

531.00 Life

531.01 Life is the eternal present in the temporal. Life is the *now* event with reaction *past* and resultant *future*. Each individual life is a special-case articulation of the infinite variety of "scenarios" to be realized within the multidegrees of freedom and vast range of frequencies of actions that are accommodated by the generalized laws governing Universe. With death, the individual probably loses nothing but gains the insight and knowledge of all others as well.

531.02 The average of all plus (+) and minus (-) weights of Universe is zero weight. The normal is weightless, eternal. What we call life is a complex of multidimensional oscillations and palpitations among various degrees of positive and negative asymmetries, whose multivariant lags in conceptioning bring about what *seems* to be temporal substance and time. The complex *woof* of a plurality of lag rates—of afterimages and recalls—produces pure, weightless, metaphysical images, produces the awareness we speak of as life.

531.03 Lags are intervals—nothing. Instantaneity would eliminate otherness, time, and self-and-other-awareness. Instantaneity and eternity are both timeless: they are the same. Eternity contains time; time does not contain eternity. The relationship is irreversible. The contained time of eternity provides eternal awareness.

531.04 Organisms: Atoms are inanimate systems. Physically we consist entirely of atoms. When we die, all the atoms are there. Whatever life was, it was not the inanimate atom systems that persist after death. At the virus level of professional concern the scientists say you can identify all the physical substances present as inanimate crystals. Biological science initiated the investigations that successively discovered cells, genes, chromosomes, and other biological design controls. Needing to check their design control theories, they employed the swift succession of generations of the fruit fly and then discovered the even swifter succession of the generations of the tobacco mosaic virus. This brought the scientists into a very new realm of virology where they found nuclear physicists, biologists, and chemists all involved. Though the virologists have discovered DNA-RNA bioprogramming controls, they have found only inanimate atomic constituents. Because their whole series of events started with biology, they have as yet—unthinkingly and mistakenly—retained the "animate" relationship. Biology began with the whole seemingly living organisms consisting of protoplasm and

viruses, but they misidentified the viral substances as physically "animate," when life is not physical. The error lies in the fact that humanity long ago misassumed that the organism employed by life is the life itself instead of merely the vehicle—as if the telephone was the communication itself instead of merely the instrument.

531.05 The now overspecialized scientists seem to have forsaken epistemological significances; they seem to have lost their gift for philosophical thinking. So the focus on the animate aspect of physical things has been continued by the church. Many religious organizations establish their power by maintaining that life is the physical apparatus it employs and by basing their ideals on "living" physical images. If life were the physical, we really could make synthetic men, laboratory animals, and artificial intelligence; we never will. We can make brainy robots, but we cannot make thinking, loving life.

531.06 Science is arriving at a phase of required new comprehension in which we will be discovering that all of the physical cases experimentally discovered are only special cases of the generalized principles of generalized systems—i.e., the vector equilibrium.

531.10 **Life and Death**

531.11 Life's employed apparatus is microconstituted by the unique frequency identifications of the chemical elements and their compounded atoms, as well as the humanly tune-in-able "color" frequencies of the comprehensive electromagnetic spectrum's concentrically interpositioned occurrences—usually published in a chart of positions along any one radius of the comprehensive concentric system. Death's reality is constituted by all the vector equilibrium null intervals between and beyond—inwardly and outwardly—the comprehensive electromagnetic frequencies. (See Secs. [262.10](#) and [526.25](#))

532.00 **Symmetry**

532.01 **Definition**

532.02 It has been customarily said by the public journals, assumedly bespeaking public opinion, that "the scientists wrest order out of chaos." But the scientists who have made the great discoveries have been trying their best to tell the public that, as scientists, they have never found chaos to be anything other than the superficial confusion of innately a priori human ignorance at birth—an ignorance that is often burdened by the biases of others to remain gropingly unenlightened throughout its life. What the scientists have always found by physical experiment was an a priori orderliness of nature, or Universe always operating at an elegance level that made the discovering scientists' own working hypotheses seem crude by comparison. The discovered reality made the scientists' exploratory work seem relatively disorderly.

532.10 **Oscillation of Symmetry and Asymmetry**

532.11 We may say that nature proceeds from the obviously orderly and symmetrical to the nonobviously (but always) orderly transformation phases known as asymmetries, which, having gone through their maximum or peak positive-phase asymmetry, only *seem* (to the uninformed brain) to be disorderly; they always return transformatively thereafter through an orderly progression of decreasing asymmetry to a fleeting passing through the condition of *obvious* symmetry or equilibrium popularly recognized as "order," thereafter deviating asymmetrically to the negative phase of balancing limits of oscillation.

532.12 This transformative progression in dynamically and oscillatively produced orderliness is dealt with incisively by the calculus and is the fundamental pulsating principle governing omnidirectional electromagnetic-wave propagation.

532.13 There is no true "noise" or "static." There are only as yet undifferentiated and uncomprehended frequency and magnitude orders. Chaos and ignorance are both conditions of the brain's only-sense-harvested and stored information as yet unenlightenedly reviewed and comprehendingly processed by the order-seeking and - finding mind.

532.14 Asymmetry is the reason that Heisenberg's measurement is always indeterminate. Asymmetry is physical. Symmetry is metaphysical.

532.15 All most-economic-pattern systems, asymmetric as well as symmetric, are resolvable into symmetric components in synergetic accounting.

532.16 Our seeability is so inherently local that we rarely see anything but the asymmetries. Sociologists have trouble because they are o'erwhelmed by the high frequency of asymmetries (rather than the only synergetically discoverable principles).

532.17 Oscillation of Symmetry and Asymmetry: Symmetry is only generalized. In cosmic-event averaging symmetry is ever implicit in the preponderantly-almost-symmetrical, spontaneous symmetry-referenceability of all asymmetry. Symmetry is systemic. Symmetry has nothing to do with the scenario series; it has nothing to do with local, special case realizations. You can find balances in series—positive and negative energies—but absolute symmetry is characteristic only of generalized systems. (See Secs. [223.05](#) and [260.33](#).)

532.18 Crystallography is always special-case and is always confronted with near-symmetric asymmetry; ergo, crystallography must recognize and reference its special case aspects to generalized symmetry. Generalized symmetric conceptuality is only manifest as the vector equilibrium and its involvement domain. The regular—regular means absolutely uniangular—tetrahedron is absolute and generalized, thus never physically realized. All physical reality is special case. This is why Universe has a capital U.

532.20 **Dynamic Symmetry**

532.21 Within every equilateral triangle, we can inscribe a three-bladed propeller, its tips protruded into the three corners. The propeller blades are approximately pear-shaped, and each of the blades is the same shape as the others. The pear-shaped propeller blade is locally asymmetrical. We call this revolvable omnibalanced asymmetry *dynamic symmetry*.

532.22 We then have three pear-shaped blades at 120 symmetrical degrees from one another. They act as three perpendicular bisectors of an equilateral triangle, crossing each other at the triangle's center of area and dividing the total triangle into six right triangles, of which three are positive and three are negative. So there are six fundamentals of the triangle that make possible dynamic symmetry. (One part may look like a scalene, but it doesn't matter because it is always in balance.) Each corner is balanced by its positive and negative—like four streetcorners. This is called dynamic balance. Literally, all machinery is dynamically balanced in this manner.

532.23 Let me take one propeller blade by itself. I am going to split it longitudinally and get an S curve, one in which the rates are changing and no power of the curve is the same. So it is asymmetrical by itself: it is repeated six times: positive, negative, positive, negative . . . and the six blades come round in dynamic symmetry. The energy forces involved are in beautiful absolute balance. We have energetic balance.

532.30 **Symmetrical and Omnisymmetrical**

532.31 The difference between symmetrical and omnisymmetrical is that in symmetrical we have no local asymmetries as we do in any one of the propeller blades taken by themselves. *Symmetrical* means having no local asymmetries, whereas in contradistinction, *omnisymmetrical* and *dynamic symmetry* both permit local or momentary asymmetries, or both.

532.32 Universe is omnisymmetrical as well as dynamically symmetrical in its evolutionarily transformative regeneration of scenario Universe.

532.40 **Three Basic Omnisymmetrical Systems**

532.41 There are only three possible cases of fundamental omnisymmetrical, omnitriangulated, least-effort structural systems in nature: the tetrahedron, with three triangles at each vertex; the octahedron, with four triangles at each vertex; and the icosahedron, with five triangles at each vertex. (See illus. [610.20](#) and Secs. [724](#), [1010.20](#), [1011.30](#) and [1031.13](#).)

533.00 **Precession**

533.01 The effects of all components of Universe in motion upon any other component in motion is precession, and inasmuch as all the component patterns of Universe seem to be motion patterns, in whatever degree they affect one another, they are interaffecting one another precessionally, and they are bringing about angular resultants other than the 180 degree-nesses. Precess means that two or more bodies move in an interrelationship pattern of other than 180 degrees.

533.02 Precession is the effect of any moving system upon any other moving system; the closer the proximity, the more powerful the effect. Mass attraction is inherent in precession. Mass attraction is to precession as a single note is to music. We do not pay much attention to precession because we think only of our own integral motions instead of those of Universe, though we are precessing Universe every time we take a step.

533.03 All the intergravitation effects are precessional angular modulations. Precessional effects are always angular and always something other than 180 degrees; they are very likely to be 90 degrees or 60 degrees.

533.04 Precession is regenerative, and that is why you have the wave. When the stone drops in the water, it impinges on the molecules and their atoms; everything is set in motion, and immediately there is a resultant at 90 degrees. The resultant is the wave; the 90 degreeeness begets another 90 degreeeness, this 90 degreeeness begets another 90 degreeeness, and so on until you have a series of 90 degreeeness interrelationships, i.e., an omnilocally-orbiting system, as with all the electrons of all the atoms, and all the stars of the galaxies.

533.05 The elliptic orbiting of the Sun's planets as well as the Solar System's motion relative to the other star groups of the galactic nebulae are all and only accounted for by precession.

533.06 Precession is describable vectorially in terms of physically realized design expressed differentially as relative modification of angle, velocity, and mass in respect to an axis. (See Sec. [130](#), Precession and Entropy.)

533.07 **Intereffects:** All bodies of Universe interaffect all other bodies in varying degrees; and all the intergravitational effects are precessionally angular modulation, and all the interradiation effects are frequency modulations.

533.08 Precession is the intereffect of individually operating cosmic systems upon one another. Since Universe is an aggregate of individually operative systems, all of the intersystem effects of Universe are precessional, and the 180-degree imposed forces usually result in redirectional resultants of 90 degrees. Gravity's 180-degree circumferential, omniembracement effect results in a 90-degree inwardly effected pressure that gains rapidly in intensity as the initially sixfold leverage advantage of the circumferentially tensed embracement gains exponentially in locally induced pressure as the radial distance outwardly from the sphere's center is decreased.

533.09 The Sun's direct 180-degree interattraction pull upon Earth begets precessionally the latter's 90-degree orbiting around the Sun. And Earth's circumferential orbiting direction begets Earth's own 90-degree of axial rotation.

533.10 Precessional 180-degree efforts beget 90-degree effects such as the Sun's radiation impoundment on Earth by the photosynthesis of agriculture (around the land) and photosynthesis of algae (around the waters of Earth), which regeneration occurs as precessionally impounded life-sustaining foods. The 180-degree Sun radiation effect precesses Earth's atmosphere in 90-degree circumferential direction as wind power, which wind power in turn precesses the windmills into 90-degree rotating.

533.11 All the metaphysical generalizations of physical principles produce indirect physical acceleration effects that are precessional.

533.12 Leverage, Sun power, wind power, tidal power, paddles, oars, windlasses, fire, metallurgy, cooking, slings, gears, electromagnetic generators, and metabolics are all 180-degree efforts that result in 90-degree precessional intereffects.

533.20 Precession and Degrees of Freedom

533.21 Despite the angularly modified resultant complexities of omnidirectionally operative precessional forces upon ever-varyingly interpositioned cosmic bodies, Universe may be manifesting to us that there is always and only operative an omniintegrated cosmic coordination of cosmic independents' actions and reactions, wherein with radial broadcasting of energy there is an exponentially increasing diffusion as well as disturbance-diminishing resultant energy effectiveness, producing widely varying angular aberrations of the precession, wherein nonetheless there is always an initial individual-to-individual operative attractiveness whereby

180-degree begets 90-degree
and

90-degree begets 180-degree,

all of whose angularly aberrated complexity of resultant directional effects always pulsate in respect to a neutral or static 60-degree, which (only statically) imposes an everywhere-else 60-degree of resultants, which in turn induces the coexistence of the isotropic vector matrix.

533.22 The 56 axes of cosmic symmetry (see Sec. [1042.05](#)) interprocess successively to regenerate the centripetal-centrifugal inwardness, outwardness, and aroundnesses of other inwardnesses, outwardnesses, and aroundnesses as the omnipulsative cycling and omniinterresonated eternally regenerative Universe, always accommodated by the six positive and six negative alternately and maximally equieconomical degrees of freedom characterizing each and every event cycle of each and every unique frequency-quantum magnitude of the electromagnetic spectrum range.

534.00 **Doppler Effect**

534.01 **Definition**

534.011 There is the phenomenon known as the Doppler effect, of which humans took much note in the early days of the steam locomotive. The high tone of the locomotive's whistle as it approached changed to an increasingly low pitch as the locomotive went by. This is because the sound waves of perturbed air coming toward us at about 700 miles per hour from the approaching locomotive were crowded together, piled up, by the locomotive's own independent speed of about 60 miles per hour. Similarly, the waves were thinned out by the locomotive's speeding away.

534.02 The Doppler effect also may be operating in our historical-event-cognition system in such a manner that the relative frequency and wavelengths of approaching historical events are compacted and receding ones are thinned out. It could be that by traveling mentally backward in history as far as we have any information, humans could—like drawing a bowstring—impel our thoughts effectively into the future.

534.03 The Doppler effect, or wave-reception frequency modulation caused by the relative motions of the observer and the observed, are concentric wave systems that compound as fourth- and fifth-power accelerations. In the summary of synergetic corollaries (Sec. [240.44](#)), fifth- and sixth-powering are identified as products of multiplication by frequency doublings and treblings, etc., in radiational or gravitational wave systems.

534.04 The Doppler effect is usually conceived of as an approximately "linear" experience. "You," the observer, stand beside a railway track (which is a "linear" model); a swift train approaches with whistle valve held open (at a constant-frequency pitch as heard "on board" by the engineer "blowing" the whistle). The whistle sound comes to you at the atmospheric sound-wave speed of approximately 700 linear miles per hour, but the train is speeding toward you at an additional 60 linear miles per hour. The train's motion reduces the interval between the successive wave emissions, which in effect decreases the wavelength, which gives it "higher" pitch as heard at your remote and "approached" hearing position. After the train goes by, the train runs away from each successive wave emission, thus increasing the interval between wave "crests" and therefore lengthening the wave-reception intervals, which apparently "lowers" the pitch as *you* hear it, but not as others elsewhere may hear it. This is pure observational hearing relativity. But the real picture of the Doppler effect is not linear; it is omnidirectional.

534.05 The Doppler effect may also be explained in omnidirectional, experience-patterning conceptionality, which is more informative than the familiar linear conceptioning of the railroad train and "you" at the crossing. Suppose "you" were flying in an air transport that exploded; because of the sudden change in pressure differential between your innards and your out'ards at high altitude, you personally have just been "exploded" into many separate parts, which are receding from one another at high velocity. A series of secondary explosions follows elsewhere from exploding "you" and at various locales in the center of the galaxy of exploding debris, as one item after another of the late airplane's explosive cargo is reached by progressive local-conflagration-heat concentrations. The sound waves of the successive explosions speed after your receding parts, amongst which are your two ear diaphragms, as yet "stringily" interconnected with your exploding brain cells, which "hear" the explosion's sound waves first at low pitch. But as your parts explode from one another at a decelerating rate because of air friction, etc., the waves of remote-explosion sounds "shorten" and pitches go "up." Now consider many separate, nonsimultaneous, secondary explosions of your various exploding parts, all of varying intensities of energetic content and in varying degrees of remoteness, and realize that the decelerations and accelerations of Doppler effects will render some of the explosive reverberations infra and some ultra to your tuning-range limits of hearing, so that the sum total of *heard* events provides very different total conceptioning as heard from various points in the whole galaxy of exploding events, whose separate components would tend to new grouping concentrations.

534.06 Because the humanly "heard" events are geared directly to the atmospheric waves with an average speed of 700 miles per hour, and the humanly "seen" events operate a million times faster and are geared to electromagnetic fields operating independent of and beyond the atmospheric biosphere of Earth, the visual and hearable information is macrocosmically so far out of synchronization that the stroboscopic effect, which can make the wheels of automobiles sometimes appear to be going backward in amateur moving pictures, can cause society to misinterpret the direction and speed of vital events—some may be seen as going in the opposite direction from the realities of universal evolution.

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