

## 160.00 Generalized Design Science Exploration

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161.00 Science has been cogently defined by others as the attempt to set in order the facts of experience. When science discovers order subjectively, it is pure science. When the order discovered by science is objectively employed, it is called applied science. The facts of experience are always special cases. The order sought for and sometimes found by science is always eternally generalized; that is, it holds true in every special case. The scientific generalizations are always mathematically storable as equations with one term on one side of the equation and a plurality of at least two terms on the other side of the equation.

162.00 There are eternal generalizations that embrace a plurality of generalizations. The most comprehensive generalization would be that which has  $U = MP$ , standing for an eternally regenerative Universe of  $M$  times  $P$ , where  $M$  stands for the metaphysical and  $P$  stands for the physical. We could then have a subgeneralization where the physical  $P = E^r \cdot E^m$ , where  $E^r$  stands for energy as radiation and  $E^m$  stands for energy as matter. There are thus orders of generalization in which the lower orders are progressively embraced by the higher orders. There are several hundred first-order generalizations already discovered and equatingly formalized by scientist-artists. There are very few of the higher order generalizations. Because generalizations must hold true without exception, these generalizations must be inherently eternal. Though special-case experiences exemplify employment of eternal principles, those special cases are all inherently terminal; that is, in temporary employment of the principles.

163.00 No generalized principles have ever been discovered that contradict other generalized principles. All the generalized principles are interaccommodative. Some of them are synchronously interaccommodative; that is, some of them accommodate the other by synchronized nonsimultaneity. Many of them are interaccommodative simultaneously. Some interact at mathematically exponential rates of interaugmentation. Because the physical is time, the relative endurances of all special-case physical experiences are proportional to the synchronous periodicity of associability of the complex principles involved. Metaphysical generalizations are timeless, i.e., eternal. Because the metaphysical is abstract, weightless, sizeless, and eternal, metaphysical experiences have no endurance limits and are eternally compatible with all other metaphysical experiences. What is a *metaphysical experience*? It is comprehending the relationships of eternal

principles. The means of communication is physical. That which is communicated, i.e., understood, is metaphysical. The symbols with which mathematics is communicably described are physical. A mathematical principle is metaphysical and independent of whether X,Y or A,B are symbolically employed.

164.00 The discovery by human mind, i.e., intellect, of eternally generalized principles that are only intellectually comprehensible and only intuitively apprehended—and only intellectually comprehended principles being further discovered to be interaccommodative—altogether discloses what can only be complexly defined as a design, design being a complex of interaccommodation and of orderly interaccommodation whose omni-integrity of interaccommodation order can only be itself described as intellectually immaculate. Human mind (intellect) has experimentally demonstrated at least limited access to the eternal design intellectually governing eternally regenerative Universe .

165.00 *Generalized design-science exploration* is concerned with discovery and use by human mind of complex aggregates of generalized principles in specific-longevity, special-case innovations designed to induce humanity's consciously competent participation in local evolutionary transformation events invoking the conscious comprehension by ever-increasing proportions of humanity of the cosmically unique functioning of humans in the generalized design scheme of Universe. This conscious comprehension must in turn realize ever-improving implementations of the unique human functioning as well as an ever-increasingly effective concern for the relevant ecological intercomplementation involved in local Universe support of humanity's functioning as subjective discoverer of local order and thereafter as objective design-science inventor of local Universe solutions of otherwise unsolvable problems, design-science solutions of which will provide special-case, local-Universe supports of eternally regenerative generalized Universe.

166.00 The prime eternal laws governing design science as thus far accrued to that of the cosmic law of generalized design-science exploration are realizability and relative magnitude of reproducibility, which might be called the law of regenerative design: the relative physical time magnitude of reproducibility is proportional to the order of magnitude of cosmic function generalizability. Because the higher the order of synergetic function generalization, the more embracing and simple its statement; only the highest orders can embracingly satisfy the plurality of low-order interaccommodation conditions.

167.00 There are several corollaries to the prime law of regenerative design durability and amplitude of reproducibility. *Corollary A:* The simpler, the more enduringly reproducible. *Corollary B:* The special-case realizations of a given design complex correlate as the more symmetrical, the more reproducible. *Corollary C:* There being limit cases of optimum symmetry and simplicity, there are simplicities of conceptual realization. The most enduringly reproducible design entities of Universe are those occurring at the min-max limits of simplicity and symmetry.

168.00 *Corollary D:* There being unique minimum-maximum system limits governing the transformation of conceptual entities in Universe, which differentiate the conceptually unique entities of Universe into those conceptions occurring exclusively outside the system considered and all of the Universe inside of the conceptual entity, together with the structural pattern integrity system separating the inside from the outside, there being a limited minimum set of structural and operating principles eternally producing and reproducing recognizable pattern integrity. And there are likewise a minimum set of principles that interact to transform already orderly patterns into other structured patterns, and there being minimum constituent patterns that involve the complex intertransformings and structural formings of symmetrical orders and various magnitudes of asymmetrical deviations tolerated by the principles complexedly involved. There are scientifically discoverable nuclear aggregates of primary design integrity as well as complex symmetrical reassociabilities of the nuclear primary integrities and deliberately employable relationships of nuclear simplexes which designedly impose asymmetrical- symmetrical pulsative periodicities.

169.00 *Corollary E:* The more symmetrical and simple and nuclear, the more frequently employable; ergo, the more frequently occurring in eternally regenerative Universe's transformative problem solutions.

170.00 *Corollary F:* The smaller and simpler, more symmetrical, frequently occurring in Universe and the larger and more complex, less frequently originally occurring and periodically reoccurring: for example, the hydrogen minimum limit simplex constituting not only nine-tenths of physical Universe but most frequently and most omnipresent in Universe; with asymmetrical battleships (fortunately) least frequently and compatibly recurrent throughout the as yet known cosmos, being found only on one minor planet in one typical galaxy of one hundred billion stars amongst an already-discovered billion galaxies, there having been only a few score of such man-made battleships recurrent in the split-second history of humans on infinitesimally minor Earth.

171.00 All the fundamental nuclear simplexes of the 92 inherently selfregenerative physical Universe elements are a priori to human mind formulation and invention and are only discoverable by mind's intuitive initiatives. Many myriads of complex associability of chemical compounding of the nuclear simplexes can be experimentally discovered, or, after comprehending the order of the principles involved, deliberately invented by human mind. The chemical compounds are temporary and have limited associabilities. Human minds can then invent, by deliberate design, momentarily appropriate complex associative events—as, for instance, hydraulics, crystallines, and plasmics, in turn involving mechanics of a complex nature and longevity. Omniautomated self parts replacing sensingly feedback industrial complexes can be comprehensively designed by human mind, the mass reproducibility and service longevity of which will always be fundamental to the design laws, both primary and corollary.

172.00 Biological designs a priori to human alteration contriving are directly reproducible in frequency design magnitude. Blades of grass are reproduced on planet Earth in vast quantities due to the universal adequacy of Sun and other star photosynthetic impoundment. Daisies, peanuts, glowworms, etc. are reproduced in direct complement to their design complexity, which involves biological and eternal environmental interplay of chemical element simplexes and compounds under a complex of energy, heat, and pressure conditions critical to the complex of chemical associating and disassociating involved. Humans have thus far evolved the industrial complex designing which is only of kindergarten magnitude compared to the complexity of the biological success of our planet Earth. In its complexities of design integrity, the Universe is technology.

173.00 The technology evolved by man is thus far amateurish compared to the elegance of nonhumanly contrived regeneration. Man does not spontaneously recognize technology other than his own, so he speaks of the rest as something he ignorantly calls nature. Much of man's technology is of meager endurance, being comprised at the outset of destructive invention such as that of weaponry, or for something in support of the quick-profit, man-invented game of selfishly manipulative game-playing and rule-inventing for the playing of his only-ignorantly-preoccupying value systems.

174.00 The greatest and most enduring discoveries and inventions of humans on our planet are those of the scientist-artists, the name joined, or artist, or scientist. The name of artist or scientist, though often self-professed, can only be accredited to an individual by others who in retrospect discover the enduring quality of the symmetries with which the individual converted his conceptioning to the advantage of others, and realizations of increasing interadvantage in respect to survival—the gradual discovery of the function in Universe which humanity has been designed to fulfill.

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