary geometry are the spiritual residue or signature "background noise" of the primordial creative Event in consciousness, wherein the limitless potential of Limit is granted its cosmic day by extension of the absolute self-continuity of being (consciousness itself) toward differential qualities bestowing abstract homogeneity and unitive self-conformance through delimiting states and dimensions.

We know then what's "conscious"; and, so far, we can see that the spirit of "geometry" belongs fundamentally to that value.

Isn't, however, the signature of geometry derivable from physical characteristics? And if so, what exclusivity does "geometry" bear with respect to consciousness, in that case? Moreover, how does the sacrosanct symmetry and abstract/zero-sum purity of geometry as "mindform", justify itself in relation to the apparently disparate requirements of *real physical operants*, where effect issues as the result of non-zero sums, real time and space anisometrics, chiralic and vectorial preference etc.?

The answer is, first of all, that geometry bears *no* exclusivity to consciousness unless "nature" (the practical physics-of-things) is recognized as participating equally in and as expression of both that "geometry", and that consciousness. And this can only come about by recognizing that "real" space *is* abstract or noetic space, a value of consciousness, only masked or "broken" by the ontological *angle* at which the coordinates of cognition intersect that space. This latter proposition bears deep relation to, but is not the same as, the explanations of "symmetry breaking" in physics.

Thinking in Circles

As an example: the basic, electromagnetic field, by itself, describes the gauge symmetry (U)[1] of a *circle*, i.e. it conserves symmetry when rotated about its center through any angle. Such a symmetry exists, so the physicists say, in abstract space. If all other forces and fields are variations on a single field, why do the strong, weak and gravitational fields exhibit dissimilar coupling constants, (behavioral properties, masses, ranges, etc.) and therefore participate in symmetry groups of different "shape"?

By analogy, we can "explain" that the sun - for example - shines its rays in all directions equally; and each ray, being an expression of the self-same coordinate field, tends to appear as bright and shine as far as any other ray. However, if we posit the interposition of a *wall* appearing from our left and extending midway into our visual range, we can assert that some rays did not in practice shine as bright or extend as far. This, crudely stated, is an analogy of "broken gauge symmetries". The symmetry of the light rays remains in theory, but it is masked or disrupted in practice so that some rays are intercepted and bounced back, never influencing the visual field. The "wall" in this example represents some extenuating "function", i.e. the tendency of states to seek their lowest energy-value etc. If an excited energy state acquires mass in the indeterminacy range, the total value of the forces is conserved in a different "packaging" which changes the *functional* results.

Initiated understanding, in order to establish the identity of "nature" and consciousness, asks what *accounts* for the appearance of those qualifying functions fatefully mitigating direct perception of the field of experience - as a whole - in terms of the perfect circular symmetry abstractly described by the *ee* field? what accounts for the incursion of those compromising functions which deform and squeeze a *noetic* magnitude, decomposing it into the variegated textures and cross-sectional crenatures of interference contributed to the broken-field running of the "real" world?

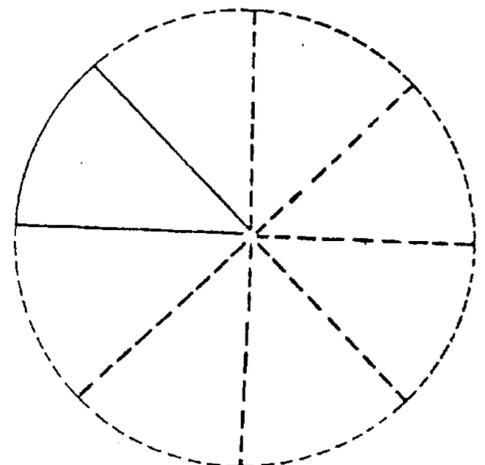
There's Always an Angle

We've already seen the "sinister" device; it's the innocuous "angle" that marries *i* (imagination) to the negative squares involved in kicking out a provisional term modeled in "positive" spacetime. As "imagination" (mind) related to the "negative-square domains" (Void, actually the double-negative of Diamond Vajra Void), we behold the instrumental evidence of *Void-mind*, introduced as a Trojan horse into the workaday world of physics. Nor is this just another "occult" attempt to find the mystagogic sign of spirit in every disposable "discovery" of science; for we've already seen the way in which these calculations *necessarily* imply the presence of consciousness (the Muse of Charles Muses presiding over this point, smilingly agrees!).

Angle is the specific culprit; angle gives the coefficient in the ratio of interaction between whole-value or integral magnitudes. Angle is itself a non-constructable (irrational) expression like Phi or Pi; irrational numbers can be generically represented in the hypotenuse of a right triangle. Angular coordinates involve a factor of *infinite uncertainty* (in the same way that irrational values are non-constructable expressions presiding as constants independent of the quantifiable terms of their operation). At precisely the locus of intersection setting the ratios of function (reflecting rates, values, intensities of interchange and threshold limits of transformation for finitizing processes) there appears the factor of 2π - the radius of a circle - establishing the angular degree of freedom in the phase dimension. That freedom is calculated as a uniform probability distribution between zero and 360 degrees, or 2π . Void-being appears as "angular uncertainty", installing the elasticity of a deep variable at the heart of integral quantities.

All factors participating in the crystal architectures of geometry are *zeroed* at the locus of their intercourse, as if they could be summed in transit to mutually canceling radii of a circle. At the same time, expressed as angle, the isotropism of zero-reference symmetry is masked in the operations that inevitably yield non-zero resultants. The common void-value of parts and processes shows up in the masked form of an angular slice from that equipotential circle; it signs in as a *variable*, the "sliding ring" bestowing the potential of an indeterminately-elastic shift in phase.

The same principle that fixes the constants of a system in any given case, bestows the adaptive variability of a basic/unpredictable value. "Angle" is the signature introduction of nonlinearity, the very factor which makes all calculation in complex space sensitively subject to initial conditions, at the same time belies the calculus of straight-line degradation lending to make of material reality an apparent one-way flow in the direction of inevitable entropy. Systems which are essentially non-linear (i.e. the "physical" system as a whole) are highly interactive, self-organizing and driven far-from-equilibrium: the conditions of a continuous self-renewal or basically negentropic (synergic) process. Macro-order "dissipative structures" which *postpone* the second law of thermodynamics by exporting entropy into the environment thus bleeding off perturbations, *reflect* the underlying principle on the scale of atomic oscillators; they belong to the class of secondary evidences.



The same factor that operates in the phenomenon of "clock-doubling" (i.e. additions in the angular degrees of freedom permitted a metronome motion etc.) whereby a system may jump in a series of finite moves to a state of basic unpredictability, accounts for the sudden puffing of massless particles into massive states, the inverse predictability of position and velocity, energy and time, etc. Again, such ambiguities aren't pylons marking the fragile boundaries of the relative observer- they're *functions* of observer-consciousness, which when drawn into resolving focus state the deep connection between consciousness and the processes it calculates. For example, Bearden has been trying to show for years that calculable properties aren't *added* to a basic, independent particle but that the "particle" is *constituted* by the properties (implicitly, then, the contrastive measurements made on the particle are mutually inverse *constituents* of the particle-might as well ask for the "real" cube that underlies the fluxing phenomenon of the Necker cube).

The Doonouse Is Thrown a Curve

Because *complex* numbers are those inherently separated by angles other than zero, any such term in spacetime calculations signals the factor of dimensional *hyperangle*, i.e. a rotation that operates not so much *within* a given dimensional framework but across the mirroring perpendicular planes marking dimensional horizons.

Curvature is generated by a description of its angular coordinates: from the "highly curved" quantum foam at the Planck scale to the spacetime curvature involved in gravity equations of mass/energy/acceleration, the factor of "infinite uncertainty" haunts each of the domains of particle physics and spacetime as an inherent operative of every straight-sum linear "cross-section". At each moment in the curvilinear history of each system, a boiling interaction of dimensionally-convergent processes takes place in the nonlinearity of the hyperangle through which it's generated.

As an example, the linear propagation of sinusoidal waveforms (familiarily, the signature of *c* and the proper limits of the lightcone) may be found to have scandalous progenitors. If the non-linearity of such processes as "clock-doubling" proceed by an exponent, then the exponential function itself has deep relationship with the staid periodicity of the sine. First of all, the exponential and its gradient are uniquely identical; the (e^x) curve is everywhere equal or proportional to its slope. However the shape of the *periodic sine curve* is also closely connected to its own gradient: plotting the sine-curve gradient produces $\sin x$ of $1/4$ wavelength displacement to the right, i.e. a *cosine* curve; the cosine gradient generates another $1/2$ wavelength shift to the right and in two more gradient operations the original curve is recovered. When, in complex number equations, x is given as the square root of a negative on the *iy* axis, (e^x) becomes a mix of sine/cosine waves; the straightsum surface of the sine, that impassable *c*, rides perpendicularly from the depths of a gradient in complex space.

Modern thinking along the same "line", so to speak, finds countless ways of apprehending passkeys to the roomy province of uncertainty, where there's plenty of leisure space and time to stretch between each blink of the straight-and-narrow.

Hidden within the "linearity" of the smooth curve is the infinitely irregular scaling of the "Koch-curve", an abruptly squaring dance of recedingly duplicate arcs (called by the exponent that whips self-similar systems such as clock-doubling to an indeterminate froth). Through such wavy carnival mirrors we detect the inevitable presence of a non-linear infrastructure making of any, curvilinear interval a potential *junction* in the mutual perpendicularity of dimensions, a kind of conjugate hotbed for what Bearden and others have come to call the potential "engineering of the vacuum". The holographically-recessive snaking upon itself of such a curve confers "infinite length" (the apotheosis of what it is to be a "line") since it must touch infinitely many more points than a regular curve; and that length approaches infinity in proportion as the length of a given "side" approaches zero. A "line" moving toward but never becoming a "surface" (owing to its zero-area perimeter) exists *between* dimensions (it is said to have fractional dimensionality). It functions as a *doorway between*.

Such description reveals one of the deep implications involved in the "curvilinear self-conformance" of the exponential gradient, the holographic mirroring and recessive self-similarity of the scaling factor, the "dust fractal" of the Cantor set hanging in the twilight between point and line etc.; it discloses a particular *product* of what has previously been observed about the character of all manifesting coordinates "borrowing against" the infinite self-conformance and absolute uniformity of consciousness, toward "finitizing" values. The implication involves the very means by which both being and becoming, formal stability and change are drawn forward into intimate coexistence as a function of the *one* standard, value and noumenon of Consciousness itself.

"What size do you want to be?", the caterpillar asked. "Oh, I'm not particular as to size", Alice hastily replied.

Extending the implications we've already drawn from the simple existence of "angle" and "curve", the generation of a curve through its angular coordinates necessarily smears any inherent specification of size and radius - i.e. scale - with respect to its exponents. The very uncertainty of position, velocity, time and energy belongs to the logarithm of curve and scale. Note for example that the process of "scaling" reproduces the whole through any arbitrary interval; this tacitly makes of any, randomly isolated locus a *systemic universe* possessing its own "scale variate" (i.e. the variable factor in probability-distribution). The whole may be measured, and thus organized, from the vantage of any such locus. Anywhere in the logarithmic relationship of curve and scale, is the *axis of orientation*.

That logarithm itself is *spira mirabilis*, the miraculous spiral; the geometric progression of the spiral *radius* and the *arithmetic* progression of its *angle*, generate all the mutually inverse ratios required for the musical scales and their tonal intervals, i.e. the perfect fourth and fifth: again, the fluxing specter of the Necker cube suggests itself, this time as illustration of the ghostly manner in which the coordinates of temporality (sound) and spatiality (spiral) simultaneously mirror and revolve between one another. Since the coordinate signatures of space and time counterchange through "spacetime singularities", it becomes evident that their functional configuration at either side of the divide is product of the *random variable*, the axial interposition of that locus which is its own "scale variate" - i.e. the observer.

The irrational function Phi, corresponding to the Golden Proportion, gives the logarithmic spiral as a constant-so that, whereas size and radius aren't fixed or given absolute values, they are given as proportional harmonics of *angle*. The *angular intersection-sets* the observer-position yielding scale, directional signatures, relative values of the spacetime vectors etc. This will become very important to us as we see just how this phantasmagoria of appearance we call a "world", comes about as it does and how therefore its functional aspects maybe ordered more to "volitional" specification (i.e., "engineering of the vacuum" etc.).

Emotional Architectures

If we understand geometry as an abstract function of consciousness, it must be equally apparent that this "consciousness" is basically a transtemporal value. We have no more call to limit it or place it within the enclosure of some measurable skull, than we have to assume that "size" inheres as the fixed property of a curve. There's nothing "personal" in the fact of our uniform capacity to cognize geometrically-though there may be plenty of personal variation involved in our mental *grasp*.

Recognizing this, it becomes possible to perceive the sum potential of geometrized coordinates as the patterning of Void-mind. In turn we may identify the *combinative* potential of patterned harmonics as a function of *psyche*; such *affine* potential within the geometrized frame necessarily possesses a psychic charge. Before it's ever a matter of quantified magnitudes exhibiting structurally viable "valence bonds" etc., the spirit of geometry has *affective value* for consciousness.

Geometry is generally conceived as an objective property of measure; recognized first of all as a *function of consciousness*, the understanding follows that its abstract elements comprise the means by which consciousness comes to itself, identifies its deepest qualities and potentials in the projective field. As expressions of consciousness, they signify its adjoint self-interaction unfolding innate *meaning*. So intimate a meaning carries forward the love-identity of consciousness, and therefore generates intrinsic emotional charge. The features of noetic geometry are at the same time basic if variable signatures of mood, whereby consciousness orients itself electrically through the very potential by which it's drawn.

Consider an abstraction such as "angle". In the absence of any content, comparative angles produce spontaneous psychic qualities: depending on degree of intersection we obtain an immediate sense of tension, harmony, receptivity, urgency, anger, stolidity etc. with no necessary object of reference. Imagine the kinds of angles - acute, obtuse etc.- and their specific slopes which would tend to fit the above nouns.

As an expression of consciousness, geometry functions on a multidimensional basis. It operates on the level of noesis; of mind-pattern; of psychic and emotional formalism as well as etheric-material configuration. We may again refer to the model of the sacred polyhedra, the five Pythagorean solids generated one from the other and mutually implicated by angle and axis, vertices and planes of bisection.

Each order of generation may (as a simplified schematic) be considered the correspondent of an *emergent dimension of mind*, with respect to its geometrizing levels. At the same time, the extroverted order of any level implicitly contains the combined polyhedra, owing to their deep mutuality. The implicit, dotted-line "clouds" of polyhedra clustered around the "crystal" of a given level, function as subtone harmonics of the level (the polyhedral complex reiterates itself by chordal progression - having been built out from tetrahedron to the enclosing dodecahedron shell, it may be "progressed" to a higher order geometry by the cube, star tetrahedron etc.). The polyhedral complex, and thus the sum of noetic geometries by analogy, exists explicitly in section or implicitly as a whole at each "density" of organization.

To understand more vividly how the physical domain "appears" out of the noetic and psychic properties of Geometric form, the initial "condition" of the physical field may be conceived as a simple point-summation of the complex coordinate properties implicit in the polyhedral "crystal". If such a crystal exists *overtly* at each, ontological "level" of being through its specific phase - as if the tetrahedron corresponded to the *noetic* level in itself etc.-and *implicitly* as a whole through every level (the full potentiality oscillating in "ghost" form through the phase coordinates of a given framework) then the "physical" field can be conceived initially as a distillate, a drop or *bindu* condensing to a virtual point the multidimensional whole in *conjunction* with the most extroverted of the potential levels (i.e. the phase-level of the dodecahedron). It quivers with life as a locus-of-convergence, summing the infeeding dimensions *through* the coordinates specific to its phase- which, indeed, are *plotted* by those radiation patterns spacing its tangents on the perpendicular.

No Particle-ar Place to Go

Such a locus is a *virtual* being, an *ontological* entity rather than a "particle" of specific force or velocity, etc. As an essentially *mnemonic* conservation through the transdimensional "turns" of being, it *reinforces* itself by continuous reverberative reflection; because it has no specified "position" in time or space (being the formal *origination-point* of physical spacetime) it spreads itself indefinitely by that self-displacing blink across the "whole" of the dimensional cross-section. That dimension (the etheric level) may be considered essentially saturated, in its primary condition, with mirror multiplications of the basic point-value condensing the cosmic crystal (cf. Mother Terasu, TNTC No. 5, Dec. '89, p. 8 for a description of the Creative prototype of this process). It abides implicitly through the creative whole as a pointillist field without orientation, direction or discrimination, bereft of privileged "viewpoint", isotropic to the zero degree. It may be viewed as a "still" ocean composed of subtly-scintillant scales; it may in fact be considered the prototype of the "scalar" mode, recognized as an *ontological* magnitude at this initial stage.

How then does the "etheric ocean" quicken, come to life and generate all the forms with which we're physically familiar?

An Astral Quadrille

Remember that each pointillist version of itself concentrates a total, virtual seed-pattern of the informing dimensions of-being. It exists at "right-angles" to the level immediately feeding into it, just as dodecahedron and isocahedron relate to one another as mutually inverse reflections across the perpendicular bias. The dimension or density directly "above" it, is that of the Psychic or astral state of being.

The astral level of things has its own characteristic geometry. Even as lines, curves, planes and angles tend to be concealed amid the scallops and horizon-breaks of the physical level of resolution, only identified by schematic reconstruction, so they are correspondingly *in evidence* at the psychic level; as *psychic* values, functions of consciousness in the first place, the formalism of beings and things appearing in the "astral plane" has only the power to reveal those construction-patterns, and no power to constitutionally mask them. The underlying energies may, at the "astral" degree or density, represent *themselves* in cognitive terms as the proper function of a field organized according to the principle of psychic affinity.

The psychic framework has *specific* affinity for identifying, and formally representing in straightforward display, the polygon properties partaking of its own nature. With slight, educated adjustment or focal reorientation the identifiable entities of "physical" features and sensuous silhouette, may be dissolved and reinterpreted in terms of the geometrizing coordinates through which their appearances are composed.

At the astral level, then, the geometries with which we've been concerned begin - without equivocation - at the point of some initiating "thought", i.e. the motive idea, feeling, mood or desire generated by an entity, a sentient complex, a group mode of consciousness or source-self (all such beings as a whole - and in each of their subdivisions - sharing an astral component and, as such, comprising intrinsic expressions of the formative domain).

The essential, ideofrom pressure toward exteriorizing the types or qualities, patterns or modes alluringly present as the potential of the geometrizing fields, begins as a burgeoning "bindu" or dot of emanation; the seed-point polarizes into a fluxing webwork of interconnected lines rapidly acquiring the characteristic curves, angles and axes belonging to units of polygon processes (and clusters of such units cohering along the astral "grain" of formal affinity).

The structures that result from the initiating thought-force vary in strength, intensity and durability. According to the degree and quality of concentration, reinforcement, repetition, self-similarity and correlative support from consonant structures, the resultant pattern will exhibit delicacy, wobble, balance or imbalance. Some geometrized energy-forms decompose swiftly, and contribute their elements to other compounds percolating up through the psychic atmosphere; some persist in close formation with consonant patterns that resonantly reinforce the basic "grain" of the structure. Some are so significantly supported by probabilistic reiterations of themselves that the overlapping, self-consonant lines and reinforcing flow-channels amalgamate the contributory elements, fusing them so tightly in integral "bundles" of patterning energy-systems that the whole appears as a seamless entity, a durable "thought-structure" possessing coherent, crystal line lines and self-stabilizing facets. These reinforced patterns or quasi-permanent structures etched in "astral matter", play particularly significant roles in the ordering of the etheric-material field - which arises, by implication, at virtual "right-angles" to the psychic dimension.

What does the etheric-material medium "look like", with respect to the swarming clouds and electric clusters of energy-activity appearing dimensionally "above" it, and reflected onto its surface?

A Storm at c

First, we recall that the etheric-material medium was - descriptively - a reverberative field of mutually displacing and self-multiplying point-predications, ontological "loci" or condensed seed-states summing the geometries implied through all the projective coordinates belonging to the preceding fields - or conscious dimensions - "above" and at right angles to it. The energy clusters and psychic patterns taking form through individual thoughts and collective states of consciousness, belonging both to personal and cosmic scales of resolution (for all beings, places and things converge through the locus of the astral field) exist in relation to the perpendicular plane of the etheric as *angles*. All the energy-activity and hives of self-organization belonging to the Psychic dimension, enter into and have their effect upon the etheric-material field in the form of *angular* intersection.

An organizational state at the psychic level appearing as a rainbow fountain, a shimmering serpent-flow, or conversely as a densely consolidated crystal or stably-volumetric beehive, in every case enters into influential relation with the etheric field according to the value of its summary *angle of entry*. The shape, strength, durability, globally reinforced balance and basic intensity of the geometrized pattern at the psychic level, determines the value assigned that - characteristic - angle of entry.

And how does that astral energy-pattern, summed through its characteristic "angle", produce an effect in the material medium? Recall that the pointillist field of the etheric-material stratum, stretched through its "being" like a boundless expanse of ocean. With that analogy, the angular intersection produced by all the patterns swarming above and precipitating from the astral "heaven" may be thought of as pelting that perpendicular, oceanic surface as so much "rain". Just as lightning and rain come down in varying angles, at varying degrees of intensity producing varying stresses in the materials on which they're shed, so also the angulated sleet of energies pouring from the variegated patterns at the astral level strikes the pointillist field of the "ether" and agitates its ontological latency.

The varying strengths, stabilities and intensities of energy-pattern from the Psychic "sky", touch the oceanic bosom of etheric-material substance generating ripples and agitated eddies of corresponding magnitude, virtual "notes" of differing tones that play over the surface. What is *being* agitated by these angular intersections, is the uniform potential contained as "coded" summary in the etheric points.

The plenum of angles, axes, coordinate hookups and integral harmonics distilled from and implied in the antecedent geometries of the conscious dimensions "above", abides within each ontological "point". Such a point is, in keeping

with *conscious value*, an essential *zero-point*; for no preferred pattern intrinsically claims the bias of those internal coordinate domains. In themselves they're maximally potential, as if within the point abided a "dust" of points clustering in supersaturated symmetry from any angle (no angle being preferred, no perspective given); the connective "lines" that would constitute the crystallization-of-pattern being virtually absent. It is the homogenous equipotentiality within each point, and obtaining by implication *amongst* the points, that is disturbed, quietly agitated by the precipitation of angulated "energy-matter" from above.

The "ripples" which such agitation produces, do not serve to "move" the points themselves; vectorial displacement isn't implied because these points represent *ontological* potential. The disturbance is one of intensity, not direction, though we can visualize this activity as a vectorial displacement from each pointillist "center" in an expanding network of interference. The "waves" of agitation as the angulated energy-patterns influence the smooth "sheet" of etheric substance, exhibit respective amplitudes which are therefore *functions of intensity*, measures of strength and relative balance; the pattern of disturbance which propagates at each point and from point to point through the field of points, is not so much a motion of the medium as an indicator of fluxing intensities, states of ontological stress alternately influencing and affecting the various points. The "motion" is illusory, but propagates an influence orthogonally, in the same way that there appears to be real vectorial motion in the on/off blinking of a succession of neon lights.

Marking Space/Time

The more random, imbalanced or loosely integrated energy-patterns from the astral field, therefore produce corresponding angulated stress in the pointillist medium of the ether exhibiting destructive interference of progressively-degraded amplitudes. The general randomness of sources spread through the psychic field, produces an overall *etheric* topography fed by Fingers of reticulating dispersion; punctuating and re-cohering the states of many of these veinous networks, there appear certain "zones" at which highly integrated, intensified and balanced energy-configurations intersect the horizontal plane of the ether.

The "angles" produced through these significant junctures may be considered maximally compensated; they belong to orders of energy-organization that are geometrically coherent, highly isometric or globally stabilized, and so in effect tend to inscribe a probabilistic-repetition pattern on the horizontal axis maximizing the angular imprint in a sweeping rotation; this process may indeed be considered the work of the Masonic "calipers" and "compasses", whereby spirit-energy sets the angle, marks the area, inscribes the optimum circle where certain geometries of allowable phase-transitions are "decreed" as the functional terms of a physically perceptible world.

At these ontological "regions" across the surface of the etheric field, coherently aligned and self-reinforcing arcs of steady circumference highlight intensified potential of the pointillist domains. In the phase-intersections of these arcs, the random ripples of pulsatory excitation playing through the points like arbitrary notes give way to sustained chords; the broken potentials even out into a stable resonance.

The virtual circumference defining a probabilistic area in the etheric field, at a threshold degree of intensity polarizes the flow-lines of specific axes from the equipotential point domains. The angular obliquity at which the arcs are inscribed through the parallel points determines the special state of the axial coordinates. Such mutually perpendicular axes demarcate the functional lines of stress suddenly crystallized within the dot-like "dust" of the given point locus, ordering its interior as a faceted whole of planes and permissible angles. At the same time, the stable internal resonances fixed through the axial lines, couple to all point-domains of parallel resonance-the initial "distance" of such points in the etheric medium is nil, since their duplicate ontological state in the beginning allows for no such distinction.

Thus regardless the vibratory states of all "surrounding" points, those of parallel resonance immediately couple and produce an integral macro-pattern across the total field. Such a process allows for an indeterminate number of overall, crystallized patterns (elicited from the infrastructural potential of each point and projected upon the exterior correlation of point-domains as a whole).

Thus, while each such potentiated world-pattern in the etheric field seems to vibrate in and through all the others, like cards in a randomly shuffled deck, their unique axes of coordinate alignment conserve a discrete integrity. They do not interfere; their independent, axial alignments may bear greater or lesser harmonic relations with any other set, thereby establishing the potentials of transition amongst them. Where such patterns are distinctly polarized from

the general field, there is then established a kind of secondary "distance"; such distances at this level however aren't judged spatially but as ontic value; they mark degrees of similarity and difference.

And what are these polarized patterns, produced by the more globally-harmonic intersections of the angular axes generated by forms of the astral field? Such patterns, elicited as states of virtual intensity, describe the general coordinates of probable worlds in material terms. Thus they bear intimate relation to the psychic typologies ordered in the astral medium as emotionally "geometrized" resonances. They're implicitly informed by those typologies. They are, therefore, vehicular potentials outlining the structural states through which affine values of polarized property enact specific, coupling-coefficients (as means of carrying through the panoply of implication contained in the initiating, abstract ideotype).

They represent a summary, logical universe of coinvolved characteristics, each implicated in the other and all forming a quasi-"closed" system - i.e., a universe in which "horse" may arise, suggests a supportive matrix of states, conditions, terms and potentialities indefinitely extensive and variable along its own lines, but producing a quite specific filler blocking out alternative worlds of incompatible elements.

"One side of what? The other side of what?", thought Alice to herself.

At this stage, the regular patterns drawn forward through the pointillist field offer a general scheme of differentiated subdivisions; they possess distinct, crystallized internal "structure". Such structure is not, at this level, assigned directional arrows. It warrants no vectorial indicators or preferential flow-channels in itself, and marks out no special zones of spacetime orientation. The phase-differentials which its facets outline are purely noetic; they give the values of ratios, rates, rhythms and harmonies; the spaces they define are abstract spaces, and all magnitudes are mirrored in a static isotropism. At the same time, all such patterns appear indiscriminately, there's nothing inherent at this stage to "recommend" one over the other, or set specific wheels in motion.

In this sense, their state is analogous to the quandary that "superstring" physics presents the current investigator: there are many possible matrix groups that solve for the assigned values of superstring - is their selection arbitrary, or is there one pattern that ultimately sifts out from the rest as uniquely suitable?

How then, at this level, does a particular pattern become distinguished, and acquire the vectorial properties as well as directional indicators that characterize "real" systems? At the present stage of the description, all strongly polarized patterns appear like similar, opalescent bubbles floating over the pointillist field. Each such bubble, looked at in its initial isometry and abstract rotational invariance (i.e. without as yet any preferential position, privileged perspective or fixed viewpoint) outlines a broad potential of states and phases. In its drifting abstraction it "allows" for innumerable alternative organizations taken from the same general structures, without distinction amongst them.

Again, this phase is analogous to the potential outlined in super-symmetry theories before the upsurge of "broken gauge fields", where particles and their super-partners coexist and counterchange non-preferentially, possess equal "validity" outside the delimiting "gauge" framework, and in themselves give no clue as to how the perceptible world based on "preferred" arrays of particles might arise. We find ourselves, in other words, back to our initial question re "what accounts for the appearance of qualifying functions?"

"Then it doesn't matter which way you walk," said the Cat. " - so long as I get somewhere," Alice added.

And it is here we affirm the intimate relation of all such patterns with the conscious axis. The "mechanism" is simply this: the implicit presence of the multidimensional, conscious axis, which we assume throughout as the agent and common denominator of all polarized processes and geometrized fields, takes specific focus through the surplus potential of the etheric level.

That "axis" may be conceived in terms of individuated frameworks of consciousness or group forms of consciousness; it may be conceived as emanations of a super-source Psyche or as isolated expression of some exploratory, "maverick" projection: therefore it doesn't matter whether we conceive of it in terms of a single-soul cycle of embodiment ("descending" in dips between bookend, afterlife phases), or as the saga of a life-wave of incarnating consciousness, establishing the collective terms of living through a specific field. The multidimensional, pleromatic Line of consciousness (cf. "What Is Christ Consciousness?", issues 5, 6, and 10 TNTC) comprises a vertical axis extending through all polarized planes issued from its common juncture, and variably focused through a sliding ring of angular coordinates.

That axis may therefore be focused through, aligned with and so entered into the matrix of potential producing etheric-material existence (consistent with the harmonics of a given pattern). Depending on the angle of intersection with respect to the rotational axes of a given pattern, that pattern will acquire a specific plane of polarization. That plane remains globally symmetric at this next stage, in terms of the abstract space it defines; but the fateful insertion of the vertical axis at a particular "angle" of orientation, now introduces a factor of "rotational English" or topspin - the internal, subdividing axes of the "static" pattern are polarized to the conscious angle of intersection and so acquire a bias of "internal tension".

Along the lines of that tension, directional arrows commence a "flow". The polarization of vectorial flow symmetrically about all "axes" of the given pattern simultaneously, induces a vigorous non-linear interaction. All possible vectors and directions with their "phase conjugates", are given at once. In this way the vertical conscious axis (singular or collective) aligns the geometric coordinates of the pattern to which it was specifically magnetized by "type", to a common referent; the displacement of all projections at once toward that common referent, generates complex non-linear infrastructures of maximum vectorial diversification consistent with the allowable lines of axial polarization, non-preferentially.

At this point, then, in the "integration of the conscious axis" with its psychically selected pattern, we have polarized flows of space and time, velocity and relative position, but all allowable trajectories of space, time, velocity and position are given; all the possible "pasts" and "presents", places and things cascade through the interconnecting ducts. An internal multidimensionality factors out at this stage producing polar rotations of complex, nonlinear vectors ("soliton moments" or virtual vortices) in a turbulence that spans, and may be indexed within, the complex dimensional spaces themselves.

At the same time, however, the vertical "descent" of the conscious axis into the manifest field is enacted through a progressive focus. The whole, axial Line is represented by and summed to a coordinate point, produced in the triangulation of internal cognitive states and planes; the whole of the being in its mental, psychic and emotional phases is "turned" toward the field of structural integration furnishing a test vehicle for the combinative values of those states. In relation to the preferred, etheric-material pattern, the transdimensional line of the conscious axis converges all its psychic domains upon a compound point locus.

That point locus establishes the perspectival intersection, through multi-dimensional alignments, of the sum vertical axis. Since it produces a "convention" of orientation with respect to the globally invariant pattern, the point-locus necessarily appears at virtual right angles to the internal dimensions of that pattern.

This is where we first encounter the standard "zero-sum" scalar field of Bearden and others (you'll recall that the scalar field possesses an internal structure of varying vector potentials converging and canceling as a whole to zero, through the discontinuous point magnitude of that field). It's possible from the initiated perspective to understand just what the "scalar field" is, rather than deducing its presence and accepting it ad hoc from experimental evidences - similarly, all fields and forces appear as "interesting" structures disclosed through practical requirements but otherwise bewilderingly arbitrary, until their functional terms are understood with respect to their conscious reference.

It will be noted first of all, of course, that initiated understanding confirms the presence of some such "entity" as the scalar field. But it recognizes that its intercepted level states the function of the point locus, the distilled bindu of the conscious axis (without dimension, extension, direction or amplitude, being simply the coordinate presence of that axis in its integral agreement with physical-field harmonics).

Since that point-locus is not specified by extension, dimensionality or amplitude, its integral phase-relation with the sum of states and planes places certain general requirements on its coordinate function. It therefore diffuses, as a presence, through the "scalar" field which it defines. (The scalar value of the field, then, takes its character from the simple presence of that point-locus.) Though that presence is not defined by or locatable through internal dimensional coordinates, all dimensions of the given pattern are defined by an orthogonal rotation with respect to it. Implicitly, the multidimensional nonlinear vortex-states become referenced through it by virtue of its inherent self-reference.

In relation to the total pattern, the point-locus generalizes as a universal matrix of pointillist potential thus reiterating the mechanics of the "point" as characterized through other phases. As an operative, it collects the axial projections of all changing stress-vectors of the soliton moments contributing varying intensities and magnitudes - evened over all - at the loci of convergence.

The "point"-representing the presence of consciousness-accepts, sums-to-zero and releases through its void-radix the totality of mutually displacing, globally adjusting stress-vectors flowing through the multidimensional pattern in continuous computation of its overall symmetry. Each such locus collects the coordinate projection values at a slightly shifted angle, so each is comprised of mutually displaced stress-emphases. The relative "position" where each cancels, is therefore slightly different, since each scalar moment takes the sum "thrust" of varying values at its independent point of collection.

The perpendicular "cross-hairs" of mergence and emergence, reception and release through the Sea of Holes polarize vacuum states of alternately plus and minus values, around the scalar moment. The point-locus itself is the juncture of cancellation, resolving those values; as a "portal of entry", however, it acts as a door with plus and minus markings clearly separated between "front" and "back". Such polarization produces a flux around each scalar moment, combinatively generating a highly agitated environment amongst the mutually offset points-a "syrup" or thick medium in which the points come densely packed.

The channels of reception and release are comparatively non-uniform in the scalar field. But this produces a real agitation of the field. The "breathing" pattern of the medium, in and out through its perpendicular flow axes, ripples irregular surfaces where the polarized tensor and compressive jets around the scalar "gill-slits" bunch up, crowd in oblique convergence and commence circling around their counter-posed fronts.

The pulsatory sets, fields and whirling backwaters of these waves comprise a longitudinal framework of propagation with respect to the in-feeding dimensions around the scalar moments. They are vector-waves of compression and rarefaction, set up by oppositional jets in a polarized vacuum. The pointillist, zero-sum referents of the conscious locus make up the purely scalar "material" of these vectors. Such longitudinal vectors are the extensions, at mutual right-angles, of selective flows and contributing stresses of the multidimensional vortex-fields (amounting, over all, to a zero-sum symmetry giving the value of the Pattern as a whole).

In this way we see that pulsatory flow-channels through the pointillist field at right-angles to the multidimensional, soliton geometries, is the equivalent of a longitudinal wave. Longitudinal fields are those associated with the propagation of sound, and sound-waves are highly organizational, patterning states. The process of incarnation (whereby that summary point-locus is established with respect to the physical field) is descriptively recounted as a phenomenal transition between predominantly visionary states, and those that are progressively saturated in a sound-quality that closes over the enchanted entity like rushing cataracts.

In order to understand how the material field is polarized out from the equipotential symmetry of the total pattern, we'll focus on the states of the longitudinal or "sound" field given to opposing wave fronts. The runoff from scalar-wave pulsations not coherently counter-posed, is equivalent of the random flux in the zero point vacuum-which, familiarly, is non-thermal (without friction) owing to the absence of atomic oscillators at that level of resolution.

As we'll see, the electron and all associated matter-waves of the familiar field are polarized out by a process of "dimensional rotation", with respect to the point-locus of the "scalar field"; the runoff of that field intercepted as "flux in the vacuum", is non-thermal until its interaction with matter at which point it may be detected as a nonlinear amplification of mass-energy, becoming translated-by the required dimensional rotation -as entropic waves patterned by mass-matter.

In this way it becomes possible to comprehend radiant energy within our standard framework, as a specialized function of the integral patterning of mass-matter according to its "local" geometry; "Light" as it's commonly known may be thought of as a stylized adaptation, tailored to such geometry and functioning through the dimensional constraints of the system rather than as an "absolute" giving the independent limit of all systems.

It also becomes possible to envision radiant energy as persisting in Hertzian or transverse waveform throughout conventional space, without lapsing unseen, out of range of material detectors, into scalar dust longitudinally displaced across the spatial vacuum a la Bearden; it's not that it "may not" - it's just that, by Occam's razor, we don't need it, since the physical field of organization is transversely polarized in the first place with respect to the "ether" (or the true vacuum-space of the scalar field); Hertzian waves, as function of the geometrical configuration of mass-matter in our "local" framework may propagate through endless "space" and yet not in themselves leave that framework, traveling a continuum uniformly perpendicular to the field into which they're supposed to "dissolve" (as if they merged together along the same plane).