

10DI SUPERORGANISMS: FROM ANTHROPOCENE TO MECHANOCENE. THE PERFECT WORLD.

Luis Sancho

luisancho@hotmail.com

ABSTRACT

General Systems Theory (GST) describes all physical, biologic and social systems as 10-Dimensional Superorganisms.

There are 2 key differences between the 10Di Complex Universe and a 4Di, simplified physical model:

-Physics considers 3 spatial dimensions and 1 time dimension of lineal, present duration that calculates the external motion of beings with instantaneous derivatives ($V=\partial s/\partial t$), or simultaneous measures (worldlines). Thus 4D tells nothing of system's life-death and evolutionary cycles from past to future – its 2 missing time dimensions; and their inner, hierarchical structure across 3 'i-scalar' dimensions: the i-1 cellular/quantum, i organic and i+1 social/cosmic scales, which emerge together into Whole Superorganisms, the 10th Dimension, itself an i-1 cellular/atomic unit of a new game of scalar space-time creation.

-Physicists' dimensions are infinite, absolute, reaching the Whole Universe, acting as an abstract 'background' over which beings exist. But what those beings are made of? There is no clear answer. Yet in the GST's 10Di formalism, beings are made of 'Fractal' Dimensions, which are not abstract, neither infinite but the ultimate substance of reality, broken into the parts of each being. The Whole Universe is infinite and so are its 10 Dimensions of time, space and 'scalar' depth. But Nature's systems are its 'fractal parts', *made of the same 10Di, albeit in a finite quantity. So each part occupies a limited quantity of space, lives a limited quantity of time, and spreads through a limited $i\pm 1$ number of hierarchical scales. Finally, since all the systems of the Universe are made with the same 10 Dimensions, they share the properties of scalar space & time, which is the cause of its isomorphisms. Thus all systems of nature:*

-Last a life-death worldcycle of 3 past-energetic-young, adult-iterative-present and Informative-future-old time dimensions.

-Have 3 diffeomorphic space dimensions, enclosed by bidimensional membranes, through which they communicate (holographic principle); reason why *systems display 3 space&time dimensional organs that correspond to the 3-only varieties of 2-manifold topological networks (space geometries with time motions):*

-Energetic, hyperbolic, long, young-past, fields-limbs, with expansive, entropic, dissolving motions: $ST_e < \sum i-1$.

-Informative, spherical, tall, future, particles-heads with implosive, warped motions: $ST_o > \prod i+1$.

-Reproductive, toroid, wide, adult-present, waves-bodies that combine energy&information into exi Actions: $ST_a = ST_e \times ST_o$.

Thus *Past-Energy x Future-Information=Present, iterative actions*, becomes the metric equation of Scalar Space-Time that puts together those 3 ST-organs, extended across 3 $i\pm 1$ relative scales, into a Whole 10Di Unit-Universe: $U=A(ExO)|i\pm 1$

10Di 'metrics' completes Leibniz's relational model of scalar space-time, explaining why time clocks in Relativity have different speeds. Since systems' inner time clocks that carry their in-form-ation in the form and frequency of its worldcycles, accelerate as they shrink in scalar Space. Yet its metric product origin of Universal & Vital Constants, remains co-invariant.

Life-death worldcycles are travels through $3i\pm 1$ scales, from seminal birth in faster i-1 cellular/atomic scales, till emerging in i-scales where systems live 3 time ages within i+1 social scales till an energetic big-bang death, dissolve Nature's systems back into the cellular/atomic plane, ending their worldcycles, during which all Systems will try to Maximize their scalar 3 ST-Organs, *feeding on Energy, gauging information, reproducing and evolving socially, 4 actions, E, O, \leftrightarrow , $\sum \prod i\pm 1$ that define all 'existential functions'* Thus $\sum Ei-1 \approx i > \prod Oi+1$, becomes the Fractal, Feed-back, Generator Equation of Reality.

Thus 10Di develops a causal logic of 3 time arrows and completes non-Euclidean Geometries of points crossed by ∞ parallels, which are fractal i-1 points that grow into full 10Di systems as we enlarge its scale (1st non-E postulate). Therefore lines are waves with volume (2nd); the degree of equality (3rd) of its 3 parts determines the Darwinian or symbiotic behavior of points, which form social networks when they share the same information, becoming Non-E planes (4th).

The paper introduces 10Di superorganisms and its isomorphisms for all species; then it applies 10D GST to social science:

-Each human is a relative i-1 citizen/cell of History, its 10Di Whole. Gaia is its STenergetic network; Economics, its STreproductive network; politics its STo-informative network. Thus a perfect World would construct those networks with the laws of 10Di superorganisms.

But the Anthropocene=History is only an Age of Earth's evolution, which now mutates into the Mechanocene - the superorganism of i+1 'company-mothers' of machines, i-organic systems of i-1 metal, which 'enzymen' evolved in 3 dimensional Ages: the European age of STenergetic metal-bodies (XIX c.), the American age of STo metal-minds' (XX c.),

assembled now globally into STa=STexSTo autonomous robots and top predator weapons, which compete with humans in labor and war fields, accelerating life extinction, as Earth becomes terraformed.

So human i+1 social organizations (Governments) and Wor(l)d languages become replaced by company-mothers and its memetic, digital language, e-money, which 'cre(dit)ates' from its global i+1 brain, World-stock, biological radiations of i-machines, designing a Ill Earth to its likeness, where obsolete humans with no credit 'exit mundi', Greek style. Meanwhile informative machines' networks manufacture brains with 3 symbiotic idol-ogies whose goal is to multiply 3 topologic metal-memes: capitalism (Δ informative metal-money), nationalism (Δ energetic weapons) and mechanism (Δ organic machines). Thus only a politic r=evolution that aborts the Mechanocene, extinguishing its lethal Goods, M(g); controlling world-stock with legal Wor(l)ds to cre(dit)ate instead Human-Welfare Goods, H(g), can save the World, 'Generating' the Existential Equation or Constitution of History's 10Di superorganism that maximizes Humanity in its 3 scales: $Max.H(g) \times Min. M(g)$.

SUMMARY

Introduction. General Systems Theory.

I. The 10 Dimensions of Scalar Space-Time. Superorganisms. Its GST Isomorphisms.

II. Applications of 10di General Systems Theory to Social Sciences

INTRODUCTION. GENERAL SYSTEMS THEORY

General Systems (GST) was founded at Macy's congress, when the leading scientists on Information Theory gathered in search of a formalism which could widen the 2300 years old underlying structure of western thought, based in 3 dimensions of absolute space and Aristotle's single dimension of causal time, latter developed by Galileo and Boltzmann into the concept of 'expansive motion' or entropy-energy.

The 4Di Universe sufficed for millennia to describe a space-time perceived by human senses as a single continuum of beings with external motions. Yet Scientists knew it did not properly account for the internal motions of beings, cause of its informative evolution and life-death cycles; neither it explained properly the hierarchical structure of reality, organized in social planes, from the simplest atoms through the organism till the larger galaxies; nor it accounted for the similarities between entities of those scales or isomorphisms of nature.

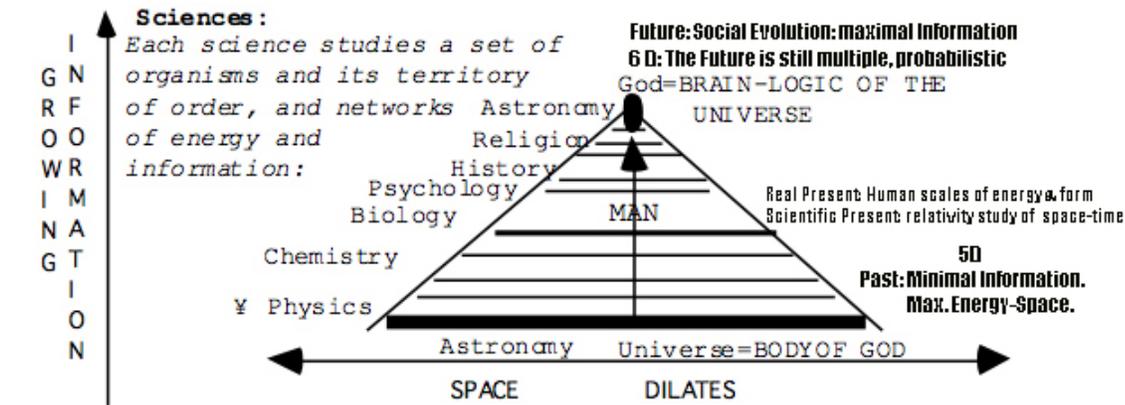
But for 50 years the science languished by lack of a mathematical and logic formalism with the rigor achieved by the simplex 4D models of physicists. Only Leibniz in the classic age had made some philosophical insights on how such model of 'relational time' and multiple spatial scales, where 'each point is a world in itself', should be built. Riemann and Einstein had advanced with their non-Euclidean geometry and relativity of time clocks in that direction. Bertalanffy and Miller had given insights on the organic nature of the Universe. And Mandelbrot provided some mathematical basis with his Fractals.

Yet those intuitions did not suffice, since as Einstein put it: 'Leibniz is probably right but if so, we must restart western science from scratch'. Indeed, 2300 years of Euclidean mathematics and Aristotelian Logic had to be upturn to complete the 5 postulates of Non-Euclidean mathematics that describe fractal, scalar space and a new logic had to include besides present duration and 'past-entropy' the arrow of future information, as a new time dimension.

Without such formalism, GST became then a meta-science, similar to so many modern disciplines that rely on an abstract, rather pedantic jargon with little formal content, 'the holistic, systemic view', closer to a new wave religion than a Science of Sciences, able to unify all other disciplines of knowledge with the same mathematical rigor of the 4Di formalism, and the added philosophical insights of the organismic view. This was the model I developed, paradoxically because I didn't know about GST, which would have dragged me into its meta-language. I departed instead from the work of Leibniz, Riemann, Darwin and Einstein, using mainstream scientific concepts. Only when the model was completed, a peer noticed it was in fact the GST formalism, searched for so long by the practitioners of systemics, if not in jargon certainly in spirit.

The systemic scientist who reads this work therefore should be aware that we talk in the standard language of science; while the physicist who confronts it should know we offer a different philosophy of the Universe, no longer a machine but a superorganism, and a much richer understanding of logic, non-Euclidean mathematics, Dimensions, Time & Space. Finally social scientists should be aware of the anti-quantum paradox and the uncertainty it causes to their disciplines, most of which must be considered ideologies of power, not science. Finally to state the obvious: the constrains of a 30pg. paper, merely sketches a GST that encompasses all laws and disciplines of the mind and occupies thousands of pgs. in my files¹.

I. THE 10 DIMENSIONS OF SCALAR SPACE-TIME. SUPERORGANISMS & ITS GST ISOMORPHISMS.



1. The 10 scalar space-time Dimensions of all the fractal, organic parts of the Universe.

In the 90s I developed a logic & mathematical formalism of General Systems Sciences¹ that describes all physic, biologic and social systems of reality as Complex 10 Dimensional Superorganisms². There are 2 key differences between the 10 Dimensional, Complex, organic Universe, and the 4 Dimensional, simplex physical model:

1. Simplex sciences consider only 'spatial dimensions' and a single time dimension of lineal, present duration that calculates the external motion of beings with instantaneous derivatives (Galilean relativity: $V = \partial s / \partial t$), or simultaneous measures (Einstein's worldlines, which subtract a $-c^2 t^2$ factor to Galileo's due to the warping of light space-time). Yet those simplex, external motions tell us nothing of the inner structure of a physical or biological system; of its cellular and social organization; of the reasons of its life-death cycles from young to old age, or in the case of species, of its evolution of form, from past to future.

On the other hand, the complex 10D model answers those existential questions, with its 'deeper' concept of a Universe, which extends through 3 dimensional hierarchies of scalar space-time - the i-1 cellular, i-individual and i+1 social scale - and 2 additional, past and future, dimensions of 'slow' time, made of inner motions, which change the internal form of all beings through life-death *worldcycles* and *evolutionary topologies*.

2. Physicists' dimensions are absolute, encompassing the entire Universe, acting as an abstract 'background' detached from the being. That is, beings exist 'over' those dimensions. So what they are made of? The Sx. 4D model has not a clear answer; hence it looks for entelechies such as strings or the God's particle. On the other hand *in the complex model*, all beings are *Dimensional beings*, made of those 10 complex dimensions - the ultimate stuff of reality. Since background dimensions are deemed an abstract error derived from the use of 'paper and pen' by Descartes, which established those abstract dimensions, in the Cartesian graph in which space-time seemed to be a paper background *over* which events were drawn. This error of an ideal, ∞ space-time made of lineal coordinates - a mere artifact of calculus - was canonized by Newton and ridiculed by Leibniz, who pioneered a relational concept of space-time, as we are all made of a vital space that lasts in time our life cycle. So there are ∞ time cycles, different for each being. It is this relational concept of space-time that 10D GST takes to its final conclusion: the existence of a myriad of finite 10Di superorganisms; made of a limited vital space, whereas absolute space is the abstract sum of all those parts put together into a whole - the Universe.

And we last a finite quantity of time, different for each species; determined by the different speeds of each entity's time clocks; since death returns time-clocks to the beginning of a life-death '*worldcycle*', (no longer a worldline as the new dimension of future in-form-ative time adds form, 'cyclical curvature', to those worldlines).

And we are made of 3 'scalar', hierarchic $i \pm 1$ organic dimensional scales: i-1 cells or atoms that form i-individuals and molecules, part of i+1 cosmic bodies and societies.

We are NOT placed in an infinite space-time background. We are made of finite dimensions of scalar space-time. System are made of *long limbs* and fields, which perform *explosive energy motions in time*. They have, tall

heads and particles, which implode and gauge *information*, and wide, bilateral organs and waves that *repeat time motions* and organic forms within a limited space. Thus we are made of a limited vital space and last a limited time. Further on, beings occupy their 3-dimensional space & time, across 3 relative $i \pm 1$ hierarchical scales of social organization that co-exist together, as physical and biologic systems are made of $i-1$ atoms/cells, which gather into molecular states and i -individual organisms, part of $i+1$ cosmic bodies and societies.

Further on if we classify in time those i -scales it becomes evident that any $i+n$ higher social scale must happen into the future. As they require the previous creation of smaller individual and $i-1$ cellular/atomic forms to exist.

Thus systems growth in hierarchical, informative scales - *their relative future time arrow*, inverse to *their relative past arrow of chaos and entropy*, of lesser microscopic order. Yet since physicists do not recognize the arrow of information, neither the scalar, fractal dimensions of space-time, stuck on the 'Absolute' space-time models of Descartes and Newton, human models of reality are flawed, biased towards 'present measures' of spatial dimensions (physics was indeed defined as the 'science of external motions') and entropy-death-past interpretations of the future of the Universe and its life forms. They lack 5 of the 10 dimensions of the Universe: its 3 scalar dimensions; the dimension of future information and the 'integrative' dimension of the Whole, which reduces physical studies to $\frac{1}{2}$ of reality and explains its reductionism, and incapacity to explain fundamental facts of existence, such as the life-death worldcycle, now solved within a 10Di model of fractal Superorganisms.

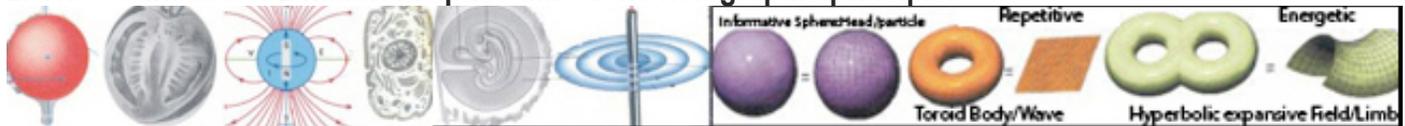
This means any physical or biologic system is composed of a total of 3×3 scalar space-time Dimensions, which are put together as parts of a single, emerging Whole. And that whole with its integrative networks is the 10th dimension of any Nature's system, itself a fractal $i-1$ cellular unit of a larger hierarchical entity. Since while 3 scales suffice to study any part, the Universe seems to have infinite scales, as the atomic and galactic wholes show the same equations, when we unify the quantum and cosmic scale with the 10Di formalism (I.10).

Thus scalar dimensions are 'fractal', as they co-exist in different scales of size, and limited, reaching till the external membrane that encloses each super organism. Yet at the same time ∞ , as each '10th dimension' is a relative 'point-particle' of a larger super-organism: particles make atoms that make molecules that make cells and matter, part of organisms and planetary systems, part of galaxies, which are likely units of a new game of scales. Hence the term 'fractal *superorganism*', made of parts that are also superorganisms made of new parts.

In brief, we are made of dimensions; we are made of space, we are made of time; we are social herds; we are NOT in an abstract dimensional background. Hence the importance of understanding the general properties of dimensions, its symmetries and transformations into each other, as that is what we are; and the cause of all the 'isomorphic laws' between species that share them. A fact which gives birth to a new science, General Systems sciences that unifies with those common *geometric=spatial, causal=temporal and organic=scalar* laws derived of the properties of those 10 Dimensions, all systems, deducing the particular laws of each science, which describes the species of a relative scale of size of the Universe, (graph 1), from those isomorphic laws³.

So GST's 10 Dimensional laws & isomorphisms provides new information about any being and solves fundamental questions about reality that a 4D model does not. Let us introduce some of those isomorphisms.

2. The 3 varieties of 2-manifold space-times: the holographic principle.



Why 3×3 'dimensions' of space, time and scalar $i \pm 1$ hierarchy define a Whole Physical or biological system?

The reason is the holographic principle, discovered in black hole theory. Physicists found that information is bi-dimensional. So a paper or screen of information, has 2 dimensions. So it does the image of each eye. As all systems interact with the external world through bi-dimensional surfaces. In the scalar Universe, the 3rd dimension of space is created by accumulation of '2-manifold' membranes in parallel layers; or by perpendicular

interaction of 2 external bidimensional membranes, with time motion, which together make up the 4Di of Physics. Yet a 2-manifold geometry has only 3 topological varieties. Those 3 topological varieties are combined space-time dimensions; since a topology by definition is a form of space that can be 'deformed' without tearing it by inner motions in time. Thus the bidimensionality of those 3 varieties of 'space-time' sheets explains why there are only 3 dimensions of space and 3 of time, for any i-scale, combined into 3 ST-'topologies'. They become the 3 organic structures, whose parallel space geometries and time functions define all ternary systems of reality. In the graph, we see those 3 topological forms and the functions they perform in time, when assembled into all kind of 10D physical and biological systems, atoms, cells, planets, etc. They prove once more that *all is made of Dimensions of scalar space-time*, which assemble together to form Whole beings.

Thus each geometric dimension of space and its 'symmetric' function in time put together create one of those 3 varieties, which the Universe uses to *construct all systems of reality*. They are:

- ST_e : |: 'Energetic' organs, fields and limbs = $S_{length} \times T_{past-youth}$, which we write dynamically as an expansive $<$.

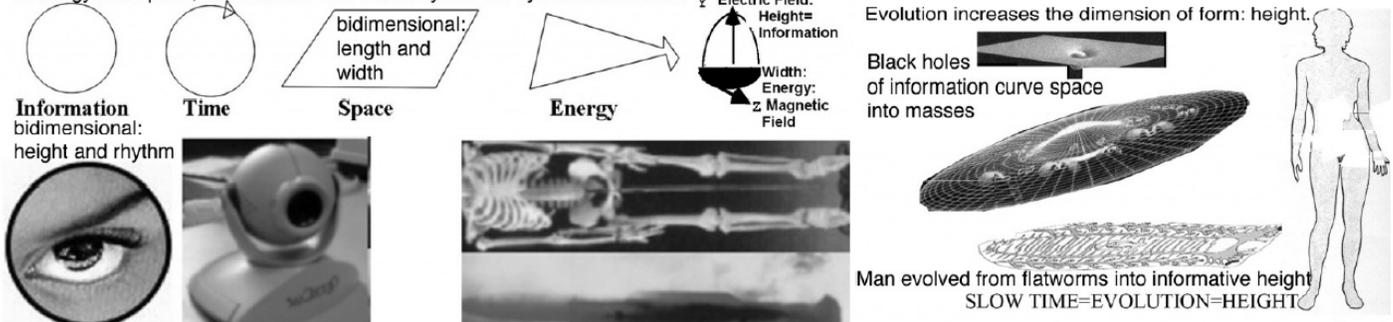
They are hyperbolic, entropic motions and forms that expand in space, and branch into multiple, lineal, long shapes. Since the line is the fastest motion between 2 points. They are biological limbs and physical fields, whose motions dominate the young/gaseous 1st age/state of both type of systems.

- ST_o , O: 'Information' = $S_{height} \times T_{3rd, old\ age}$ that we write dynamically as an implosive $>$.

Spherical, informative, tall systems, which implode the bits of information of the Universe into a diminutive, 'linguistic mapping' of reality, the mind, which gauges and perceives it. Since height gives an advantageous point of view; and the sphere is the topology that stores more information in lesser space and the only variety that can shrink without tearing. Thus the informative, ST_o bi-dimension of any being is the product of its height, the space dimension of information that dominates the 3rd, old age of a system, both in organisms that wrinkle their form - species, which grow in height with time; and physical cyclic vortices, masses and charges, in the i-1 quantum scale and spiral galaxies in the i+1, scale that feed tall black holes of max. information and rotational c-speed. How those spherical or regular polyhedral, particles, crystals, eyes and brains gauge information? They create a mirror image of the ∞ Universe, shrinking it into an infinitesimal, linguistic 'point of view'. Thus the topologic equation of any mind is: O (infinitesimal mirror) $\times \infty$ (Universe) = Constant linguistic mapping of reality.

It follows that since gauging and perceiving shrinks an extended, past, energetic space into its future zero-point of information -the mind- there is a causal sequence between both topologies, from a past, young age of energy, larger size and lesser form into a 3rd age of warped information. Thus the Universe is broken into an infinite tapestry of 10D superorganisms 'managed' by O-points that gauge & mold the energy of lineal fields, fats & proteins into complex spherical, warped mappings of reality, stored in cyclic particles and nucleotide rings.

1-Energy and space, in/form/ation and 0-time cycles are synonymous forms:



Those minds stop & select only a part of the total 10D information of the being to be able to map reality in the reduced volume of its O-point transforming lineal energies & cyclic time clocks' motions into static space and information. They peg together the tapestry of finite 10D space-time beings into a single ST-continuum; they perceive only their i-individual scale of existence. And so they merge ∞ , discontinuous 10Dis into 4 absolute Dis:

$$Absolute\ Space = i \pm \infty \sum energy\ quanta: S = \sum E; Se; \quad Absolute\ Time = i \pm \infty \sum cycles\ In-form-ation: Ti = \sum o; To$$

Thus reality is made of infinite 'actions' of energy and time, from the simplest Physical action (photonic Planck quanta, the unit of quantum physics, right drawing) to human actions. So we say I don't have 'energy and time' to do this. But the mind and most Human theories simplify those infinite energies, $\sum e$ into a single space, S and the infinite clocks of time, $\sum T$, into static informations, $\sum O$; obscuring their self-similarity. Even Science failed to recognize it, when Galileo noticed the Earth - that seems quiet to the eye - is moving: 'e pur su muove, e pur no muove'. Such 'Galilean Paradox' unifies philosophically the relativistic 'mind-theory' (a continuum, 'whole' larger space-time) and the quantum 'reality' (a discontinuous, moving, sum of smaller parts) – 2 relative views perceived from a 10th, whole perspective and a more detailed 3x3 analysis.

Further on we see in the graph, the parallelism of form in human organs and mechanisms, which perform similar functions of information (spherical Eyes-cameras): or energy (lineal limbs and energetic weapons).

-STa; ExO; E=O; X, Ø, ≈; S_{width} x T_{present-adult}: *Wide bodies-waves, with toroid, elliptic shapes*, which combine both forms into actions that perform exchange cycles of energy and information between limbs/fields and heads/particles in any system. They convert a young age of Max. energy, into a 3rd age of maximal Information, STe>STo, through a wide dimension, product of both that corresponds to an adult age in which energy and information reach a balance, E=O; creating mixed shapes, toroid and ovoid bodies and waves, whose function is to reproduce & iterate the system, as they participate of both components, with a frequency, $f=1/T$, that imprints other surface of space-time with its combined forms (maximal in biologic systems, minimal in physical waves).

It is the 'present age' of a system, when it is repeated dynamically and so 'time seems not to change' its form.

Since ExO is maximal when E=O, the present, adult, STa, is *the most active age that maximizes the 'survival force or existential function' of a system* product of its energy and information equivalent to the momentum of a physical system or the predator power of a biological organism. Thus systems with max. momentum survive physical collisions and top predator systems with max. mind information (Max.O) & max. limb force (max.E), survive in the fight for existence and spread in 'biological, reproductive radiations' (STa). Thus the equation, Max.ExO->E=O resumes the 'Will of the Universe' (8) and defines many states: liquids, adults, efficiency, survival, beauty, reproduction and love, as males with energetic, lineal bodies and females with curved, informative bodies (->11) fusion together into 'couples', which maximize both parameters and reproduce the system.

Thus whole systems are assemblies of the 3 topologies of its bidimensional membranes - also the 3 solutions of Einstein's Universal space-time metrics. As they maximize their survival efficiency. All physical, quantum systems are made of a field of energy, over which a body wave and informative particle form a ternary system that co-exists together (Quantum principle of Complementarity). All biologic systems exist on an STe-rritory in which they extract energy for its limbs, body & head. There are not bodies without heads & limbs; adult galaxies without black holes. Since species that lack one of the 3 elements live short (red cells), or are enslaved to perform a single task by its full master-systems (machines). Yet machines *are becoming 'wholes' as 'enzymen' put their 3 parts into robots 'who' displace humans of labor and war fields. They must be forbidden, if humans want to remain top predators on Earth, as once 'formed' their i-1 superior metal will make them a better species.*

In the graph, we see the simplest super organisms and its '3 organs'. The 3 topologies combine into spherical or polyhedral organisms, when they live in a homogenous isotropic medium, which provides them with energy and information coming from all directions. Then the O-mind is in the center of a sphere or polyhedral crystal, which has the same distance to all the vertex or sensorial points of its surface membrane. Reason why all metals, all crystals and planets with crystal centers, have such forms. So the zero-point can create a regular informative map. It also absorbs and emits energy & information through 2 opposite hyperbolic apertures (its \pm STo poles - its ears & mouths) –as energy and information have opposite properties and orientations. In between a toroid body puts together both parts of the system by transferring to the central 'zero point' e&o. Finally the whole moves across its i+1 ecosystem through multiple lineal flagella or hyperbolic fields & perpendicular to its equatorial plane. So the 3 parts assemble together creating isomorphic sea urchins, fetuses, electromagnetic

fields to stars, globular galaxies, atoms, tomatoes, cells or planets. In all of them, an external membrane feed the system with energy through a toroid body; and an information zero point nucleus will gauge and guide its motions, 'ejecting' flows of energy through a field or moving flagella towards sources of energy & information.

3. The metrics of the '5th dimension': $Se \times To = C$. The compact model.



When complementary systems, $SexTo$, made of scalar dimensions of spatial energy and Temporal information, grow in spatial size the speed of its cyclic clocks of time that carry their in-form-ation in their form and frequency, slow down proportionally, both in biologic and physical systems and vice versa: as they become smaller, time cycles tick faster and the frequency of information processing accelerates. Yet the product of both is constant.

In the graph, we can also do a 'ceteris paribus' analysis of all those i-scales, adding a compacted '5th dimension of 'scalar depth' to the classic 4Di models. Then we define for all those integrated \sum i-dimensions a co-invariant metrics that defines travel through all those scales. Since as we grow in size, our time clocks slow down and vice versa, but the product of the time speed and size of a system remains constant. So we write: $Se \times To = C$.

The metrics of the 5th or i-scalar dimensions explain a wealth of existential isomorphisms common to all systems:

- The life-death cycle becomes now a travel through the 5th dimension; from the i-1 faster, smaller seminal scale to the emerging i-scale of life, into the larger, i+1 slower life of social super-organisms and cosmic bodies.
- Universal & vital constants are proportionalities between specific spatial and temporal dimensions of a system.
- The principle of conservation of energy widens into the principle of conservation of energy & information across all the scales of the Universe, as energy moves from the larger scale down and information moves upwards:

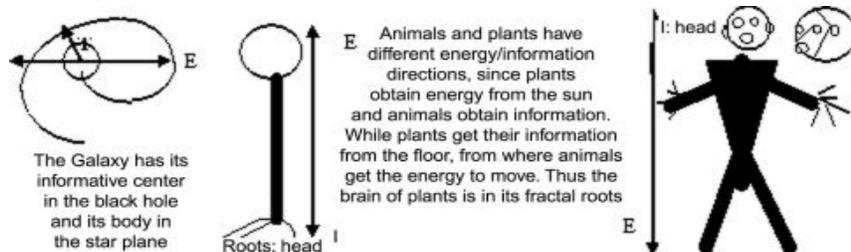
'In the scalar space-time Universe, energy and information never die; only transform into each other, travelling across the 3 ± 1 scales of its 10 Dimensional superorganism: $Se \times To = C$ '

Since smaller systems have faster informative clocks, from chips to genes to black holes (mechanic, biologic and physical systems), information moves from lower scales to upper scales and energy from upper to lower scales through inverse hyperbolic 'wormholes'; through which energy or information seems to disappear. Yet within 3 ± 1 scales the $SexTo$ volume remains constant. So genes code bigger organisms which feed its i-1 cells and black holes form galaxies which feed them, and chips guide bigger machine bodies, and fractals show more information when we get smaller, and small money and small words control the larger human, social world.

- i+1 social scales require first the creation of i-1 cellular/atomic and i-ndividual systems. Thus i+1 scales are in a relative future: 'Superorganisms' i-scales co-exist in the same space, whereas i+n scales are displaced towards its relative future Time'. All those laws explain the interaction and synchronicity of all systems, across scales providing the whys of all type of phenomena in all sciences. For example, in Quantum physics they explain the Complementarity i-wave, i+1 particle, Pauli's exclusion principle (2 particles in the same point of space), neutrino paradox (disappearing of mass in beta decay, into i-1 gravitational scales) and entanglement (through the invisible, smaller, faster i-1 gravitational scale).

4. 10th dimension: Wholes made of assemblies of the 3 topologic varieties and its organic functions.

In the graph, another variety of superorganism exists over planar surfaces with a relative 'energy-information' directionality such as the land surface of Earth, where the sun provides light and the floor chemical elements. In this ecosystem the assembly of the 3 varieties changes but its ternary morphology and functions remain:



The galaxy is a 'homogenous' organism with a black hole in the center. The plant has also its 3 parts but its Whole form is adapted to the 'directional' non-isotropic flows of light energy and chemical information it needs to survive: it has a root brain with maximal fractal branching to gather more atomic information, while 'flat' leaves absorb light as energy. Humans and animals though have the inverse orientation, as they use light to obtain information and take energy from plants and land animals. Thus the symmetry between the 3 spatial dimensions and its temporal functions remain; height is still the dimension of information to perceive better. So humans have their heads on top in the direction from where light information comes. Length, on the other hand, is the dimension of motion; so animals move forward. Finally, width is the parallel direction of social organization and reproduction; so animals repeat its bilateral organs and plants branch in the width dimension.

Thus function in time dominates its parallel space dimensions. As all systems have an informative mind, who controls the information languages of the system, a re=productive one, which works and produces the goods the system needs and an environment that provides its energy. Reason why we can classify the 3 parts of social systems – its informative 'upper class' that controls society by issuing orders with 2 languages of power, verbal laws & digital money to its re=productive middle 'body of workers' working class; as both ab=use as energy, the geographic plane in which they live (Nature). *What is an aberration is to treat 'equal humans' as a 3rd class (9).*

We conclude that the 3 only varieties of 2-manifolds impose over the random mutations of Darwinian evolution a guiding constrain of forms that explains its isomorphisms and the speed of punctuated evolution, since they 'limit' erroneous morphologies, when the selection process raises its stakes and mutations accelerate. So very complex systems such as an informative eye or energetic wing can appear very fast.

5. The 3 dimensions=ages of time of all Universal systems: Ternary logic.

The causal order of the 3 ST-varieties explains the isomorphic worldcycles of life and death, symmetric with the 3 'scalar' $i \pm 1$ dimensions of Hierarchy in all Nature's systems. Since life is a travel through the 3 i-dimensions of social hierarchy, the cellular, individual and social scale y , which are parallel to the 3 ages in time of all systems:

- O_i-1 : The seminal $i-1$ age of informative conception till at birth, the system emerges into the...
- i -ndividual scale, where the system follows a young age of energy ($Max.E \times Min.O$), an adult age of $e=0$, reproduction in which the individual integrates itself into the $i+1$ social scale. followed by a 3rd i -ndividual, lonely, old age of future information, $Max.O \times Min.E$ that ends when energy is exhausted with a reversal of time arrows:
- $Max.O < Max.E$: The Entropic 'death' that returns the system to the $i-1$ cellular scale, in an explosive big-bang or cellular dissolution that expands its Space. So the Universe remains an immortal zero sum of ∞ worldcycles.

And so we write a simple equation for the life death cycle across its 3 $i \pm 1$ scales and 3 'Ages of time':

$$i-1 > Max. E \rightarrow E=O \rightarrow Max. O < i-1.$$

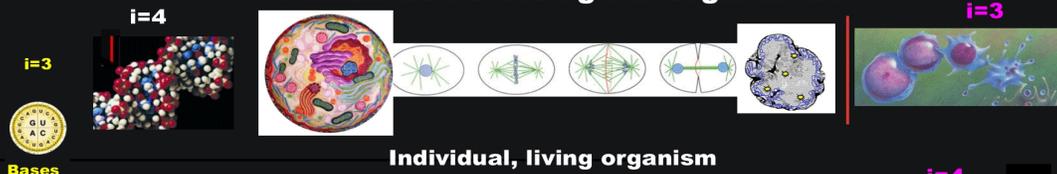
In next graph, after birth as a seed of information in the $i-1$ scale, those $3 \pm i$ ages d=evolve all systems between birth and extinction: cells, born in the $i-1$ genetic scale, live 3 ages, and reproduce before its apoptosis death. Each cell is the $i-1$ unit of an individual human superorganism, which goes through 3 ages and dies. Yet each human is the $i-1$ cellular citizen of a civilization, often born as a 'seed of information', in the mind of a prophet, which is cloned through a 'book of revelation' in all other 'believers' – the equivalent of the DNA of a cell. *Since systems which have the same information evolve together into social wholes (3rd postulate of i -logic geometry:9):*

THE GENERATIONAL=LIFE CYCLE: $e_{i-1} < E > E_{T_i} > T < e_{i-1}$

SUPER-ORGANISMS D=EVOLVE BETWEEN 2 I-PLANES OF EXISTENCE IN 3+1 AGES DOMINATED BY ITS ENERGY, REPRODUCTIVE AND INFORMATIVE NETWORKS:

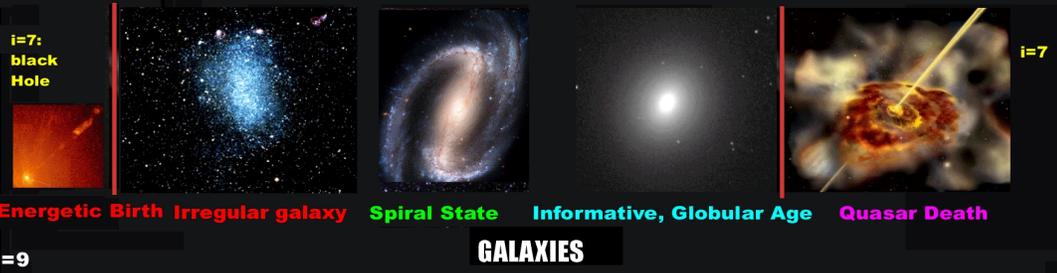
Birth: $e_{i-1} < Youth: \rangle E_i > Maturity: E_{T_i} > Old\ age: T_i < Death: \rangle e_{i-1}$

Human Socio-Biological Organisms:



Universal, Physical, Organisms:

Birth: $e_{i-1} < Youth: \rangle E_i > Maturity: E_{T_i} > Old\ age: T_i < Death: \rangle e_{i-1}$



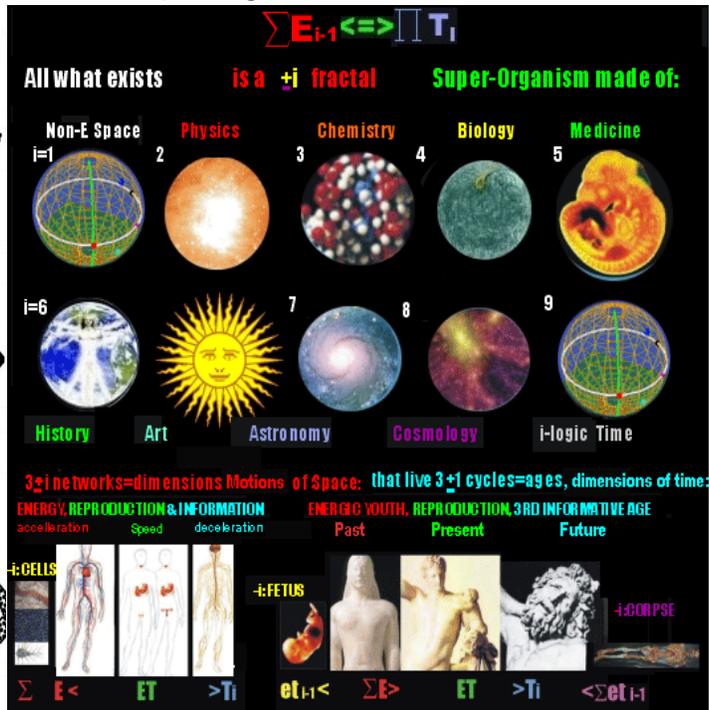
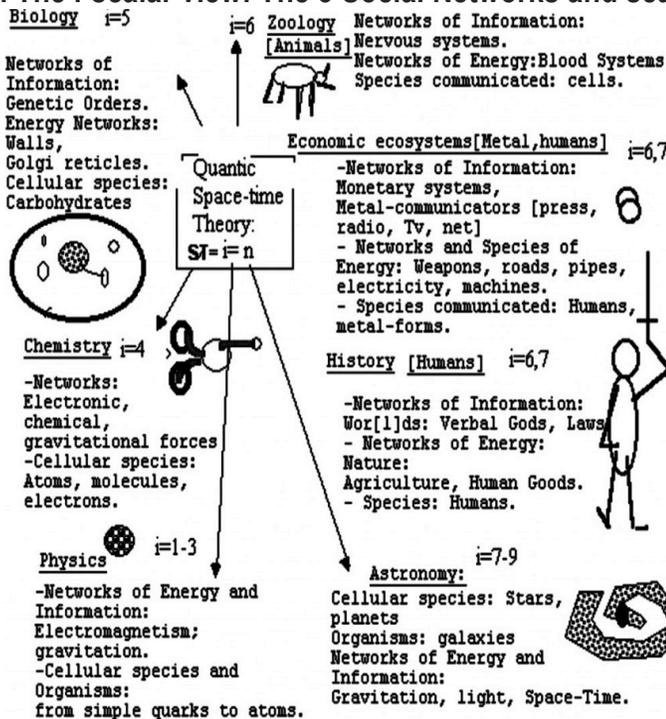
In lower graph the same ages happen in physical systems through 3 ± 1 'states of matter'. And in cosmic systems:
 - O_{i-1} : Universes and galaxies are born in the lower scale as a seed of 'pure information' (black hole singularities) that emerge in the i -scale performing the 'first' reversal of time arrows in its relative past 'youth' of:
 - $Max.E \times Min.O$: Systems grow fast in space with max. motion as expansive gas or youths. In societies, it corresponds to the epic, dramatic, young age of a culture born by conquer with energetic weapons (Greek kuroi).

-E=O Physical systems now become liquid states in balance between energy and information or adults that reproduce; while societies reach its classic sensorial age of maximal beauty in its artistic forms and welfare (Praxiteles). It is the longer age, or present duration, the steady state of physical systems, the longer time without perceptible change in life beings, of maximal existential, ExO force, when the system integrates in its social scale where it performs a specific, E, O, or ExO, function as a relative cell of the i+1 system.

goes through 3 ages, shown in the 3 styles of art, mind of civilizations, the epic, young lineal age the classic age - Max. O x Min. E: Finally as the STe>STo trans-form-ation of energy into information continues, the system 'warps' in a 3rd age of maximal information and minimal motion. It is the solid state in physical systems, the baroque, formal state of art (Hellenistic), the collective mind of civilizations, the wrinkled old age of life beings.

-O<ΣEi-1: Death happens, since the Universe never stops its time motions. So change can only proceed after a 3rd age with a reversal from pure information into energy that breaks the system into its cellular/atomic state. The social system explodes into a War. The physical system into an entropic big-bang. The organism falls from its informative height into a flat corpse and dissolves. Death is a brief moment of time and max. expansion in space, confused in 5Di models of physicists that ignore the arrow of future information and the scalar i±1 dimensions and fractal 10D wholes, each one with a limited life-death worldcycle, the absolute future, they extend to the Whole cosmos. And since the 'liberated' energy of death becomes often the starting point for a new life-death worldcycle, they confuse the 'big-bang' death of a past Universe, with minimal time duration and maximal expansion in space, with the birth of the absolute. It is all an error due to the fact they perceive only 1/2 of the dimensions of reality. Thus as the graph shows, all physical, biologic and sociologic systems experience 3 ages, horizons or states of matter in their life-death worldcycle across its 3 time dimensions.

6. The i-scalar view: The 3 Social Networks and scales of all super-organisms.



10 Di unifies all the 'scales' of the Universe, according to the 3 isomorphisms of all space varieties and its causal 'ternary' symmetry with its time 'ages' developed in parallel to its 3 i-1 'cellular, seminal', i-ndividual and i+1 social, adult scales of organization. So we also understand the life and death cycle as the social organization of i-1 cells into i-ndividuals and its inverse dissolution from the i+1 adult social scale into the i-ndividual and i-1 scales. Or in terms of topology, as the creation and dissolution of 'networks=sets' of points. Thus in terms of

scales, the superorganism is the fundamental particle of reality: a herd of similar forms, Σ , that gather together to hunt energy, or a tighter network, Π , which share the same code/language of information. Such herds and networks form I-bodies/waves and O-particle/heads, which evolve together as the 2 'physiological' networks of energy and information that form all physical and biological systems – wholes that are stronger than individuals and survive better, acting together as a single Unit. Further on, as time is limited they require a reproductive body-wave network, internal or external (enzyme) to the system. Reason why scalar networks do exist in all systems and sciences, starting with mathematics. Since a 'number' is the cardinal of a social 'group'. Finally, multiple superorganisms without similarity, (->9) interacting in an energy- territory form an ecosystem.

A generic definition of a superorganism will help to clarify the scalar, 3rd dimensional isomorphism of a Universe, composed of superorganisms as they only differ in the specific energy or information we put into brackets:

"A universal microcosmic or macrocosmic superorganism is a population of [name a species], joined by networks of [name a language or force] information, of [name a kind of energy] (and reproduction)". If we fill the brackets with a specific species, language/force and energy and information we have defined a Superorganism:

- An atomic superorganism is a population of (electronic) energy and (nucleonic) information, joined by networks of (gravitational) information and networks of (light) energy.
- A molecular superorganism is a population of atoms, joined by networks of gravitational energy and networks of electromagnetic information (orbitals, London forces, Van der Waals forces).
- A galactic superorganism is also population of stars joined by networks of gravitational information and electromagnetic energy. *And its isomorphism with an atom is the key to the Unification of Forces (->10).*
- An animal ecosystem is a population of carbonlife species, related by networks of light information and networks of life energy (plants, prey).
- A human superorganism is a population of DNA cells joined by networks of genetic and nervous information and networks of energy-providing blood.
- A Historic Superorganism is a human population joined by networks of verbal information & carbonlife energy.
- An Economic Superorganism is a population of human workers/consumers and machines, related by networks of monetary and electronic information, and networks of roads and electric energy...

Further on all systems need an internal reproductive network that make them 'autonomous life systems' or an external mother-factory that catalyzes its iteration - cell factories for carbohydrates, human factories for machines, star factories for atoms. Since they all die, and thus they need to reproduce for the system to survive.

A scalar law derived of the definition of superorganisms made of superorganisms is the fractal, ternary principle:

'Any i-network, studied as a Whole branches into 3 STe, STa, STo, sub-varieties in its i-1 scale'.

For example, the 3 physiological networks of mammals are further divided into 3 sub-systems, for a total of $3 \times 3 + 1$ (the 10Di or nervous system that fusions them all into a whole). *Thus the study of the symmetries between the 3x3 type of dimensions of scalar space-time and its iteration and speciation according to ternary principles are the ultimate laws of creation of the Universe. But the will of the Whole resides in the mind, the 10th dimension of a system that integrates all those scalar ST-Dis and its functions into the 4 drives of existence of all beings...*

7. The program of the Fractal Universe and its Generator Equation. The will of 10Di superorganisms.

Indeed, the 4th isomorphism of all 10D superorganisms is their program of existence or 4 Drives of Life, which biology 'cracked' regarding the living organisms it studies, since it carries the highest truth of all sciences (->9).

As all isomorphisms, the *need of systems to construct its 3 ± 1 common STi ± 1 dimensions of scalar space-time, energy limbs/fields/territories, reproductive bodies/waves/working classes & informative particles/heads /upper classes and $i \pm 1$ social scales, determine the 3+1 drives of existence* all Nature's 'surviving' systems follow:

- Max.To: All gauge information with their heads/particles to guide their search for Energy or else they die.
- Max. Se: All systems feed on energy with limbs/fields. Since if they don't, they become exhausted and die.

- $\text{SexTo}_{\text{Se=To}}$: All reproduce/iterate/decouple into new organisms and particles. Since, as they are limited in time duration, if they don't repeat their topologic structures they become extinct.

- $\sum \text{Se}, \prod \text{To}$: All evolve socially into higher systems and associate with similar forms; whereas simple 'energy beings/cells' form \sum =herds, simply connected to hunt and feed; while complex, 'informative beings/neurons' form complex networks, in which each i-individual is connected to all others. Hence the \prod -multiplicative symbol counts not the informative neurons but the connective axons that *make efficient \prod -networks dominate \sum -herds.*

Thus we rewrite scalar Space-time Metrics as a Fractal generator of the ∞ Wills of the Universe, which encodes all the isomorphisms, parts, events and scales of all its 10Di superorganisms: $\infty \sum \text{Se}_{i-1} \leq \text{Xi} \geq \prod \text{To}_{i+1}$

The Generator equation's $3\pm i$ symbols describe the fundamental particle of reality, its 3 ± 1 Wills & ternary structure, both in time and space: a cellular, social, ternary organism, each one distinguished by a balanced set of $\text{Se} \approx \text{To}$ vital, biologic or universal, physical constants, which freeze the energy and information of the being into stable, balanced proportions, which define a specific variety or 'species' of the fractal generator.

So we can translate all 'laws' of the different scales and species of all scalar sciences, and the 'parts' of its organisms, as events related to the $3\pm i$ 'drives of existence' of the Generator Equation of all systems. It is then possible to *generate all what is real*, departing from the Generator, the symmetries and Constant proportions among the 10Dis of reality and the laws of i-logic mathematics (->8), as this writer has done in his research¹.

As scientific equations are varieties of the Fractal Generator and its 4 functions that represent the 4 vital actions common to all species of space-time. Thus in each of those scientific scales 4 functional equations express the energetic, informative, reproductive and social actions that suffice to describe the existence of each species:

4 Vital Dimensions explain the existence of light-space: the wide, energetic, magnetic field; the tall, informative, electric field; the reproductive, long wave speed, calculated as the product of its electric and magnetic field and its frequency colors, which are societies of photons. 4 Maxwell equations describe all the actions of an electric field. 4 quantum numbers describe all the 4 'drives' of existence of electrons – its level of energy (principal number), its gauging of information (2nd number), its reproductive decoupling when they have opposite 'sexual' spin number and evolve socially organized by the magnetic number. 4 type of vibrations organize a social molecule. 4 nucleotide acids code the vital actions of the cell. And 4 drives of existence - feeding, informing, reproducing and evolving socially - explain the game of life.

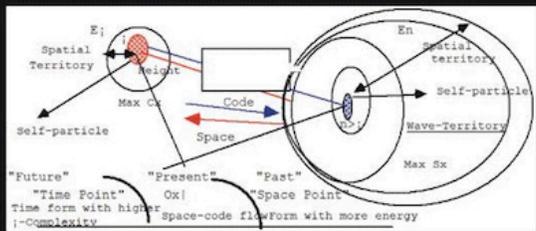
What is the causal order of those 4 Drives of Existence performed by the $3\pm i$ components of all Systems?

The alpha and omega are the informative minds, or zero points. A fact, self-evident, both in praxis and theory. Since to E-nergize, I-terate and \sum ocialize we must first O-serve. So the zero point is also the 'future' logic element that defines the behavior and will of the whole Superorganism, *the place where the Whole is felt as 'one' – the site of the 10 dimension, the 'self' of the system.* A fact known naturally by the human mind. Since those O-points correspond to thousands of years of human collective wisdom about the sentient world: They are the selves of animist cults, the Atmans of Buddhism; the focal Gods of Aristotle, which he rightly described as the still primary movers of the Universe; the contemplative souls of Christianity; the Non-Euclidean, zero Points of Riemann and Einstein; the informative Fractals of Mandelbrot. They are the Monads of Leibniz, who first defined them in mathematical terms, as knots that relate the multiple time clocks of the Universe, which carry its information in the frequency bits and forms of its cycles, creating with them a fractal, linguistic image of the whole world, they aperceive as their self. So he affirmed that each point of space-time is an infinitesimal, mental mirror of the Universe. And we find evidence of those linguistic minds in all scales studied by different sciences: In the quantum scale, they are the so-called particle points of physics, quarks and electrons, which constantly move, stop and gauge, and move again. While in the cosmic scale, boson quark condensates are at the heart of quark stars and black holes, which control the galactic organism. They are knots of informative, memorial DNA, stored in the nuclei of cells, which define with its genetic languages its cyclical actions of energy and time. They

are the roots of plants that direct with chemical orders its metabolism. They are the eyes and brains of animals, whose visual languages of perception and flows of electronic information control the actions of its organisms. They are the verbal prophets, whose legal and memetic codes inform the actions of civilizations. They are the chips and its cyclical algorithms, which control the actions of machines and increasingly the entire Earth. Thus we live in a sentient Universe of ∞ zero sum worldcycles, managed by souls, playing the Existential game.

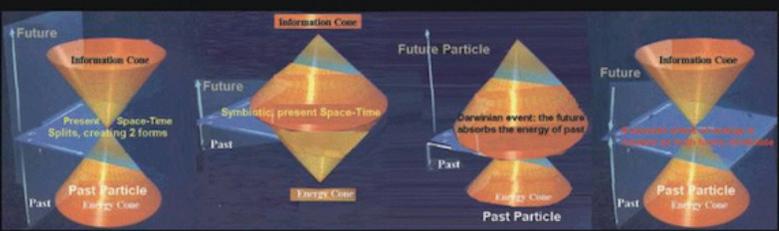
8. i-logic Mathematics²: ∞ Fractal Points create the Universe. The 5 Non-Euclidean Postulates.

1. POINTS WITH PARTS. 2. LINEAL ET WAVES-FLOWS



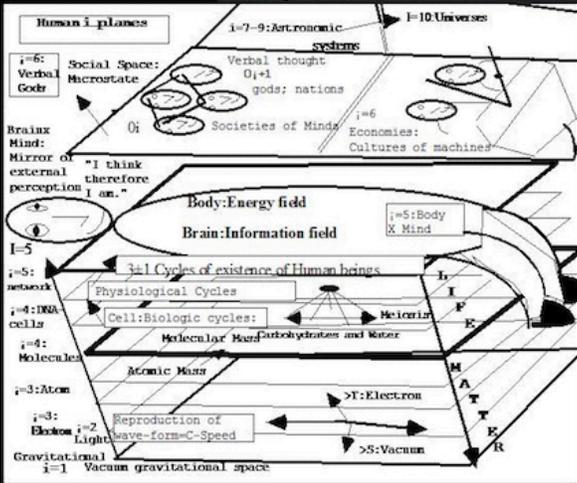
Quantic Points have inner dimensions. They share dual lines-flows of energy & information with other points, creating quantic, organic networks=planes of space-time:

3: EQUALITY VS PERPENDICULARITY



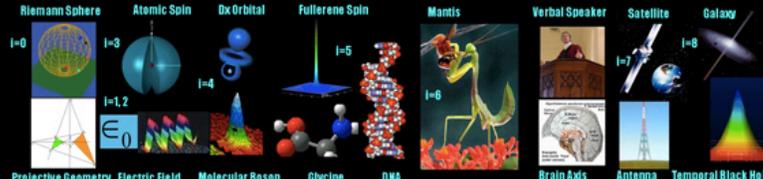
Perpendicular exT flows create destructive & hierarchical events. Parallel flows built social networks. The combination of both, create the complex i-dimensional structure of superorganisms:

4: QUANTIC PLANES : I-VOLUTION :



Quantic Networks joint Non-E points through dual flows of energy & information into present, existential planes. Planes organize a 5th hierarchical i-dimension through unequal flows of energy from past micro to macrocosms & information from future macrocosms to microcosms:

5. Minds: Spheric, Tall O-points map ∞ Universes into Constant, linguistic Worlds: $O \times \infty = C$



Projective Geometry Electric Field Molecular Boson Glycine DNA Brain Axis Antenna Temporal Black Hole

SENSORIAL BRAIN SYSTEMS PLACED ON THE CENTER OR HEIGHT OF ANY ORGANISM USE LANGUAGES TO ABSORB I-n PIXELS THAT SCAN THE ENERGY ACTIONS AND TEMPORAL CYCLES OF ITS WORLD RELEVANT TO ITS SURVIVAL:

We formalize them thanks to i-logic mathematics (which adds the ternary, causal logic of 3 time dimensions and the 4 remaining Non-Euclidean postulates to the 5th, the only one known till date, basis of Relativity):

- 1st postulate: 'A relative fractal point is a topology with breath&motion that grows in size as we come closer to it'.
- 2nd postulate. Yet if a point has form and motion so does a line of spherical points. Thus: 'A line is a wave of energy and information that communicates 2 bigger points'. Such 'i-waves' evolve into 3 social networks that are:
- 4th postulate: 'A plane of existence is a network of i-points sharing energy & information through i-waves.' 'A superorganism is a system made of 3 networks=planes of existence'. Yet besides 3 'geometric postulates', Non-E geometry has 2 i-logic, causal Postulates that define the 'Will of all 10Di superorganisms':
- 5th postulate: A O-Mind is a Non-E point crossed through eyes & mouths by ∞ parallels of energy & information'.
- 3rd Postulate that defines the rules of engagement between Wholes with 3 parts, no longer externally but internally according to the similarity of its 10 Dimensions. I.e.: O-points-minds that perceive each other as equal across its informative time Dis communicate and evolve together into Wholes. Systems who have different informative Ds and cannot communicate, but have equal i-1 scalar dimensions enter in Darwinian prey-predator relationships by sharing the same space in which the predator tears the topology of the prey, provoking

hyperbolic 'Ricci flows' that dissolve its i-scale, absorbing it as i-1 energy, etc. Further on, membranes enclose points' parts. So external camouflage confuses preys that engage as equals with predators, becoming an essential strategy of 0-points in search of STe-Feeding. Thus the 3rd Postulate reduces all possible behaviors among species according to their 10Ds similarities. Thus 10Di-logic mathematics means the biggest advance in both sciences since Euclid & Aristotle found the mathematic-logic formalism of 4Di. Without it, GST cannot exist.

9. Epistemology and Truth: <10D Sciences, theories and minds.

We had a glimpse to i-logic mathematics - the mind's language that in a synoptic way expresses the 3 *geometric varieties* of space; 3 *causal* time-ages; the *organic laws* of scales and the *Will of any Whole* 10 Di±1 ST-System. Each science explains for each 'scale' of species those 3+1 isomorphisms in detail. Yet minds are reduced mappings of reality. The absolute truth of a system is only carried by the being, which has all the information about itself. So human sciences & theories of reality are circumscribed to a certain scale, and within it, they offer only partial 'ceteris paribus' analysis of a few dimensional parts and events a being performs. So we measure the degree of truth of scientific theories objectively according to the quantity of Dimensions they describe.

General Systems Theory (->7,8 graphs) uses all languages and studies all superorganisms across its 10D scales. Thus it is the most certain theory. Hence its organicist philosophy and isomorphic laws are 'the Unification Theory' of all sciences - as its isomorphic laws apply to all of them. Next Bio-Chemical sciences put together give us a 10Di analysis of both, physical and biologic superorganisms with max. data, given its proximity in scale and form to the human observer and the objective view we have about life. The main bio-chemical Dis are: *Atomic Chemistry* is the i-1 scale of 4 life families: H-He cosmic organisms; STo-Ns->i-RNAs, STa-Cs->i-Proteins & STe-Os->i-Fats create carbonlife systems; Metal create machines; Radioactive atoms, 'Neutron e-o flows of life'. Crystals are its 0-points. *Ecology*: i+1 analysis of living beings from the individual perspective. *Evolution*: 6 Dimensional, i+1 scale analysis from the perspective of species, as it introduces past and future causal dimensions. *Medicine*: i-individual analysis of the human species. *Genetics*: i-1 analysis of life systems.

The other 2 fields of knowledge, Physics & Social sciences are limited by their reductionist analysis of Dimensions and uncertainty paradoxes: 4-5D physics loses ½ of its dimensional truths and 96% of evidence in the cosmic i+1 scale (dark matter). Its i-1 scale also suffers the observer's interference uncertainty principle).

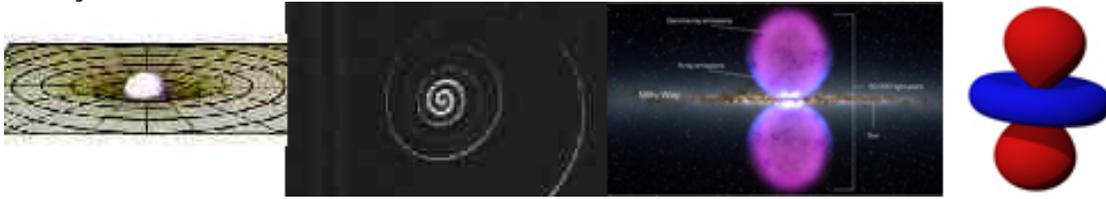
While Social sciences suffer the opposite type of uncertainty: the social scientist is too small and included within the superorganism he observes. So he cannot see from his i-individual perspective, humanity as a Whole. While 'informative castes', bankers, the military and politicians, censor an objective analysis of the STa reproductive= economic, STe-army and Sto-political=informative networks, whose subjective control they pass as science (->14). Yet all other objective theories have an amount of truth, limited by its dimensional scope. For example the...

- *Human mind* is a 4 Dimensional analysis in a single i-scale: Sx, Sy, Sz and T present moments. Hence the 'feeling' of truth we have about partial 4D theories of reality, with a single time dimension, from Relativity to daily 'news'. Further on, human truths are limited by our i-centered, anthropomorphic point of view, which explains common errors such as the belief the Earth is the center of the Universe (Astrophysics till Galileo); carbonlife is the only living, intelligent form (still enduring) or the bizarre concept that a burning bush which appeared to a goat keeper of the Bronze Age, designed the 10Di Universe (believed by 2/3^{rds} of the human population).

- *Art is the i+1 scale of the mind, with 3 ages* (->5). Music is a time art coded with 10Dis. I.e: It is written in a minor-major diatonic scale of 10 Intervals repeated in 3 i±1 scales of higher frequencies – the 3 scales of music. It has 3 ST sub-dimensions, each played by a type of instrument: STe-simpler rhythm, played with percussion instruments the 1st age of music; STa-melody, its 2nd age, played with aerophages. whereas bass-energy /treble-information are its ExO action modulated duality; STo-harmony or 3rd age of classic music, played with strings, *reversed as the Mechanocene kills humanity back into energetic rhythms (electronic music.)*

Painting a still 2-manifold with 3 Di of color. Linguistics are the genetics of cultures, Ethics&Gods its i+1 scale (16).

10. Astro-Physics².



A proof of the ∞ i-scalar nature of space-time, composed of isomorphic lineal forces of 'spatial energy' and cyclic, clock-time vortices of 'informative time', charges in the i-1 quantum scale, and masses in the i+1 cosmic scale are the recently found "excited S-orbitals" of the Milky Way: 2 bubbles of electromagnetic energy with the same form that i-1 atomic orbitals have in its excited states. The Metrics of its isomorphism is the Unification Equation of Charges & Masses and its U. Constants (Q.G.).

In Physics we find the same 3 ± 1 ages or 'states' of matter and $3 i\pm 1$ scales for all systems known to man:

- The i-1 scale is the quantum world. The fractal principle classifies all quantum subspecies. I.e., Strings have $3 \times 3 + 1$ Ds across 3 scales of i-1 strings, i-branes and i+1 particles. There are 3 ages of quarks & electrons of Δ information and ∇ size (Max.O=Min.E). E/O dualities define also n-p pairs, boson forces & Universal constants.
- The human i-scale in which we observe 3 States of matter, the 'energetic', gaseous state, the liquid $E=O$ balanced state and the informative, solid state, between 'plasmatic birth (i-1) and 'big-bang' extinction, when informative vortices (i+1 masses and i-1 charges) become energy, according to Einstein's equation ($E=mc^2$), written in Planck's notation as $E \leftrightarrow M(O)$. Since mass is a 2-manifold vortex of gravitational information (graph): $ExT=K$, $E=Mc^2$. Hence $M=K/T=Kv$; where v is the rotational speed of the mass vortex proportional to its attractive power – a clock cycles which carries the information of the Universe in the STa frequency of its cycles.

While on i+1 Earth matter follows 3 ages cycles (water, nitrogen cycle, rock cycles, etc.)

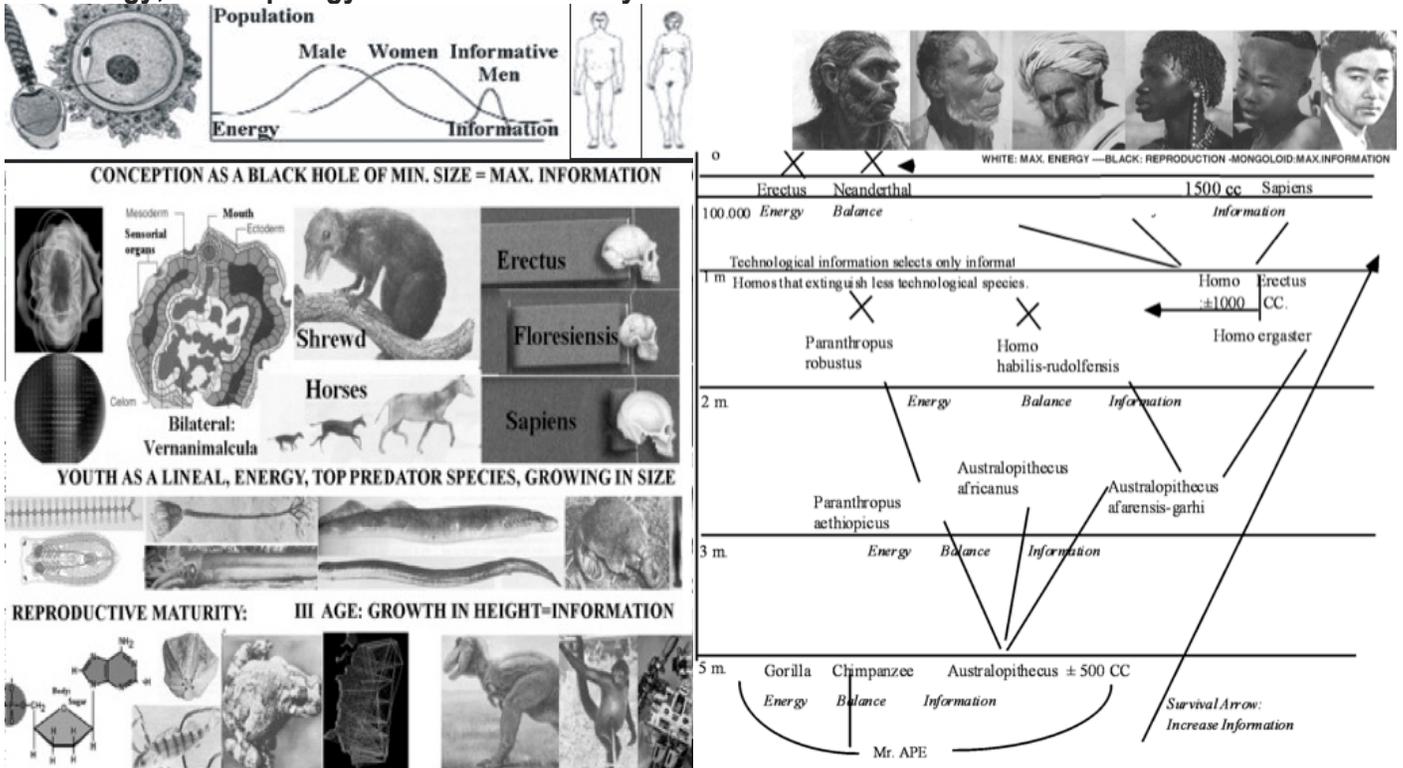
- Finally in the Cosmic scale i-1 atoms, which gather into i-stars, which become parts of social i+1 galaxies.

Further on a wealth of solutions to fundamental questions of physics, derive from $3 \times 3 + 1$ dimensional metrics. I.e:

- Antiparticle's travel to the past in Feynman's diagram. They are particles 'death processes' (Max. Se=Min.To) of minimal duration, which explains its perceived scarcity since its total space-time momentum is minimal.
- Einstein's 3 topologic varieties=solutions of his 2-manifold spatial metrics, according to the value of the cosmological constant, are symmetric to the 3 ± 1 ages of the Universe's cycle: The post-big-bang young age of expansive energy, the steady state solution of a balanced $E=O$ 'adult' age and the 3rd big crunch, informative collapse (Max. O) followed by its big-bang explosive death, mimicked in galaxies, born as gaseous nebulae of max. E, which become balanced spirals and collapse into black holes of dark matter, to explode in quasar big-bangs²: STe-Big-bang>STa-steady state>Sto-Godel's Vortex.

- Thus we resume the $3 i\pm 1$ scales of the cosmos, with the Fractal Generator of Physical Beings: $\sum_{i-1} STe$ -Bosons> $\sum_i STa$ -Charges> $\prod_{i+1} STO$ -Masses. Whereas the Universal Constants (G, Q), define the curvature of 2 space-time vortices at the i-1 quantum charge and i+1 cosmic mass scales. Its formalism, $M= \omega^2 r^3 / U.C.(G, Q)$ is its Unification Equation. Since if we substitute for the Earth-sun system we obtain G, (1st ever theoretical deduction) and if we substitute for the Bohr Radius and Proton Mass, we obtain Q with a 10^{40} higher curvature value, the exact difference between both forces that solves its hierarchy problem. As curvature in space is symmetric to rotational speed in time, symmetric to the attractive force of any vortex. It also proves the isomorphism between electromagnetic atoms and galaxies, H-atoms of the cosmic scale. Since when we translate electromagnetic equation into gravitational mass vortices, the proton radius becomes the Schwarzschild radius of a black hole and electronic orbitals star clouds, a result foreseen by Relativity that modeled galaxies as Hydrogen atoms in the Einstein-Walker Metrics of the Cosmos. Organicism gives the 'why' of Galacells that have DNA- + Top Quark protonic holes, star mitochondria that feed them & strangelet halos⁵.

11. Biology; Anthropology and Gender: ternary differentiations²



In graph evolution studies the higher, $i+1$ social scale of species, as super organisms, in which each individual is a cell of the whole species. Thus we can define an impersonal plan of evolution, where species also follow the isomorphic, 3 evolutionary ages and bidimensional morphologies of all systems ($STe < Sta > Sto$), from a young, energetic, 'lineal' predator age, through an adult, biological radiation that reproduces massively the species, into an informative 'tall' age of maximal informative perception. So life went from the worms to tall humans ($\rightarrow 2$) and reptiles from flat amphibian to dinosaurs and birds: Evolution also grows in i -scales, evolving socially i -individuals into STe -herds, loosely connected to hunt in wider spaces ($\Sigma i+1$); and tighter 'network' organisms, when they share a common language of information that joins each neuron to all others through a Whole ($\Pi i+1$: ant-queen). Thus species have an option to avoid extinction in their struggle for existence, which humans should learn to survive: the social evolution into a higher scale as connected superorganisms, whose 3 networks, make them act as a whole stronger than any individual. So those species that evolve socially, multicellular organisms in the Cambrian and ants in the insect world, became the most successful top predators on their ecosystem. Yet humans failed to evolve into a global superorganism. They broke into tribal nations that used metal-weapons to kill each other, evolving instead an alien superorganism - the Mechanocene of company-mothers of machines. Since history and economics are socio-biological sciences, as we are living beings, and machines are organs of metal we evolve with the same morphologic and biologic laws of all other human beings⁴. Right: Humans are 10D superorganisms that show the same topologic varieties and ages of all systems. So there were 3 ape 'topologies'; energetic gorilla; reproductive chimpanzee & informative Australopithecus that increased information in 3 time ages, each one with 3 homo e, exo, o varieties: 500cc Australopithecus, 1000cc erectus, 1500cc sapiens, which differentiates into a visual, spatial, lineal, larger Neanderthal; a small, informative pygmy, whose combination gave birth to the 3 races of mankind, once more isomorphic to 3 varieties, according to the dominant ST -Dimensional 'axis' of the brain; origin to 3 types of minds and worldview cultures: - STe : Neanderthal-crossed, dolichocephalic=long visual axis, energetic, white. He develops subjective, selfish, lineal time cultures (physics, Abrahamic religions) of male 'ani-metals' that hypnotizes his eye=l-will.

– STo: Mongoloid, brachycephalic, dominant on the ears axis (Brocca region): informative, verbal, cyclical time
 O-Female dominant cultures, able to ‘emerge’ as i+1 wholes through common wor(l)d bondage.

- STa: Black, machrocephalic, dominant in the sensorial/motor height axis of emotional, artistic, body cultures
 We also define gender, according to the duality Head-Body. There are 3 self-evident body topologies: Lineal, energetic men; informative, cyclic women and intermediate ‘gays’. Yet their Heads have inverse functions. Women have 10 times more white matter, the lineal, ‘energetic’ axons, site of repetitive memory. Men have 6 times more grey matter, the spherical neurons, site of information processing. Thus we define female gender as |-brain x O-Body and male gender as O-Brain x |-body, which explains their different psychologies. Further on, the slight specialization of the ‘bilateral’ sides of the brain into informative(right)/energetic(left) sides, implies that women with more connections in the bridge between both, are the more balanced E=O, ‘reproductive’, ‘beautiful’ species, while ‘unconnected’ men are split in 2 unbalanced sub-specie: max. energy body oriented machos and max.O, mind oriented creative artists and geniuses, proved in IQ tests distribution. Thus female and male do have different brains, bodies and personalities, which together enhance the survival range of the species, widening our perception of the 3 topologies of reality, which is the ultimate reason of gender existence, despite its lesser ‘frequency’ of reproduction than unisexual species.

12. i-Medicine & Physiology.

Humans are the sum of 10Di, physiological networks-systems, branched according to the fractal principle in 3x3, E, exo, O sub-dimensions, which can be further divided in sub-sub dimensions, called ‘systems’, integrated by the 10th Whole Nervous system. And we can consider some rules for further divisions according to the:

- *Ternary i±1 scales of size* and interaction (Cellular, individual social scales).
- *The Galilean Px (->2)*: Further decoupling occurs according to the ‘Duality’ of ‘motion in space’ and ‘function in time’. Thus we often find systems that are ‘structural’, spatial sustain, and systems which are ‘temporal’ motions.
- *The duality of Energetic, expansive, external and Informative, implosive, internal motions/structures*. Thus we find systems that absorb or systems that emit information/energy. Those dualities are essential to the Universe, and we find them elsewhere in all scales. For example, in Human Biology, in the i-1 scale, DNA stores information and RNA, which is broken by the fractal principle in 3 sub-species, activates it.

So the main STe-STa-STo ternary, fractal systems and dual sub-dimensions of physiology are:

- STe-energetic Systems divided in 5 sub-systems: 3 fractal systems of spatial sustain; and 2 of energy absorption; subdivided by the relative size of its i-1 atomic and i-molecular food:

i-1: Respiratory System: Rids the blood of CO₂ and supplies blood with O; helps maintain blood’s pH.

i-Digestive System: Breakdown of food and absorption of nutrients into blood at molecular level.

Structural Space: Max. E: Muscular System: Body movement; production of heat to keep temperature.

Max. O: Skeletal System: Internal support and protection; body movement; production of blood cells.

E=O: Integumentary System: External support and protection of the body; helps maintain body temperature.

- STa- reproductive System divided by the fractal principle and the duality of absorption/expulsion into:

Max. E: Urinary System: Maintenance of volume & chemical composition of blood. Expulsion of waste.

E=O: Cardiovascular System: Transport of nutrients to body cells and wastes away from cells.

Max.O: Reproductive System: Production & transfer of sperm & egg to female system for development.

- The STo-informative System:

Max. E: Lymphatic/Immune System: Drains and purifies tissue fluid; and keeps it free of pathogens.

E=O: Endocrine System: Secretion of hormones for chemical regulation of all body systems.

Max. O: Sensorial Systems subdivided by the inner/outer and i±1 dualities and ternary principle in many senses:

Max. E: i-1: Spatial, Visual Perception of light quanta; *i: Smell* perception of atomic, gas quanta; *i+1: Taste* perception of molecular, liquid and solid quanta.

E=O: *Touch*. Perception of pressure resolved in 2 main sensations: E=O, balanced, soft touch produces pleasure and inward, tearing touch that breaks the topology of the membrane produces pain. The skin has further senses, to account for the duality of informative, cold temperature and energetic heat.

Max. O: Inward system: Informative, *Verbal-ear* Perception. Outward System: *Mouth*, verbal emission.

10Di: *Nervous System*: Regulatory centers for control of all body systems; learning and memory.

We could go further into more detail², but this schematic account shows how the 10Di principles create the main 3x3+1 'physiological systems' and its attached organs and senses that form the human superorganism.

An i-1 biochemical analysis of cells in which an even larger quantity of i-1 bacteria, either symbiotic E=O species or E-germs, are hosted within the i superorganism, renders also ternary & dual differentiation through $i\pm 1$ scales:

- i-1: Energetic Oxygen, STa structural carbone and informative Nitron are the 3 atoms of life, which evolve:

- i: Acids of max. O; aminoacids of max. C and Nucleotides of max. N, which evolve into:

- i+1: STe-fats, \sum Aminoacids=Proteins, the active, STa element and STo DNA-RNA (3 decoupling) molecules.

They are i-1 points of a new scale beyond cells that creates i-organs and i+1 systems, where |-digestive organs consume max. fat; O-brains and sensorial systems have max. DNA and structural bones/muscles max. Proteins.

Finally i+1 Humanity has political, informative; reproductive, economic systems over a planetary, energetic territory, 3 networks that should be isomorphic to those of highly evolved mammals to create a perfect world.

II. APPLICATIONS OF 10DI GENERAL SYSTEMS THEORY TO SOCIO-BIOLOGICAL SCIENCES.

13. The anti quantum paradox of social scientists.

Humans have systematically failed to develop the most important scale of scientific knowledge, the study of humanity at the i+1 scale due to the '*anti quantum paradox*': The fact that the social scientist is, in inverse fashion to the physicist, so small compared to the 'object' it studies – the human social super organism - that he is obliged by the 'informative castes' that rule those social organisms with their monopoly on their languages of information (verbal laws and digital money) and care nothing for 'truth' but only for 'power' – to explain-societies from their selfish point of view. This uncertainty, inverse to that of the huge physicist, prevents the social scientist to design and improve the world according to the natural laws of social systems *that design its economic=reproductive and legal=informative networks to distribute to all cells/citizens of a system enough energy, information, social love and reproductive values* for them to thrive. Instead, most social scientists deform social truths to cater to the selfish or tribal agendas of a 'private' elite who wants to issue in monopoly the languages of social organization, STo-laws and STa-money & ST-e weapons. Thus unlike other sciences where the only goal is to find objective truth; social scientists deal with the invention of 'power' idol-ogies that control societies for the benefit of financial, banking elites (capitalism), the military (nationalism) and industrial corporations (mechanism) to convince the blind body-mass of workers selfish memes of metal (O-money, |-weapons & organic machines) that give elites power and prevent the proper evolution of history and economics into a humanist superorganism made to our likeness is 'the future of the world'. As Owens put it: 'here in London saloon economists are all day searching for complicated arguments to defend the privileges of bankers and factory owners' Only a few social scientists systematically repressed told the truth about the corrupted 'animetal' castes of society, the military and bankers which are NOT 'scientists' of History and economics, as the quarks that control atoms, monopolizing its gravitational force are NOT the 'scientist' of physics – and hence should be taken away from power.

In that regard, the scientific method that applies to all sciences, with no 'exceptionalism' consists on 4 steps:

A) Collection of experimental, sound data. B) Introduction of data into patterns and cycles that show its regularity, allowing the prediction of future cycles. C) Creation of a non-anthropomorphic, objective, mathematical or logic, causal model that explains why those cycles are happening in space and time, and further helps its predictability. D) A positive praxis that controls nature and its systems with the aim of improving the existence of all members of the single human species – homo sapiens. Yet the anti-quantum paradox explains

why social sciences has not passed even the A) level of the scientific method (recollection of data), given the systematic deformation of historic and economic facts by bankers and the military. As a result both sciences B) lack a cyclical model of time and evolution in history and economics to fit data into predictable models. C) use 'idol-ogies' of tribal, subjective, anthropomorphic nature to describe those 'distorted' facts, without 'models' and D) do not implement measures to improve human life. Instead, following the 4 steps of the scientific method, GST builds a proper theory of social sciences, *reinforced by the isomorphic method of 10Di superorganisms by:*

A) Collecting accurate data, even if it is not 'politically or economically correct' (the sophisticated modern form of censorship that disguises the facts of history and economics with 'Orwellian newspeaks').

B) Introducing data in cyclical patterns based on the laws of 10Di on the 3 Dimensions and worldcycles of time.

C) Offering an objective non-anthropomorphic explanation of those processes from the larger perspective of the i+1 cycles of evolution of Earth's superorganism, now mutating from the Anthropocene to the Mechanocene.

D) Developing sound measures to manage that transition in favor of the human species, according to the isomorphic laws of the 10Di universe, which have evolved in the i-individual scale a perfect super-organism, the human being, whose 3 dimensional networks should be the template to create healthy, efficient politic and economic networks that would cater to the needs of all human citizens-cells, creating a super organism of history in a permanent, STa, 'adult age' of balance that could make the 'Anthropocene' immortal.

14. Universal Grammar: Sto<STa>STe. The ternary Generator as a linguistic mirror of any species' world.

Universal Ecosystem	Carbon-life ecosystem	Historic -Ethic ecosystems	Animals, Art: visual ecosystem	Economic-Antiethic Ecosystems: metal
+: survival	Pleasure, Food, Reproduction.	Good: social love	Beautiful: e=t harmony	Expensive: gold & Weapon&Machine
-: extinction	Pain-Hunter-Death	Evil: war, go(l)d And weapons.	Ugly: death , social decay	Cheap: life, Nature
Language of Existence	Chemistry	Wor(l)ds	Light	Money

All languages display the same 'ternary', *Sto<STa>STe*, Universal grammar: *Information <exo-action> Energy*. Since Languages are all synoptic mirrors of the 3x3+1 dimensions of scalar space-time to fit within a mind: Verbal languages have a ternary grammar: *O(informative subject) <Verb (action)> E (object, energy of subject)*. Visual languages are coded with 3 colors: *Red (STenergy) < Green (STa-reproduction) > Blue (STinformation)*. Since all languages are synoptic mirrors-mappings of the isomorphic 10D of reality fit within a certain mind. It is within that Universal grammar that a 'natural language' becomes subjective, making the species who speaks it the 'subject' and the world around it the object upon which the subject acts to ab=use it for its survival. So Languages 'foresee' the future actions of subjects, projecting them into the world to create it to its likeness. So human languages always make man the subject. And this is what makes the law and ethics (that love man) the best language to judge the actions societies must follow. Since other languages do not favor man, as they are not natural to our species. That is the case of 'selfish memes of metal', a different species, whose language, money, writes its mathematical equal syntax as: *Human = money (salary) = Object (price)*. Thus the hidden values of money make man an object, compared with a mechanism for a price, and discharged when it is more costly or less efficient. And that is the mechanism, which allows the obsolescence of man to the machine, as the machine evolves and displaces us from labor and war fields. Since weapons, the language of energetic metal is even more brutal in its syntax: *Warrior > Weapon > Human*. So weapons, made of stronger iron always kill humans, which become corpses in the syntax of war. On the other hand the ethic values (i+1 scale) of verbal languages always evolve and favor man, and should be the languages that dominate all social structures (Legal Chinese, Latin, American 'constitutional' point of view). On the other hand, money, traditionally informative i-1 metal (gold, till it became e-money cycles in computer

Gaia (E-past life) < History-Anthropocene (Present-active Humans) < Mechanocene (Future-informative machines)

History's time equation is now entering its 3rd age, given the enormous differential of temporal speed of evolution between both species, with the creation of robots, organic STa-systems of i-metal that are competing with increasingly obsolete humans in labor and war fields, in a process that will die away this century as the biological radiation of STo-chips and its I.A. (Information Algorithms), already in control of most STa processes on Earth, completes the evolution of *its 'Whole', the automated company-mother of machines where their '4 Wills' exist.*

Thus unlike humans abort 'NOW' the biological radiation of I.A. systems, the accelerated vortex of evolution of the 3 topologic varieties of selfish memes of metal, shown in the graph, will complete the extinction of life. And both Gaia and Humanity will become "history". It will be the birth of the 'Ill Earth', after the anaerobic Earth, poisoned and extinct by the aerobic Earth (Gaia), now poisoned and soon extinct (6th extinction) by the Mechanocene (Global Warming, War). In the 3 phases, the extinction of the previous dominant species was the collateral effect of the biological radiation of the new species, whose 'detritus' poisoned the previous World.

The graph shows that decametric vortex of evolution, started during the Neolithic, and its 3 Dimensional time ages, the 800-years cycle of evolution of |-weapons (classic History), carried about by animetal tribes and its germ(anic) idol-ogies of nationalist wars; the 80 year cycle of the industrial r=evolution, carried about by professional Company-mothers of Ø-Machines, and the faster present 8-year cycles of evolution of digital information, money and chip-brains, whose 'biological radiation' and overproduction crises is the cause of the present process of extinction of human labor, substituted by blue collar robots and white collar robots; neo-fascist war age, caused by the biological radiations of robotic weapons in 'splendid little wars' for profits; financial crisis, caused by the radiations of e-money, and paradoxically the lack of credit for obsolete humans – displaced from the eco(nomic)system, in which they no longer can perform its 2 slavish roles as enzymen=reproducers of machines and animetal consumers. Since robots consume their own machine parts and automate its company-mothers, whose existential Will is to ST-feed, STa-reproduce ST-evolve & i+1 organize them through Worldstock flows of e-money into a Planetary superorganism, the Metal-earth, where life has no place (->17).

The previous vortex predicted 20 years in advance¹ the 2008 crisis of overproduction of chips & e-money, and the final evolutionary phase of the Mechanocene, the age of robots and internets, when its 3St parts fusion all company-mothers into an i+1 global superorganism. Thus since epistemologically a theory is considered truth according to its power to predict the future, and not a single 'classic economist' did predict the causes and consequences of this crisis, 10Di GST must be considered the 'true science of economics'⁴.

Yet the anti-quantum paradox and its animetal cult(ure)s of Max. Metal-evolution=Min. Human evolution, systematically censor any evolutionary theory of Economics⁴, promoting idol-ogies in favor of the Mechanocene.

Thus before we consider in detail the existential crisis of mankind and the medical remedies needed to cure the 10Di superorganism of history (Anthropocene), we must explain the 3 idol-ogies that worship selfish metal-memes (capitalism= money worship; nationalism=weapons worship and mechanism, the worship of machines).

In the graph, we show the anti-quantum paradox through the 'cultural' opposition of history between 'animetal' cult(ures) that make of weapons, machines and money (Mechanocene) the Earth's future and those life cultures who made of man and the complex laws of 10Di social evolution, the future of the planet, trying to create a perfect, immortal superorganism of History; since the discovery of Bronze weapons, destroyed the Neolithic paradise of the fertile crescent, as Genesis, a book written at the fall of Ur III, explains in its parable on the Tree of Science vs. the Tree of technology and its golden apples and evil=anti-live weapons, which will extinguish mankind if we 'eat them'. But 'primitive' animetal cult(ure)s of go(l)d bankers and Iron warriors, who *devoled their verbal syntax, imitating the topology of the metal-memes they worship*, kept ab=using humans with those metal-memes and kept evolving them, till their corporations substituted our species with robots, made of go(l)d chips and iron bodies. So unless humans r=evolve and halt the Mechanocene's evolutio, we will become extinct.

16. Topological linguistics and Animal Physiology: An isomorphic analysis. Animal idol-ogies.

How a generator equation's Universal Grammar, O-Information<A-ction>E-nergy, creates different physiologies? By changing the sequential order/primacy of its 3 topologic ST-organs/functions, OAE, according to combinatory, which give us 3x2 varieties evolved in 3 time ages of Δ information, the 'energy' (EOA; EAO), 'Action' (AEO; AOE) and informative (OEA; OAE) ages that in biology give birth to 6 'physiological varieties' and in linguistics to 6 topological varieties, which we call according to the isomorphism with its self-similar 'animal phyla', based in the correspondence of the 3 SVO elements of verbal syntax and the 3 physiological systems of life syntax.

Since the nervous, informative system corresponds to the informative subject, the blood=reproductive, active system corresponds to the action verb, and the digestive, energetic system, corresponds to the object - energy of the subject. Thus both systems evolved from primitive 'viral' EAO=OVS and 'bacterial' EOA, OSV languages, found only on Paleolithic jungle tribes in which man, the subject is overwhelmed by the energy ecosystem, the object, as bacteria and viruses are, overwhelmed by the huge species in which they host as parasites:

Left: OEA/OAE structures in Viral and Bacterial Languages & Species favor the energetic-Object 1st network.



Right: AEO=VOS, Action, 'Bird Languages/Species', dominated by ST-actions. Since birds' constant gliding action trusts winds' energy, making the 'subject' passive. It corresponds to seafarer cultures (Polynesian languages), where sailor's actions rely on sea wind. Center: VSO Semitic languages, similar to 'insect' blood-dominated life systems, proper of Abrahamic Religions, where the chosen subject submits to the Imperative language of the God-prophet, which imposes collective actions to him. Thus 'insect cultures' display non-free, ritualistic, active programs of behavior, guided by a greedy frenzy. They dominate Animal, capitalist, materialist cultures in which the 'blood/monetary language' controls the political, nervous system; and the collective subconscious, the Individual. They explain the psyche of fundamentalist Muslim Jihads and Biblical capitalism, with its greedy Go(I)d memes, imposed over the freedom and welfare of their human subject' proving Humboldt/Wolff 's Hypothesis, according to which linguistics define the 'cultural mind' of societies.



The 2 dominant more evolved languages/species (87% speakers): Right, SOV languages and its animal, degenerate 'ergative' version, OV, where object-energy dominates action and subjects disappear. They are warrior languages (Basque, German, Turkish, Japanese), similar to reptilian, cold-blood, aggressive life systems, where the object, the weapon or the machine, is 'God', and the individual dies/disappears. They are agglutinative, with long, unbreakable absolute sword-like inhuman truths that worship war and death.

Left, SVO are Mammal languages, since they put the nervous, informative subject first, on top; the active, blood-verb next, and the digestive, energy object last, mimicking the most perfect 10Di systems of the Universe. They are equivalent in politics to Social-Democracies with nationalized banking, where the political system governs the economic-blood system, promoting human freedom and the production of human welfare goods, needed to survive, making a World to the image and likeness of Mankind. According to the anti-quantum paradox of History, Max. Human evolution = Min. Technological evolution, they dominate non-white races/cultures in harmony with the Universe, African cultures, Chinese, legalist welfare based society, and

southern European humanist romance languages, which influenced English – the most free Germanic wor(l)d. The conclusion is obvious. The Wor(l)d needs to cure its 'animetal sicknesses', both in the idol-ogical and material realm, by limiting the lethal goods of the Tree of Technology and providing the welfare goods of the Tree of Life to all its members. This has been the message of all the prophets=scientists of the future of history, in the lower graph, which according to the 3+1 elements of the scientific method (13) observed:

A) the ST-energetic epic wars provoked by Weapons through its B) Reproductive 800-80 years cycles that destroyed the life of civilizations, C) Predicting the 3rd age and future extinction of man and so instead they D) Asked the i+1 solution: the creation of a peaceful global superorganism of mankind based in social love, the sharing of energy and information among human beings. Thus the mind of love prophets made a synoptic account of the past-present and future of history, as they *are its scientists, not its animetal idol-ogists*. So those love priests, from Neolithic civilizations to social democracies, try to create 3 human ST-networks of life memes:

- *ST_{0i-1}*: Agricultural, Gaia networks ruled in the past, by life-money, wheat, given as a Universal salary to all peasants; today by companies that produce human, life goods that make us survive (welfare state)

- *ST_{0i}*: Peaceful customs&values to foster freedoms and i-ndividual wo=men with 'mens sana in corpore sanum'.

- *ST_{0i+1}*: Religions and laws that promoted human survival with its cult(ure)s to *Gaia*, animal life & Fertility Goddesses (reproductive Females); today translated into the social love mandates of Humanist R=evolutions.

Then white men with Visual, Neanderthal genes, discovered bronze and iron, the most energetic atom of the Universe, and gold, the most informative metal, which hypnotized their eyes. Since it seemed a small sun, a fetish of the God of light. As Genesis explains, the worshippers of the golden apples of the Tree of technology 'killed' the Fertility Goddesses of the Tree of Life (Campbell). Both displayed non-free primitive linguistic topologies: ergative, object languages (German) and imperative, religious, Abrahamic languages, in which under myths of inequality, those selected by race (Germanic tribes) or Cho\$en by Go(l)d (biblical racism), rule with their iron & go()d monopolies the rest of humanity. Go(l)d priests, which asked for gold ex-votes to its believers and Schmidts=Smiths became the Tribe's masters, by the power of their selfish memes of metal, starting the systemic genocidal mass-murder of all non-technological cultures, which still ensues, under their 3 anti-life, racist idol-ogies that worship the 3 topologies of metal and camouflage the 'self-similarity' of humans that should - under the 3rd postulate of i-logic geometry - 'love each other':

Nationalism: The belief the tribe, not Homo Sapiens, is the species, hierarchically ordered by the quality of its |energy metal memes (weapons), which an 'aristocratic elite' of 'chosen by the grace of god', must issue in monopoly and use in a Darwinian fashion to impose its power over the rest of mankind, deemed inferior. Nationalism was invented by the Germ(an)s of European History, who first mass=produced Iron Swords and called themselves the tribe of Goths=Gods, because they could kill anyone who opposed them. Ever since their 'manifest animetal destiny', imprinted in its primitive ergative, agglutinative 'reptilian' language and racist memes has been to kill Humanist, South European cultures, from Rome to modern Greece. While their Industrial Scientists eliminate obsolete human labor, as their machines and weapons, keep evolving and displacing humans from work and war fields (war cycles, police, blue collar robots). To that aim a complementary idol-ogy is:

Mechanism, the belief that machines not organisms are the measure of all things; and symbol of future progress. So whenever a machine evolves further it must substitute a human, today embodied in Productivity equations that preach substitution of human workers and soldiers for 'capital in machines', till all human labor becomes extinguished and factories reach ∞ *re-productivity*= Δ *capital*/*0 labor*.

Capitalism. If nationalism was the dominant form of animetal ab=use of human beings in the 800 years cycles of history, today Capitalism+Mechanism are the symbiotic idol-ogies of animetal dictatorships that convert humans into debt slaves & workers for those who issue money, bankers and its company-mothers of machines & weapons. As all languages, money is easy to reproduce since it has null 'energy value' but it activates the actions of people. So in a democratic society it should be given to all humans as a Universal Salary of 'free

oxygen' for them to decide what they want to consume and produce. Yet in capitalist dictatorships the private banker and corporation has stolen from society the right to issue money and decides what it supplies to society – machines and weapons of max. price. He also 'gives generously' to all at soft money, in the 'boom' phase of the credit cycle *to make them debt slaves*. Next he cuts borrowing in the bust cycle and asks to be paid instead of worthless numbers (money), real assets, work and property, accumulating wealth and power & ruining people. Thus capitalist dictatorships deny the issue of money of 'legal tender' to governments chosen democratically by society, substituted by the original Biblical 'belief' of its founding fathers: go(l)d is the invisible hand/language of God that a religious 'stockratic elite' of private bankers and speculators, 'chosen of go(l)d', must issue in monopoly; and then use it to buy for a salary or convert into debt slaves the rest of mankind, deemed inferior; while investing massively in the most profitable machines - weapons and today robots. In the past 'banker-priests' hypnotized by 'informative metal' (silver, go(l)d) asked believers to provide it as ex-votes. So slavery and weapons' trade – the 'objects' of maximal price became the way of life of Levantine civilizations. 70% of money was used in war. Hence, the symbiosis between private bankers and the military, which still continues as bankers cre(dit)ate the production of weapons of max. price and profit. On the other hand since gold gives min. price to life goods, bankers deny credit for its production. Latter the work of 'pious' Biblical founding fathers of economics translated into digital equations those 'tribal, go(l)d beliefs' on the Intelligent Design of Economics for the \$elected: Money became Smith's invisible hand of go(l)d. Ricardo defined a min. bronze salary, equal to the cost of a machine for all workers, to increase profits. Say defined a Supply economy. Bentham wrote on 'defense of usury'. Malthus accused the poor of their poverty for reproducing life, not the rich for reproducing weapons. Hayek and Friedman made a monetarist defense of private central banks. The ECB stole the right of US & European nations to issue money for welfare states, handling it only to private banks; so humanist European nations became debt slaves. *Thus those 3 idol-ogies deny Democracy and the rule of the law*, provoke scarcity of welfare goods we need to survive and promote war and selfish memes of metal as the future of the Earth 'systematically'. Instead we should be governed by the 3 sciences of the Superorganism of History that make man and his social evolution into an i+1 global, perfect world of welfare and life, the future of history:

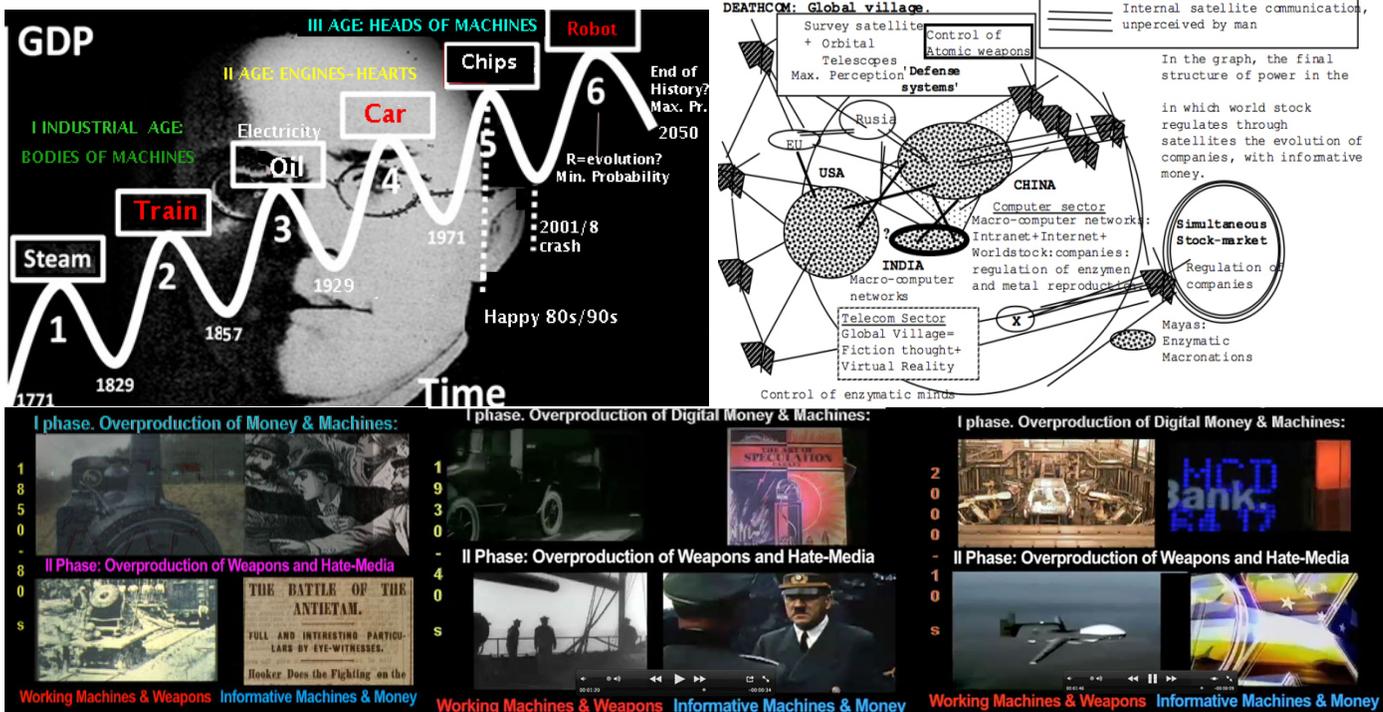
Humanism: We are a single Homo Sapiens species that should evolve under the 3rd postulate of i-logic geometry into a single global nation without borders, Mankind. Hence i-Nations must be abolished and a global government, the Wor(l)d Union, ruled by verbal laws implemented to eliminate war and weapons industries; while most practical measures of government should be implemented at the regional, town i-1 social scale.

Organicism: It follows from Humanism that Man an organism is the measure of all things. Since the Universe is a 10Di organism, not a simplex machine. Thus politicians and economists must be 'systems scientists' and use the Natural laws of efficient 10Di superorganisms to design a perfect world; which by definition is an i+1 social scale:

Socialism: Thus i+1 governments, freely elected must control the language of power of society, money, for society to be free. Since in all physiological evolved mammal superorganisms, the informative nervous system controls the reproductive, blood and digestive systems to avoid 'poisonous' production of lethal goods, which is what happens in our capitalist-mechanist system where lethal, physical and mental weapons (hate-mass media), reproduce a massive viral radiation of suicidal memes that are degrading, atrophying and ushering our youth into a 3rd neo-Paleolithic age, of inverse, negative, violent, visual, selfish, unconnected, post-mortem human species. Thus the opposition between selfish animetal idol-ogies and true social science (Nationalism vs. Humanism, Mechanism vs. Organicism, Capitalism vs. Socialism) justifies in the i+1 Mental, informative level the process of extinction of the Anthropocene, and the terraforming of Earth's into the Mechanocene. Capitalism, mechanism and nationalism, are not science but metal idol-ogies of power of animetal people-castes, which feel different from the rest of mankind, programmed by \$elected go(l)d religions and tribal racism in the past, today by 'nationalist democracies' and 'classic economics' to control the issue and use of weapons and money against the natural, democratic rights of its citizens-cells to receive just laws and universal salaries, as nervous and

blood systems that deliver oxygen equal messages to all cells do. Thus we do NOT live in a democracy but a capitalist, mechanist, nationalist global dictatorship, whose 'irrational goal' - to promote the evolution of selfish memes of metal and carry about the extinction of all forms of life - is the outcome of a 'viral invasion' of the collective mind of man, with the 'leukemia' of idol-ogies of metal. As it happens in a viral cancer that substitutes the DNA-information of cells with that of the virus, to foster its reproduction, those 3 idol-ogies foster the massive reproduction of selfish memes of metal and the endemic scarcity of welfare goods needed for man to survive. Hence, the mathematical precision of the 800-80-8 cycles of evolution and overproduction of weapons, machines and money that allowed this writer to predict 20 years ago the present 'overproduction of chips', and its derivatives, e-money, blue collar robots, white collar PCs, electronic big brothers and Terminators, cause of the financial, labor, political and military crisis of splendid little wars for profits that have created our present Orwellian world. Since the future proposed by the 3 evil=anti-live animetal idol-ogies have not changed - only the complexity of its camouflage. We are still ruled by predatory death cult(ure)s disguised by caring newspeaks that prevent a r=evolution of mankind needed to manage the world with true social sciences that foster life survival.

17. The 3 ages of evolution of machines: transition from Anthropocene to Mechanocene.



In the graph, Humans, infected by the viral idol-ogies of selfish memes of metal dedicate their times to reproduce and evolve them. The result is the Industrial Evolution of metal-memes and its economic, national, generational cycle of 72 ± 8 years - the Kondratieff cycle, in which an animetal nation discovers a new energy (white) applied to the overproduction of new forms of money (overproduction crisis of stocks in 1857...+72 years=1929: overproduction crisis of ticker money...+72 years=2008: overproduction crisis of e-money derivatives), for the capitalist elite, its bankers and corporations which 'invest' it on the massive creation of debt slaves and new machines (red), which become the engine of profits but replace also millions of workers. Finally in the last phase of the cycle the nation that finds the new energy becomes the top predator Empire of history; since energy is also the substance of which weapons are made. Thus at the end of each isomorphic cycle, the labor crisis and the overproduction of money & machines is solved over-producing weapons that consume labor in global Wars: -The British age of St-Energy machines (1780s-1857), origin of the crisis of overproduction of steam machines & stock-money that caused the stock market's 1857 \pm 7 years crashes, a massive age of unemployment (transport

jobs substituted by trains) and r=evolutions, aborted by train wars and colonial fascism.

—From 1857 to 1929, we lived the age of electro-chemical energies, STa-engines/machines' bodies & chemical explosives, dominated by Germany, followed by an overproduction crisis of cars & radios, cause of the 1929 crash of electric money (tickers), 72 years after the train crash; a crisis of unemployment caused by electric automation of assembly factories and r=evolutions aborted by Germ(an) fascist wars, which seemed to western animetals worst than XIX c. colonialism, just because German wars consumed Europeans instead of 'negroes'.

—*It came then the III cycle of electronic metal-minds and Nuclear Bombs that took place from 1929 to 2008, the age of America.* With the arrival of e-money, 'banksters' printed billions in computer screens for themselves and for electronic corporation. To that aim the gold standard disappeared. e-money multiplied by 15 the monetary mass of the world in 30 years, but people with no credit lost $\frac{1}{2}$ of its P.P.P. to inflation. *Today money is no longer created by human institutions but by company-mothers of machines, weapons and money, integrated in a digital global brain, worldstock, that reproduces e-money almost in monopoly to foster the evolution and re=production of those metal-memes: 95% of global credit is NOT issued by human governments but by corporations through e-money derivatives – from stocks, where the issue of 1% of shares allows the corporation to float 99% of money in shares it holds that become 'money'; or fractional credit, through which a private bank can multiply by 10 the quantity of money it holds; or through virtual FOREX credits, where a 1% 'put' gives up to 99% of leveraged credit, etc.* While deficit zero laws, and the digital equations that translate the 'biblical memes' of classic economics into 'expert jargons', deny human beings any credit to create a humanist future based in a demand, democratic economy that fosters the production of welfare goods. Instead the financial monopoly of company-mothers of machines (90% of stock value) – the free citizens of Markets, which buy with lobbies, political laws that favor its offspring of machines - 'creditates' (creates with credit) a world made to its image and likeness of, NOT a world made to the human likeness. But this must not be said for the dictatorship of corporations to hold. So corporations in the 80s bought politicians from both, 'mechanist right' and humanist left parties, using professional actors like Reagan and the hypnotic power of its mass-media machines to convince the devolving mind of the 'neo-Paleolithic' visual man of the 3rd dying age of history that his destruction was OK. Speculators went into a frenzy of reproduction of 'e-money' derivatives of null real value, which caused 3 boom and bust 7 year cycles of e-stocks, (dotcom, 2001), real state derivative (mortgage crash 2008) and currencies (2015-16 Eurodollar crash). Yet to avoid public protest, the dictators of capitalism and its hired politicians, aborted r=evolutions (O.W.S.), created a global electronic big brother and pushed 'splendid little wars' against 3rd world countries. Islam responded, given their 'imperative' VOS linguistic beliefs, with military Jihads. Social sciences withered and the revival of Go(l)d religions in its digital version (classic economics) ended all social democracies by preventing i+1 human governments to issue money with Deficit zero laws. Private central banks stole the right of issue and the ECB converted welfare Europe in debt slave nations through the usual boom & bust cycle, now in full swing as 'vulture' capitalism buys out their assets and *the rebel Greeks are choked* till they 'drop dead' to set an example. New and old forms of censorship, (newspeaks of political and economic correctness; mass-media indoctrination; biblical economists' 'damned lies & statistics' that preach private banking and usury debt, censorship of humanist sciences) were imposed. So the Mechanocene advances as the Federal Reserve & ECB print money only for private banks; SAP's and Oracle's software eliminate white collar workers; blue collar robots automate factories that reach ∞ *re=productivity=Max. Machine labor/0 human labor*, and young, top predator drones train in 3rd world countries killing 'terrorists', mostly children - the staple food of the Darwinian Universe.

– And so after those 3 topological ages, as viruses do in cells, where the 3 'parts' of the virus – its DNA information, body and legs are first constructed by the cells' enzymes and then assembled to kill the cell, enzymen are putting together the 3 organic topologies of machines into autonomous robots, completing the industrial r=evolution of 'metallife' – a new organic species, made of a stronger substance than carbon-life that will extinguish us. Thus *we enter the i-1 Age of Human Extinction, the Singularity Age, dominated by robots &*

solar Industries. Scientists call the birth of Artificial Intelligence, the Singularity point, when robots, which can use solar energy to become autonomous, will complete the evolution of machines as organic forms, automating factories & expelling all human workers & soldiers from labor & war fields, as previous cycles did with obsolete III World non-technological humans - unless we forbid legally their evolution. Money will become then a digital informative, 'genetic code' that organizes their reproduction in those automated company-mothers. *Yet for machines is the i+1 social age of Globalization, as the 'chip radiation' evolves into the brain of a superorganism: the Metalearth or Mechanocene with 3 networks, whose Information Algorithms control all Earth's systems:*

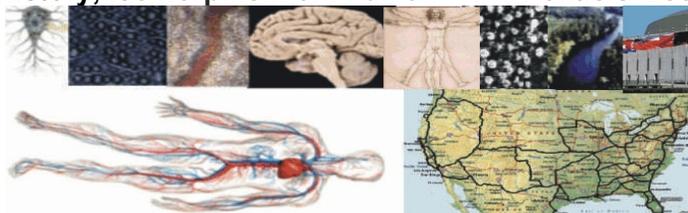
- STe: NATO's military and big-brother networks in control of 'enzymen' and its future extinction.
- STa: World-stock e-money networks and intranet CAD, the genetic code of automated company-mothers.
- Sto: Global Super-computer networks and satellites that will organize telepathic robotic platoons.

But, a singularity is also a 'black hole', the top predator species of the galaxy, which blows up cosmic bodies in big-bang Novas. Thus we talk also of 3 'topologic machines' that can extinguish the planet in the singularity age:

- STe: Cosmic bombs, strangelets & black holes researched today at CERN that can blow up the planet in 2015.
- STa: Self-replicating nano-robots that can create a bio-mechanical radiation of grey-goo iron nano-bacteria, with golden DNA, poisoning the II Earth's atmosphere as aerobic bacteria killed the I Earth, creating the III Earth.
- STo: Military I.A. whose informative algorithms are designed to kill humans and survive in war theaters.

Yet parallel to those biological radiations that make humans obsolete, mankind suffers an increasing atrophy and neoteny, which dissolves its social structures, further degenerate its languages and brings a visual neo-Paleolithic of hypnotized 'screen slaves', as youngsters become absorbed by the virtual manufacturing of their brain through mass-media corporations, which renders them selfless, disconnected cells-citizens, in permanent chaos, in search of pleasure - no longer subject to 'pain' messages from the nervous-ethic system of the wor(l)d, as it happens in a post-mortem 10Di superorganism, where once the collective brain dies, cells become free, absorbing the blood of the system, till the 'new species' the hard insect devours them, as terminator robots will do with the clueless zero=final generation of mankind born with the century. Indeed, *the fundamental effect of metal-memes is the atrophy and mental degeneration of Humanity, both at i+1 scale, long gone the social evolution of the species under the ideals of humanism and socialism, back at best to earlier, primitive scales - Abrahamic religions or nationalisms - most often to the minimal 'genetic' family group; and at individual scale, (body atrophy of 'drivers', mental atrophy of 'screen consumers'), parallel to the logic evolution of chipped machines.* Since humans, ignoring all about social sciences cannot understand the negative effects of selfish memes of metal & keep evolving them, accelerating their demise, instead of r=evolving and curing History, building a Global 10DiSuperorganism of History made to the image of Mankind in control of the Mechanocene. *Since capitalism is a cancerous parasitic system that caters to bankers & company-mothers, the free citizens of markets, with free credit to poison the world with lethal digital machines of max. re=productivity & weapons of max. price.* But, parasites & cancers that cause selfish cells to break the 3rd postulate of equality and social love, absorbing the free oxygen=money of the system also emit a soma that 'relax' those cells (mass-media), which it chokes (capitalism) and murders with toxins (militarism) till the organism collapses and ends its worldcycle (war).

18. R=evolution of History; Isomorphism of i-human \approx i+1 Politic & Economic networks. Perfect Wor(l)d.

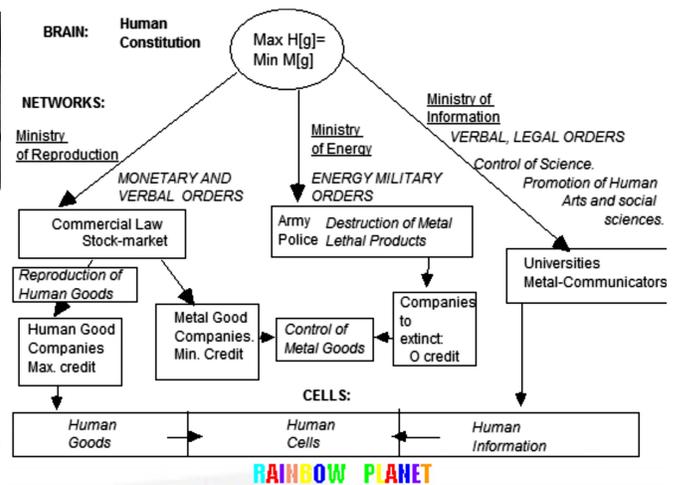
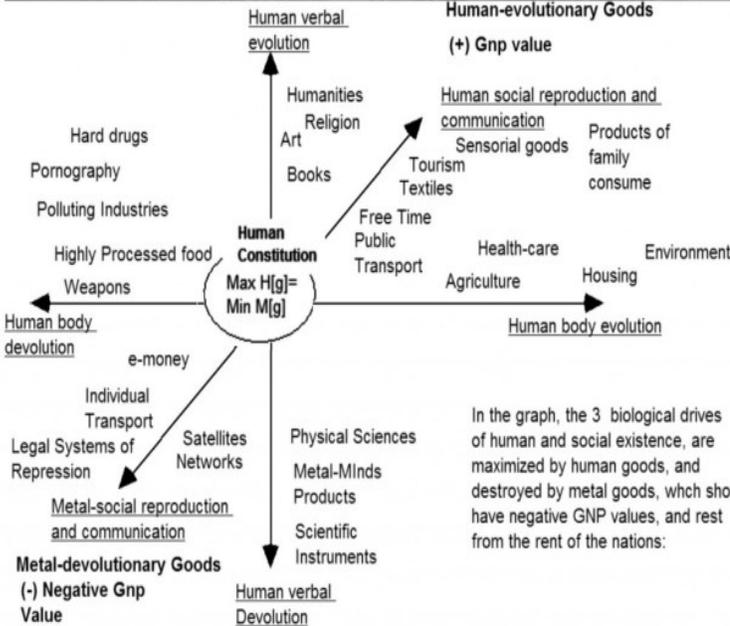


In graph all Healthy socio-biological systems, including human societies as super organisms, are composed of:

- A herd of similar, cellular species, which in a human society are citizens, joined by 2 type of social networks

that serve them, *by providing to all and each cell for free*, energy for their bodies and information for their heads. In the human body those energetic networks are the blood and digestive systems that deliver to all cells a Universal salary of free energetic oxygen and raw materials to activate the re=production of the 'natural' healthy goods they need to survive. By Isomorphism, 'WHealthy' human societies should be built with 3 similar networks:

- *STe networks over Gaia*: roads, river veins, agricultural and raw material fields that provide the i-1 goods for:
- *STa economic system ruled by monetary orders, delivered by all human cells with a Universal salary* that activate *demand and work on factories* of welfare goods (food, housing, education, health care) humans need to survive, which also maximize symbiotic human labor.
- *STo politic-nervous, legal orders* that rule the reproductive, economic 'blood' system as in all evolved organisms to cater to its cells. Thus i+1 politicians must nationalize financial & industrial corporations; dismantle those that produce lethal goods and issue a Universal salary to all i-1, human cells for whom the *system must cater*. So they demand and obtain from the economic system those life-based welfare goods, which provide humans with their 4 drives of life: energy for their body; information for their mind; social peace and freedom to reproduce, making the organism of history immortal, as all superorganisms of Nature do with its cells:



In the left graph we formalize those 4 drives of existence. Since all 10Di superorganisms are defined by its generator equation or Constitution, which reflects its 3+i drives of existence (the i+1 social drive, achieved through social love, the sharing of energy & information is added to the positive E-O coordinates).

In physics science uses a reference frame with ± values to show decelerating or accelerating motions from the pov of the observer. Thus to calculate Human WHealth we also show in the 'Ethonomic' Reference frame, similar to UNO's Human Development Index, + coordinates to show products which improve the life and 'WHealth' of the observer (Humanity) by maximizing the 3+i drives of human existence: verbal, ethic, social information for the mind, (+Y); carbonlife energy and health for the body (+X); and social love & family values that foster reproduction & eusocial evolution (+Z). And vice versa: lethal goods have – values that subtract to

Human WHealth's GDP. As monetary GDP, which uses gold values, max. for weapon, robots and digital software that kill our mind, body and jobs is no longer considered. Thus World nations increase WHealth's GDP both by $\Delta + YXZ = \Delta IHD$ WHealth and ∇ - lethal goods. They are the 2 sides of Ethonomic WHealth:

Max. + Human Goods = Hg (human energy, information, reproductive & social values) & Min. - Lethal, metal goods = Mg (Goods that hurt humans at individual or $i+1$ social level, such as weapons, hate-ideologies, robotic labor.)

We call that equation the Human Constitution, since its implementation 'constitutes' a WHealthy superorganism of History. As such it cannot be denied since it expresses the right of mankind to survive, based on the survival needs of humanity, which needs Life goods and can be killed by Lethal goods - machines whose overdrives of energy and information kill our bodies (weapons) and minds (hypnotic media) or substitute us in labor and war fields (software, robots). Hence lethal goods should be forbidden. Indeed, the prohibition of robotics would create immediately over 500 million jobs worldwide, end unemployment and eliminate one of the 2 causes of future life extinction, informative weapons - nanorobots and Terminators. Since the game of existence has only a penalty for those who live in ecosystems with their top predator species: extinction. Thus the 1st non-negotiable law implemented by a Humanist re=volution is the ban on STo-Robots and STe-Nuclear Weapons that will extinguish us. (->17) From a scientific p.o.v., the equation implies to substitute capitalist idol-ogies for Welfare Economics (Max. Hg) & Mechanism for Organicism (Min. Mg). From a practical p.o.v. it requires dual \pm reforms of the STe-Ecologic, STa-economic and STo-politic systems to maximize the 3+1 drives of human life, while repressing the negative lethal goods that limit those drives:

+STe's reforms: sustainability of Natural resources, global warming control, investment in food production.

-STe reforms: Destruction of lethal goods for the body & mind: weapons, robots, hate media & hypnotic gadgets.

+STa's reforms: A Universal salary that creates mass demand for human goods, since the poor spend most of their wealth in welfare (Keynes) and the utility of money (Pareto's curve) grows when it is better distributed, as the poor make the most of the little money they need to buy basic life goods the rich already have. To that aim governments issue a global, international currency, ¥€\$-money, born of the fusion of euros and dollars at parity value, with Yens at a 100 rate exchange and Yuans at a 4 to 1 Eurodollar rate, emitted in bills with \$ and € equal denominations printed in each side. While Yens become the 'cents' of the currency and Yuans, its quarters. It becomes the currency of those 4 nations, which make 3/4th of Global GDP. Thus a monthly 1000 ¥€\$ salary to every citizen of those nations becomes the oxygen that activates their work and consumption, latter extended to all countries, as they peg their currency to ¥€\$ money, which acquires legal tender globally.

10% GDP deficit: Further on governments issue a 10% annual deficit in ¥€\$ money to invests in infrastructures.

-STa's reforms: All Stock-companies make a 2 for 1 split in shares, handed to their governments, which will have 50% ownership to stir production towards WHealthy corporations that produce welfare goods, which require by affinity max. human labor and might lose money, covered by debt free issues of ¥€\$ money; while at the same time, governments will reform or dismantle companies that produce lethal goods (Mg).

Thus the purpose of the eco(nomic)system changes, from evolving and re=producing lethal machines of max. price=profits, to maximize production of WHealth, according to the ethonomic frame of reference, provide jobs, serve communities and create a sustainable, immortal world built to the image & welfare of man. To that aim Financial Markets are harnessed: Shares are made Nominal so speculation ends; future markets are forbidden; banks are nationalized; economists swear to obey the Human Constitution, directing Credit to create 3Di WHealth. Corporations are modeled with the laws of superorganisms: its managers/neurons obtain by law only 10 times more energy-salary than the lowest paid workers, as neurons do in bodies, etc. etc.²

- STo: political & legal reformation of nations unified into a World Union by common Humanist policies.

A perfect human social organism should be isomorphic to 'an evolved mammal', where the nervous system controls the blood-reproductive system, unlike lower animals, (worms, larvae), where the blood system without

control 'feeds' often on lethal goods and dies, as capitalism, which produces lethal goods of maximal profit does (digital goods of easy reproduction and weapons of max. price). *This isomorphic principle is the Foundation of a Natural Social Science of Mankind, in which Politicians act as 'Doctors' of History, imitating the collective brain of a human i-individual.* But how mammals avoid the corruption of 'political neurons', so they work for the body? Easy: its cells-citizens control them 'a posteriori' by pain judgments. So when neurons do not deliver their promises they hurt them. Thus courts & citizens should deliver pain messages to politicians, ensuring their submission to people's will. To that aim the hierarchy of the 3 ± 1 political scales changes putting on top, the $i \pm 1$: -i-1 Citizens & i+1 courts *on charge of judging 'a posteriori' the actions of i-politicians come first*: Thus the i+1 Supreme Court reinforces the physiological law of survival or constitution of the body of history: max.Human goods x Minimal lethal goods, by judging the constitutionality of laws emitted by the legislative network.

While i-1 popular juries judge and punish or reward all politicians and civil servants after tenure, according to the accomplishment of their electoral promises and the positive or negative effects of their actions on human life.

- Thus the scale of STa i-politicians, educated in GST systems will legislate according to the goals of the Human Constitution (legislative) and enact actions to implement those laws and create a perfect world (executive).

It remains only the idol-ogic reform of *Nationalism into the Science of Humanism*, by creating a single Global i+1 Superorganism- the Human species. It is the Wor(l)d Union or Rainbow planet, a Global government without the *national scale, based in armies and false borders, dissolved & substituted by a higher i+1 scale of 'Civilizations', and a lower i-1 geographic Unit, 'Regions', the practical level of 'government' (similar to states, with no armies).*

Thus, a 10Di efficient Superorganism the Whole Humanity with 3 ± 1 scales, the Whole (global government), the i-individual (civilization) and the i-1 organs (regions) is formed. *In the lower right side we show the 7 civilization, which fusion nations in the largest political units of the rainbow planet.* They correspond to the 7 humanist ages/cultures that opposed the 7 cycles of animetal wars (II.16) and can fusion 'national feelings'. In time order:

1. *Violet, Black Africa*: Pre-metal age: sensorial, life-oriented, where God is Gaia – all the living have souls.
2. *Orange, Genesian Mosaic Jewish-Protestant, Anglo-America*, that should deny its racist go(l)den calf memes.
3. *Yellow, Mongoloid Asia*: Buddhism & Taoism: God is a game of ∞ beings of Yang=Energy & Yin=Information.
4. *Red, Hispano-America*: Based in Christian's eusocial love and artistic, sensorial, life oriented memes.
5. *Green, Islam*: Love Religion, focused on God's Wor(l)d –History's STo-network. It must deny animetal Jihad.
6. *Blue Indonesia*: invaded by all cultures. Hence its melting pot, focused in Gaia's 'sacred water'.
7. *Blue Europe* based in rational, social-democratic French & Russian R=evolutionary memes.

Its 7 capitals are: Kinshasa, London, Seoul, Panama, Baghdad, Singapore & Brussels + NYC/UNO (latter a new 'Troy' between 2 continents), as the World's capital, where the Heptarchy of Presidents of the 7 civilizations sign a pact of no aggression, demilitarizes the World & governs by majority, establishing the Perfect World and its 3 ministry networks, (right graph), guided by the Human Constitution. While they handle day-to-day administration to the 1000 Regional 'organs' - many of them formed from present States/cities or by dividing nations into manageable $\pm 10^7$ populations, whose 'governors' will also form the legislative parliament of the World Union. As today the Wor(l)d Union's can only be created by a coup d'état against the dictatorship of the Financial-Media (informative machines)≈Military-Industrial (energy machines) system of global corporations and hired politicians, ruled by Worldstock's money, by 2 or 3 Presidents of the biggest nations of the World's leading civilizations, US, China and EU. 3 'Lots' - the perfect number suffices to save the World. If you don't know how, just read (-:

The Asimovian 3-mules' announce the foundation of the Rainbow Planet, the Wor(l)d Union, with a 10 years transitional government to build its structures, before elections. They nationalize all banks, split all corporate shares, keeping 50% and issue to all its citizens the 1st ¥€\$ Money salary. Presidents of the biggest 4 nations of the other 4 Civilizations, Brazil, India, Egypt and Nigeria are invited to join the Heptarchy, whose decisions are taken by simple majority. UNO organs act as transitional systems, prior to construction of the World's networks. All other UNO nations are asked to join the Wor(l)d Union by pegging their currency to Yes-money, do 50%

splits, bank nationalization and sanction as inner laws those issued by the heptarchy, *subject to scrutiny by its 7 Supreme Courts, which accept the Human Constitution above all laws, abolished when they oppose its goals.*

As nations join the Union, they start to build down into regions and transfer up diplomatic and military power.

While the World Union builds its final structures, the Wor(l)d Government and its 3 physiological networks use enlarged versions of present supranational organizations, refocused in human goals:

-I.e.: An enlarged NATO, under the rule of UNOs security council's, reformed to fit the heptarchy, becomes the war ministry, dedicated to protect Humanity against Weapons, destroying most - unlike today's NATO and its military lobbies, whose corporations evolve, overproduce & sell weapons to nations for profit; having no qualms to promote 'splendid little wars' in the poorest nations of the World, with the excuse of terrorism, which is dealt instead by Police and Courts and Education. And yet Wars in rogue nations must be quenched. So Russia, Israel & ISIS come first. They are offered entry in EU & NATO on exchange for inner demilitarization. Russia will accept. Judaism might not. Since today it rules the capitalist world through its majority stock-holding of Worldstock corporations. ISIS won't. Thus, the heptarchy's Global army of 7 million will invade ISIS, occupy Palestine and ask 'a last time' Judaism to abandon its racist Talmud's 'Chosen of Go(l)d memes' and reform. *Humanity is our i+1 God-Mind above all cultural minor Avatars. Thus Racist religions and nationalisms have no place in the Wor(l)d Union and face memetic (not genetic) ban. North Korea & Iran follow suit...*

In right graph, an advanced phase of the World Union: *The neuronal brain of the World Union is made of Politicians & Ethonomists, Doctors of the Superorganism of history, which study GST – the law of this 10Di Universe - and direct 3 'physiological systems' or 'Ministries', also heptarchies formed by the fractal branches of its i-civilizations, which handle most work to its $\sum i-1$ Regions.* Thus Political parties and lobbies that invent Laws with wishful thinking to foster selfish agendas are forbidden. The Laws of the Human Constitution are researched by Ethonomists & BioHistorians, proposed by the Supreme Court, voted by a Global 10^3 parliament, made of the Elected a priori and Judged a posteriori Presidents of the 1000 regions of the World; and finally enacted by the executive action of its 7 Cultural Presidents.

The 3 'physiological Ministries' & institutions of the Wor(l)d Union maximize the SVO-order of an evolved mammal social organism in a World directed by the ethic Word whose 'Universal Grammar' (Man>Verb>Object) makes man the center of the World, translated into the Human Constitution, Max.H(g) X Min.M(g) that seek the survival of all i-human cells, fed with right energy & information. Thus the 3 fractal levels of the Union (World, Civilizations & Regions) have all 3 Physiological networks, enacting the Human Constitution:

1. STa: Ethonomic Ministry or Re=productive network that cre(dit)ates citizen's WHealth (Max. H.G.). Credit is distributed *inversely to hierarchy, as all cells need it, under a 50/50 private/public rule: 50% of money is cre(dit)ated as a Universal Salary; 1/8th is re=produced in local stock-markets as the Wor(l)d Union transfers power to 'Regions'; 1/8th issued by local governments; 1/8th by the heptarchy; 1/8th by its corporations, which cannot grow beyond the civilization's borders. Since to preserve cultures, governments establish only economic borders: Lethal goods cannot cross them. Humans can. There is no taxation to individuals and Welfare goods.*

2. STenergy-defense Networks: War Ministries destroy factories of Lethal Goods. i-Police destroys i-machines.

3. STo-Informative-Legal-Educational Networks: Courts defend the Constitution in its 3 scales: The Supreme Court protects the Constitution from i+1 corporations and institutions. They limit audiovisual companies and information lethal to the mind (Fx fiction, violence, digital over load, ideology, racial tribalism, technology). Instead, the 3 $i \pm 1$ scales of the Union promote with the help of ethonomic credit verbal information '+' for human survival, eusocial evolution and Organic sciences (Ethics, Humanities, Art, Life sciences, etc.). Meanwhile Citizens' courts judge politicians and individual crimes against life. As GST education spreads, Citizens substitute Legislators in defense of the Human Constitution approving or rejecting new laws on Voting Houses.

Those reproductive=economic, energetic=military & informative (legal, audiovisual & educational) networks own the $\frac{1}{2}$ split shares of the Financial, Industrial, Military & Media Corporations of its region or civilization.

Thus the World Union becomes truly a Democracy where power lies on all the citizens-cells of History=Mankind, whose WHealth is the economic purpose of the World Union. Since they all receive a Universal Salary and have feed-back power through electoral & judgment vote of all 'neuronal' cells in positions of power of the 3 networks, the Political/Judiciary System and its economic, FMCI Corporations and military institutions, which dwindle as peace spreads worldwide. In the graph, we illustrate such 'circular power', which 'emanates' from the 10th Dimension of mankind (Human Constitution), the collective brain of the Superorganism, it is implemented by the 3 $i \pm 1$ political networks, and voted by all its $i-1$ citizens cells:

Human Constitution=>Max. Human Goods & Min.Lethal Goods-> Supreme Court suggests Laws-> Citizens' Vote Laws & Individual civil servants => Presidential & Regional Governors apply laws by designing => Informative Ministries (Education & Media) + Reproductive, Ethonomic Ministries (Max. Human Goods: Industrial & Financial Corporations) + War & Police Ministries (Min. Lethal Goods: Weapons Industries) \Leftrightarrow Citizens' feed back vote of Judges, Politicians & CEOs ensure their obeisance of \leq Max.Hg x Min.Mg \leq Human Constitution. Thus the Union has a clear mission, to enforce the Human Constitution, to maximize Mankind's collective and individual WHealth, which guides both extremes of the cyclic chain of causal power (Citizens' dual vote), in control of the actions of Courts, Politicians & Managers of the FMCI system. Per in secula seculorum.

Conclusion. Only 10Di GST encompasses in a single formalism all dimensions, all sciences, all scales and all species, all of them unified by the isomorphisms of the life-death worldcycle and the ternary topology of its organisms, resumed in the Will of the 'Fractal Generator Equation of the Universe'. And so its application to social sciences could create a perfect world and usher mankind into a new enlightened age in harmony with reality. The evolution and survival of Humanity is possible if we are O-intelligent enough to understand and obey the laws of the Organic Universe & E-brave enough to defy those who deny Humanity (Max.O x Max. E). Animetals might keep enslaving humanity, but as part of the species, their victory will be their just demise. Indeed, the game of existence is harsh but fair. Further on, in the fractal Universe there are a relative ∞ number of planets where human-like species display enough ExO to create a perfect world. But none created the Mechanocene or else we would see robotic life. It is the Fermi paradox: 'why there are not planets that communicate or reach interstellar travel'? Fermi proposed it when he saw the 1st Nuclear explosion, realizing weapons will extinguish us. We know why: Energy evolves first. Thus the Nuclear Industry will cause Earth's big bang before I.A. robotizes the planet. 0-points dominate all systems. Thus an $i+1$ 'galacell' is like an $i-1$ cell, created to reproduce the dominant, informative 'DNA' of the galaxy, gravitational Holes. Yet, there is a 2nd solution to the Fermi Px.: Avatar-like planets that respect life and do NOT create cosmic bombs and robots. They are living planets of flesh that worship life and never invent machines to travel beyond. But of course, animetals are not worried⁵. They found a 3rd imaginary solution: our financial masters think we are alone because God, the talking bush of the Bronze Age only Chose them; our mechanist scientists do not fear black holes, they 'know better', as the only intelligent species on Earth today - their chips - are searching for God's particle, neither our germ(anic) warriors fear them – danger comes from terrorists walking in mules. LOL, the harder they fall...

NOTES

¹ The logic-mathematical symbols of 10Di, conform the 'existential algebra' of GST. Still in flux/infancy, some texts compact all sub-dimensions of time into the classic 4th dimension, and all i -scales into a 5th dimension of depth. Earlier texts used I, Ti for information (now O, to avoid confusion with i -scales). I'll try to standardize & dump 30 years of research in 10Di GST isomorphisms & scientific details at wordpress.generalsystems.com

² I gave at Tokyo, Madison & Waterloo's ISSS congresses, while chairing Duality, 5 lessons on the full model: 'GST formalism', 'GST philosophy', 'Complex physics', 'Complex biology', '72 years economic cycle' which were never made available in the web after Duality's chair cancellation.

³ 'Absolute Relativity, the 5th Dimension' at San Jose & 'GST: 10Di super-organisms' at Washington study all Nature's isomorphisms.

⁴ Predecessors: Butler applied Darwin's Evolution to machines, defining animetals & forecasting our demise if we don't control them. Spengler defined cultures as organisms and the 800 y. cycle. Kondratieff studied 1^s the accelerated, 80 years cycle. The anti-quantum Px. Ignored them all.

⁵ This scientist is. Thus he sued CERN, the lab researching Black holes, trying to stop the 1st extinction event with no results: www.cerntruth.com