- 528.01 Conceptuality operates independent of size. Whether referring to the size of an object in respect to other objects or the sizes of any one object's subdivisions, size emerges exclusively as a cyclic-frequency concept, uniquely differentiating out each special-case experience.
- 528.02 Size is a measure of three kinds of energetic experience: a measure of relative magnitude of separate linear, areal, and volumetric rates of change, and each one has a differently rated change velocity. Size and size alone can come to zero.
- 528.03 Size and time are synonymous. Frequency and size are the same phenomenon.
- 528.04 Size is the concept of one experience's relationship to another experience defined in terms of cyclic repetition of any one experimentally demonstrable, self-terminating, or single-cycle experience. A triangle or a tetrahedron or a sphere is a triangle or a tetrahedron or a sphere conceptually independent of size. An angle is an angle independent of the length of its edges. All of Plato's solids may have the same length edges because their differences are entirely angular. An angle is inherently a subdivision of a single cycle. Therefore, an angle is subsize.
- 528.05 Size begins with one specific cycle's completion. As the linear size of an object is doubled, surface is fourfolded and volume is eightfolded; ergo, areas increase at a velocity of the second power, and volumes increase at a velocity of the third power. Ergo, size-variation relationships are deceptive and not superficially predictable by any one experience.
- 528.06 Size and intensity are relative sensorial comparing functions of the special- case experience by brain, not by mind. Mind is concerned only with principles that hold true independent of size yet govern all relative size relationships.

529.01 Time is experience. Time can be *expressed* only in relative magnitude ratios of relevant experiences. Time can be *defined* only in terms of the relative frequency of reoccurrence of relative angular changes of the observer's environment, the relative frequency-of-occurrence rate being referenced to any constantly recycling behavior of any chosen subsystem of Universe.³ All experiential realizations are conceptually definable in degrees of angulation change and in relative frequency-of-occurrence rates in respect to the observer's optionally chosen axis of conceptuality and to his specifically identified time-recycling rate.

(Footnote 3: E.g., a clock.)

529.02 Distance is measured in time. Time increments are calculated in respect to a variety of cyclic regularities manifest in our environmental experiences. Experimentally demonstrable cyclic regularities, such as the frequencies of the reoccurrence of radiation emissions of various atomic isotopes, become the fundamental time-increment references of relative size measurement of elemental phenomena.

529.03 Newton said that time was a very specific phenomenon, assuming that there was a specific and finite time that permeated Universe and that everything observable in Universe was occurring at the same time. It was Einstein who discerned that time might be relative to the individual observer. A majority of academic people and the vast majority of nonscientists are still thinking in terms of the classical Newtonian scientific conceptioning of "instant Universe." While light's speed of approximately 700 million miles per hour is very fast in relation to automobiles, it is very slow in relation to the "no time at all" of society's obsolete instant-Universe thinking. It was part of the classical scientist's concept of instant Universe that Universe is a system in which all parts affect one another simultaneously in varying degrees. Contemporary science as yet assumes that all local systems in physical Universe are instantly and simultaneously affecting one another in widely ranging degrees of influence. (And the degrees of influence are governed by relative proximity.) Whereas radiation, i.e., entropy, casts shadows and gravity, syntropy, does not; and whereas the tensional integrity of Universe and all its substructurings is continuous and omniembracing—while compression is islanded and discontinuous—it may also be that while light and radiation has a velocity, gravity is timeless and eternally instant. (See Secs. 231.01, 251.05, 541 and 1052.)

529.04 All the time phenomena of the physicists are expressed in linear data coordinates, but all cyclic actions are spirals because there are no straight lines and also because lines cannot "go through" or "return into" themselves. There can be no experientially demonstrable circles as continuous lines "returning into" themselves. Lines cannot return into themselves. Therefore matter is a cyclic self-interfering *knotting*; whereas radiation's waves are non-self-interfering *spirals*.

matter knots
----- = ----radiation coils

Which reads: matter is to radiation as knots of rope are to coils of rope. Because there are no planes, a wave is a spiral. A spiral articulated in a direction perpendicular to our observation presents an illusory, wavilinear, planar profile.

529.05 Generalized principles are often called constants by the semantics of scientific specialization, whose viewpoint is myopic. Constancy is a time concept. Time is relative and cyclically terminal. Time is energetic, physical, and ever finitely evolving—which is the opposite of "constant."

529.06 Minimal consciousness evokes a nonsimultaneous sequence, ergo *time*. Time is not the fourth dimension and should not be so identified. Time is only a relative observation, a set of local sequences of experience afterimage formulation lags of the brain. Time is not a function of space. We can discuss time as if there were no time. It exists in weightless, metaphysical conceptuality. There is a metaphysical timeless time, just as there is a difference between physical tetrahedron and metaphysically conceptual but weightless, substanceless tetrahedron. Instantaneity would eliminate otherness, time, and self-and-otherawareness. Instantaneity and eternity are both timeless: they are the same.

529.07 The concept of being alive may be inherent only in the eternal principle of differentiability, and of a theoretical number system, and of complexes of different numbers. Seeming consciousness and life may well be inherent only in mind-conceivable theories of differentiations. To perceive of "truth" involves the concept of "nontruth," ergo, of differentiation. An intellectual integrity of Universe evokes its own theoretical evolvement of a Universe of ever-multiplying problems and pure-principles solutions and regeneration of multiplying problem-solving. (See Secs. 217.03 and 1005.50.)

- 529.08 The measuring act always involves time increments of our totally available time of life and may be conceived of only in respect to local events in nonsimultaneous Universe, there being no overall *largest* size to be referred to. Einstein was able to show that every individual's every-time employed yardstick of time (that is, the cyclic increment of imaginary reference) is always unique and different from every other's, a difference that amplifies greatly as we enter into astronomical observing by individual instruments, whose progressively designed reduction of tolerated error is always unique and only calculable relative to each experience.
- 529.09 It is a consequence of the phenomenon time and a consequence of the phenomena we call afterimage, or thinking, or reconsideration, which has inherent lags in the time rates of recallability of the various special-cases and types of experiences. So the very consequence of awareness is to impose the phenomenon time upon eternal, timeless Universe.
- 529.10 It is one of the strange facts of experience that when we try to think into the future, our thoughts jump backward. It may well be that nature has some fundamental metaphysical law by which opening up what we call the future also opens up the past in equal degree. The metaphysical law corresponds to the physical law of engineering that "every action has an equal and opposite reaction." (See Sec. 1031.16.)
- 529.11 The future is not linear. Time is wavilinear. Experience is expansive, omnidirectionally including and refining the future. It probably consists of omnidirectional wave propagations. We seem to be talking about a greater range of known cycling. It is both a subjective "now" and an objective "now"; a forward-looking now and a backward-looking now which combine synergetically as one complete "now." Because every action has both a reaction and a resultant, every now must have both a fading past and a dawning future.

529.20 No-Time-at-All

529.201 Intellect is top speed, which is instantaneous, being vastly faster than the speed of light and all radiation. Radiation's 700 million miles an hour is very slow in comparison to 700 million miles a minute and infinitely slower than 700 million miles in no-time-at-all—which is the rate at which intellect operates, being able to jump instantly to consideration of stars that are operating millions of years ago and thousands of light- years away.

- 529.21 The top speed of radiation is simply the minimum operational lag before making the cosmic leap to the eternal no-speed, where the instantaneity spontaneous to a child's conceptioning is normal and eternal. Not that it is ever lost. None of the differentiation of the generalized principles is lost. Many principles as yet undiscovered are nonetheless operative. Understanding is exquisitely total. Understanding includes a large increment of intuition to account for the as-yet-undiscovered but nonetheless operative generalized principles. (See Sec. 1056.03.)
- 529.22 Motion is not relative to *standing still*. Motion is relative to eternity, which is no-time-at-all. No-time-at-all is inherent in the generalized principles which, to be valid, must have no exceptions and be eternal, thus eternally true. The beginning of awareness, of intellect, is otherness. The whole complex of different and nonintercontradictory, all- interaccommodative, generalized principles is eternal. Complexity is eternal. The principle of mass interattraction of complex otherness is eternal and relates all the eternal complexity to our eternal system interfunctionings.
- 529.23 Newton's norm, as disclosed in his first phrase of his first law of motion, was "at rest." Newton's stars were "fixed." The planets and the moons of the planets, as well as comets, were in motion because hurled into motion by explosion from "fixed" stars.
- 529.24 Einstein's philosophy did not hold the speed of radiation unfettered in vacuo to be "very fast." It assumed this speed to be normal, and all other lesser speeds manifest in physical Universe to be occasioned by local interferences, shunting independent phenomena into local circuit repatternings.

529.30 Eternal Instantaneity

529.301 We have a new norm. The phenomenon lag is simply due to the limited mechanism of the brain; we have to wait for the afterimage to be realized.

- 529.31 The norm of Einstein is absolute speed instead of "at rest" . . . what we called instantaneous in our innocence of yesterday. We get to lesser and lesser lags, and we then approach eternal instantaneity—no lag at all. We have now learned, however, from our generalizations of the great complexity of the interactions of principles, that as we are disembarrassed of our local exclusively physical chemistry, our local information- sensing devices, what will be realized is an eternal and instantaneous awareness of all the potentials that ever existed. All the great metaphysical integrity of the individual, which is potential in the complex of interactions of the generalized principles, will always and only coexist eternally. I am saying that the arrival rate of intellect vs. the top-speed of radiation manifests the minimum lag short of no lag at all, i.e., "eternal."
- 529.32 Intuition derives from the approximate instantaneity of intellect, which is much faster than any physical phenomenon like the brain lags. Intuition is the absolute- velocity insistence of the intellect upon the laggingly reflexed brain to call its attention to significance of various special-case, brain-registered, experience relationships. Intuition is intellect coming instantly in at highest speed into dominance over lower-speed, lagging brain reflexing.
- 529.33 Eternity is simply highest speeds: not "at rest," because it gets there in notime-at-all: Complete intellection + Otherness + No-time-at-all.
- 529.34 Differentiation of functions is inherently eternal and implicit to the plurality of generalized principles, which are everywhere nonredundant, redundancy being a temporal consequence of brain-lagged dullness of comprehension and ignorance.

529.40 **Now Hourglass**

The macro-microcosm of minimum frequency of omnidirectional self-interference restraints, whose greatest degrees of outward expansion occur when the last of the least-frequent, self-interfering cycles is completed (and cycles, being geodesic great circles, must always interfere with one another twice in each wave-and-frequency cycle, which twiceness imposes eternally regenerative cosmic resonance with inherent quanta-, wave-, frequency-, time, interference-, mass-, and effort-aspects), in exquisite speed-of-light, 700-million-miles-per-hour, self-interfering radiation patterns energetically self-tying into concentric knots of relative mass in a mathematically idealized variety of

symmetrical-asymmetrical atomic assemblages, whose local subvisibly resolvable microorbiting induces the superficially deceptive, motionless thingness of mini-micromicrocosm of **NOW** which progressive, experiencewon, knowledge multiplies by progressive, intellectually contrived, instrumentally implemented, exploratory subdividing into microscopically ever-greater speeds of transformation through insect-phase magnitudes dividing into the micro-organisms phase, and then dividing progressively into molecular and atomic phases; then phasing into radioactivity at 700million-miles-per-hour, expanding once more into the microeternity of no-time into the macrocosm and repeat, ad infinitum....

530.00 Nonsimultaneity

530.01 Thought discovers that we divide Universe into an "outwardness and inwardness," so thinking is the first subdivision of Universe, because Universe, we discovered, was finite. Thinking is a nonsimultaneously recallable aggregate of inherently finite experiences and finite experience furniture—such as photons of light. One of the most important observations about our thought is the discovery that experiences are nonsimultaneous. Nonsimultaneity is a fundamental characteristic, and if experiences are nonsimultaneous, you cannot have simultaneous reconsideration.

530.02 All the words of all the vocabularies could be said to represent all the formalized attempts of men to communicate all their experiences. So we could set out to examine all the dictionaries of the world. We can pick up any one dictionary and discover that it is a nice finite package. We can open one page, but we cannot look at all the words at once. If we cannot look at all the words even on one page, we certainly cannot look at all the words of a whole dictionary at once. It does not make the dictionary infinite because we cannot look at all the words at once or think about all the words at once. The inability to think about everything at once does not mean that experience or consideration of experience is infinite. It is perplexing that one of the most persistent contemplations of human beings has been predicated on a static concept of Universe, the kind of Universe that went out with classical Newtonian mechanics. We cannot think of Universe as a fixed, static picture, which we try to do when people ask where the outwardness of Universe ends. Humans try to get a finite unit package. We have a monological propensity for the thing, the key, the building block of Universe. What we discover here is that it is not possible to think about all Universe at once. It is nonsimultaneously conceptual. This in no way mitigates against its finiteness and thinkableness.

530.03 The parents tell the child he cannot have both the Sun and the Moon in the picture at the same time. The child says that you can. The child has the ability to coordinate nonsimultaneity. The parents have lost the ability to coordinate nonsimultaneity. One of our great limitations is our tendency to look only at the static picture, the one confrontation. We want one-picture answers; we want key pictures. But we are now discovering that they are not available.

530.04 We can think about all the experiences progressively and successively. And we can coordinate our thoughts about our experiences. Our very ability to think is such a propensity for the coordination of the reconsiderations of relationships. We do not have to be simultaneous to be interconnected. We can telephone across the international date line from Sunday back to Saturday.

530.05 We have had a tendency in our thinking to say that what is finite is statically conceptual as a one-unit glimpse, so we have been seemingly frustrated in trying to understand Universe, which is an omnidirectional experience, and so we feel there ought to be an outwardness of this sphere. That is a static concept. We are not dealing with such a sphere at all, because we have all these nonsimultaneous reports, and all we have is the interconnectedness of the nonsimultaneity. One of Einstein's most intellectual discoveries was this nonsimultaneity, which he apparently could have come upon by virtue of his experience in examining the thoughts of inventors and their patent claims regarding timekeeping devices, watches, and clocks.

530.06 The speed-of-light measurements plus Planck's quantum mechanics and Einstein's relativity showed that Universe is an aggregate of nonsimultaneous events. Their experiments showed that as each of the nonsimultaneous events lost their energy, they lost it to newly occurring events. Thus energy always became 100 percent accounted for.

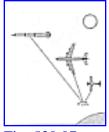


Fig. 530.07

Spaceship Earth makes it very clear how very severe have been the great transformations of history. The movement of topsoils around the surface of the Earth is very new, geologically speaking. As Einstein interpreted the speed-of-light information and the observation of the Brownian movement of the constant motion in water, he then posited a Universe in which we knew that light takes eight minutes to get to us from Sun and two and a half years to get to us from the nearest star; astronomical information shows that some of the stars we are looking at are live shows coming in from 100 years ago, others from 1,000 years ago, while the light from some of the stars we are looking at started on its way over a million years ago. With that kind of information, Einstein had to say physical Universe is quite obviously an aggregate of nonsimultaneous and only partially overlapping transformation events.

530.10 Nonsimultaneity of Scenario Universe

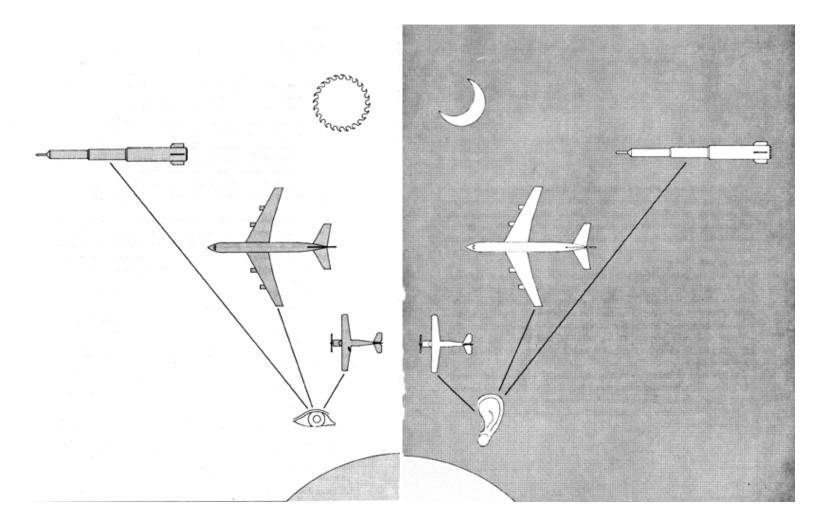


Fig. 530.07 Simultaneous and Instant Are Nondemonstrable: Simultaneous and instant cannot be experimentally demonstrated.

- 530.11 Any point can tune in any other point in Universe (Sec. 960.08). Between any two points in Universe there is a tetrahedral connection (see Sec. 961.30). Thus systematic connection of two points results in the interconnecting of four points. But none of the four event points of the tetrahedron are simultaneous. They are all overlappingly co- occurrent, each with different beginnings and endings. All of the atoms are independently introduced and terminaled; many are in gear—that is, synchronously tuned—but many are also way out of gear, untuned, or "noisy."
- 530.12 Nouns can co-occur at the same time, but verbs cannot. Events can never be omnicongruently simultaneous, which would mean having all the component four events' beginnings and endings always simultaneous. Events occur. Occur is a time word. The overlappingness of Scenario Universe (see Sec. 320) makes events appear simultaneous when they are not. Events are only overlappingly co-occurrent but never omnisimultaneous.
- 530.13 All the four unique electromagnetic frequencies of the 92 chemical elements are uniquely different, yet many are intersynchronizable in overlapping occurring alloys, whose unique sets of interattractive interrelationships produce the synergetically unique behaviors of those specific alloys.

Next Section: 531.00

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