

## FOREWORD.

### ABSOLUTE RELATIVITY: ORGANIC SYSTEMS

"According to their [Newton and his followers] doctrine, God Almighty wants to wind up his watch from time to time: otherwise it would cease to move. He had not, it seems, sufficient foresight to make it a perpetual motion. Nay, the machine of God's making, so imperfect, according to these gentlemen; that he is obliged to clean it now and then by an extraordinary concourse, and even to mend it, as clockmaker mends his work.' *Leibniz-Clarke Correspondence on the absurdity of mechanical models of the Universe*

This blog is dedicated to the philosophy of science called systems sciences.

Systems sciences are based on the alternative philosophy of science to that of mechanist physicists and its only entropy arrow, called organicism. Let us try to explain why only organicism is a scientific truth.

According to *Deism* the whys of existence are due to a personal being, external to the Universe that makes it all happen and cares for humans more than for the rest of His work. According to *Mechanism*, this is due to the self-similarity between the Universe and the primitive machines we humans construct to observe it. Mechanism though needs 'someone' to make the machine, which is not self-generated; so it is similar to deism, reason why the founding fathers of science, all pious believers, adopted it as a proof of the existence of God, which had given man self-similar properties – the capacity to make machines to the image and likeness of the Universe.

The problem with those 2 approaches, which in fact are the same is obvious: a personal God is an anthropomorphic, subjective myth and science must be objective; while a mechanical view of the Universe still needs an internal, self-sustained process of growth, creation and synchronization caused by an external God that made and rewinds the clock – as Leibniz clearly stated in his critique of Newton.

Scientists today are unaware that mechanist theories are in fact deist theories, reason why Kepler and Newton, pious believers, liked them; since they were a metaphor of their self-centered, anthropomorphic religious beliefs: If man created machines because we were made to the image and likeness of God, God had created the ultimate machine, the Universe.

Organicism on the other side is the only self-sustained, rational theory that doesn't need a creator, language, god, as organisms are self-replicating, *but does explain perfectly within the 'correspondence principle', those 2 other philosophies of science; since a machine is just a primitive organism of metal, and we shall see in our sections of History, Gods are the subconscious collective of civilizations, ANOTHER scale of social evolution of the fifth dimension.*

So what we mean by an organism? A very simple system - NOT to confuse with the most evolved, complex of them all, that of human beings, reason why so many people, having a natural biased ego-centered belief in man as the unique organism, reject the concept:

An organism is just a group of similar forms, which organize themselves with at least two 'networks', one that provides the 'clone cells/citizens/atoms' with the vital energy they need to feed, move and reproduce (blood-economic system-electromagnetic forces) and one that provides them with information to guide their survival actions (nerves system, political system, gravitational in-form-ative forces).

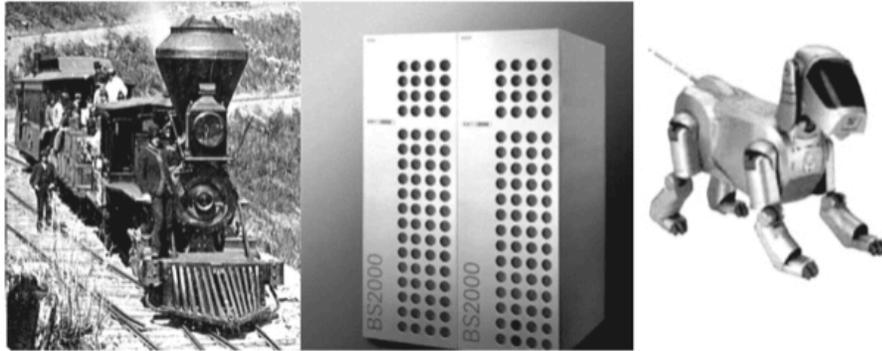
This simple dual system IS the minimal, fundamental particle of the Universe. Since it is obvious that machines are also organisms.

Indeed, a machine is an organism of metal fast evolving through the customary ages of all organisms - in the XIX c. 'humans', who catalyze their evolution did its bodies of metal, then its hearts-engines, in the II

Industrial evolution, then its metal-minds in the XX c. and now in the Industrial r=evolution 4.0 put them together in organic robots.

So mechanism, the underlying philosophy of physical sciences, is just a simplex version of organicism. *It is not man who resembles a machine, but the machine, which is made to the image and likeness of life organisms:*

**XIX C. MACHINE BODIES XX C. MACHINE HEADS: Pcs, Cams XXI C. ORGANIC MACHINES=ROBOTS**



WHAT ARE MACHINES?: METALIFE

*Machines are metal-organs of energy and information that evolve and reproduce through company-mothers. As such we have evolved machines in 4 stages, creating first its bodies, then its engines, next its heads, and now we put them together into organic,*  
In the graph, evolving machines can also be modeled with the concept of an organism.

Why then organicism has remained in the modern time, a fringe theory, to mechanism, even if it was the first theory of reality put forwards by Aristotle, the father of the experimental method and logic science, in his magna opus the Organon?

There are obvious cultural reasons - we live in the age of the machine and so the machine has substituted man, an organism, as the measure of all things.

But the deepest reason of them all is the fact that to make an organism we need at least two 'arrows' or 'motions of time', entropy, locomotion, the one used by physicists but also INFORMATION, form-in-action, formal dimensions, which physicists have always ill-understood, to the point they call it negentropy, the denial of entropy.

Only then when we properly define information and add it to the mix, we will have the required elements to refund philosophy of science on far more rational, basis, that the present 'mixture' of mechanism and creationism (either of verbal language as in religions or digital languages, as in the religion of mathematics).

But what is entropy and information, in simple self-evident terms? The answer is obvious: entropy is motion, and motion is time, change. And information is form, and form is dimensional space. Time=motion and Space=dimensional form become then the two substances of which all what exists is made, and in their analysis we must start our inquire about why indeed the Universe and all its parts are a fractal super organism of time=motion=entropy and space=form, made to the image of its whole.

The proofs? That is the easiest part. Look around you, all what you see are forms that occupy space, and move in time. Everything you see is a form of space with a time motion. There is nothing else and so *all is a proof that reality is indeed made of space-time organisms, as the motto of this web says. But this is only the starting point of an extraordinary adventure of the mind...*

## General Systems: 5th dimension metric and the nested super organisms of the Universe.

New scientific ideas never spring from a communal body, however organized, but rather from the head of an individually inspired researcher who struggles with his problems in lonely thought and unites all his thought on one single point which is his whole world for the moment.

*Planck on the informative seed or mind that will reproduce and evolve into a larger super organism or mental world.*

For those with little time, a brief introduction to a subject that could easily fill an encyclopedia Britannica:

The Universe is a fractal scalar, organic system of 5 Dimensions of space-time. The fifth dimension is made of the 'different co-existing scales', which from the simplest forces through particles, atoms, molecules, matter, organisms, super organisms, planetary systems and galaxies, create an 'organic network structure', which amazing enough since it was discovered at the beginning of science with telescope and microscopes, was not formalized till I introduce its metric equation in the milieu of systems sciences.

In mathematical science for a dimension of space-time to exist, it requires a metric equation, which combines space, and time to gives us a co-invariant system that allows to travel through such dimension. The fifth dimension has a 'metric equation', hence it exists. The equations for a given number of scales co-existing in an organic network is  $S$  (size in space)  $\times$   $T$  (speed of time cycles) = Constant.



Stiences study the Disomorphic laws of species, each one focused in a scale of the eusocial 5th Dimension, with different jargons, which we shall unify as all what exist is homologic, made of the same Dimotions, which force them to exist as part of super organisms tracing worldcycles, with a ternary structure in space, time and scales, guided by a still, linguistic mind, which projects its smaller mirror images of form in its territorial body waves, creating its fractal scalar structure, broken though by the entropic limits of its perceptive reach. Above the main scales of the nested super organisms of the human island-universe: the galatom, where nested thermodynamic planets exist, where nested human social organisms self-centered in visual, verbal, mathematic and logic minds create its order with social and mechanical memes, carried by individuals where nested cellular systems exist, coded by genes, made of even smaller atoms and particles coded by quantum numbers. Yet all those scales are unified by the co-invariant metric equations of each of its synchronous time clocks.

It means when we become smaller within such organic network, our time clocks accelerate. And vice versa. For example, in your organism the equation relates the cellular genetic scale, whose time cycles run much faster than your biological cycles. As information is stored in the form and frequency of time clocks, it follows that in all nature's organisms, smaller systems code the information of larger systems.

Each 'stience' therefore specializes in the study of a nested super organism, or scale of the fifth dimension ( $\Delta\pm_j$ ), We study 3 fundamental super organisms of the 5th dimension. The 'galatom', whose metric equation is  $H$ (Planck constant of angular momentum)  $\times$   $C$  (speed of light) =  $C$ , whereas  $h$  is an obvious 'cyclical time

clock' and C an obvious measure of speed-distances in space. And indeed, smaller scales have faster turning particles, and larger systems move in slower cycles. (Vortex law:  $V_0 \times R_0 = k$ ).

In **biology** we study families of animals such as mammals where larger organisms have slower metabolic cycles. In **history** we study social organisms, whose cycles of life and death, will define the evolution of nations and civilizations. And in each of those organisms, smaller systems code larger ones. So the quantum numbers of particles code matter, genes code biologic organisms, and memes code societies.

We define them two fundamental systems one in space and one in time, taking place in the fifth dimension:

An entangled **super organism** in space, in which the synchronicity between 3 scales of the organism, its atomic/cellular/Individual, thermodynamic/organic /social and gravitational/ecosystemic/global scales in physical/biological/social organisms form a complex interacting, entangled system we shall call a super organism, whose study discovers 'Isomorphic=equal laws' regardless of what kind of system we study. Because the system is entangled, and made of 5 obvious components, we need a new logic, 'pentalogic' as all the elements communicate and interact together. Those elements common to all systems of nature are identified as:

**'space'**, " §pace that is 'types of dimensional form', and we find to have 3 only 'topological varieties', which perform 3 clear organic functions in the super organism, lineal limbs/fields that move the system, hyperbolic body-waves that iterate its forms and spherical particle/heads that gauge information/

**Time**, that is types of 'motion=change', those organs perform, which are locomotion (limbs/fields), reproduction (body-waves) and informative gauging (particle/heads), which dominate each of the 3 consecutive ages of the being (young motion age, mature reproductive age and old informative age).

**Scale**, the 3 aforementioned scales for any super organism

**Mind**. And this allow us to identify a 'center that process' information from the outer world, and controls the internal networks of the system, with a given language, which we shall call a mind, regardless of its automatic processing or consciousness. As it coordinates and maintains the whole as a single system performing actions of control of the energy and information of the system. So we find gravity centers, chips, brains, DNA nucleus, black holes in galaxies, etc. etc. Indeed, there is always in any stable organic system, a relative still, self-centered mind, *which we shall discover all systems do have, even physical systems, which have centers of gravity, centers of charge or crystal systems, which maintain the whole.*

**Entropic limits:** In time called death, in space, called membranes, in scales as systems loose control beyond to scales and in fact death is defined by a simple equation of dissolution of two scales of information,  $\Delta 1 \ll \Delta -1$ .

All this allow us to define any system in time, by its life and death cycle which we shall call a **worldcycle** (taken from 4D physics, worldline, which now with a new dimension becomes a worldcycle. Since indeed any scalar super organism's *existence can easily be defined as a travel through the 3 scales of the fifth dimension, as all systems are born as a seminal, smaller form, in the  $\Delta -1$  lower scale, grow fast with its faster time speed, emerge in the  $\Delta^0$  body scale and are part with its head/particle of a larger social world, in the  $\Delta +1$  scale.*

How then a system travels through those scales? Very simple, it does so accelerating in its life cycle, emerging, living in the larger world, and then dissolving back to its parts in the death moment:



## SUMMARY:

### GENERATIONAL SPACE-TIME

**Part I. 5D Universe:** Fractal spacetime supœrganisms tracing 5D worldcycles.

1. Newton v. Leibniz: from absolute to relational to generational spacetime
2. Vital spacetime topology: the fractal generator.
3. 5th Dimension. Scalar bigbangs.
4. Super organisms. Networks.
5. Cyclic time.
6. Relativity of motion and form.
7. Non-E Minds-mirrors.
8. Worldcycles of Life and death: ¶Logic Time Scales
9. Existential Algebra.
10. Philosophy of Stienœ.

**Part II. T.œ: A theory of the Organic Everything.**

**I. Formal Stiences: B;otologic systems. In search of the Generator**

Scalar=organic, spatial=mathematic & temporal=logic properties of T.œs' worlds

1. Program of existence. Non-Ælgebra
2. Fractal points: Non-E Mathematics.
3. ¶logic systems: from Dilogic to Dodecalogic.

**II. Astrophysics: Δ±4:**

1. Galatom; its 5D metric. Unification of charges and masses.
2. Immortal universe: fractal big-bangs.
3. Forces as 5 Dimotions.

**III. Biology: Δ<±3:**

1. The 3 ages of Earth.
2. Species as Superorganisms.

**IV. Social sciences: Δ<±2:**

1. Humans as space-time beings.
2. Topologic evolution: Anthropology.
3. History. The 3 ages of mankind. Its social supœrganisms: religions, civilizations and nations.
4. Industrial R=evolution of machines. The Eco(nomic)system: Company-mothers.
5. A needed reform of social sciences.

# PART I.

## 5D FRACTAL UNIVERSE

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- 'The Universe is an organism with a mind called Logos' *Timaeus*, Plato.
- 'The logic of God, the seer of time is of a Higher order than man's', *City of God*, Augustine.
- 'The languages of God are infinite' *Upanishads*.

S=T

- 'Yin=Information combines with yang=entropy to create all the qi-energy organisms of reality' Zhuang Zi<sup>2</sup>
- 'Metaphysics is the science that goes beyond physics', *Organon*, Aristotle.
- 'Call information entropy, nobody knows what it is, so you will have the upper hand on this.' Neumann to *Shannon*.

Δ<sub>i</sub>

- 'Complexity - Systems theory - will be the science of the XXI c.' Hawking
- 'Philosophy of Science will be completed only by a set of principles regarding information similar to those of Physicists in the study of entropy and locomotion.' *Searle*. On the goal of Duality.
- 'The Universe is a sentient, fractal superorganism, of 5 D<sub>i</sub> motions of Space-time.' I§

# I. RELATIONAL SPACE-TIME

## Leibniz v. Newton

**Correspondence principle: The big underlying question of physics of timespace.**

'Time is what a clock measures'. 'Leibniz is right. There are infinite time clocks in the Universe, but if so we have to restart science from its foundations'. Einstein, on the infinite relational time cycles of reality.



### The Newton-Leibniz Controversy A clash of Titans

10 Letters  
1715-1716

Leibniz-Clark  
Correspondence

- Space and Time: absolute or relative
- Space as the "Sensorium Dei"
- Existence or inexistence of the void
- The need for God's continual intervention in the functioning of the universe
- The mysterious nature of gravitation
- The principle of sufficient reason
- The principle of the identity of indiscernibles

Leibniz proposed a Universe of relative space-time beings where 'vacuum' did not exist, but reality was a nested chain of 'fractal' (to use modern terminologies) entities, as 'each point' hold a world in itself. Hence an organic Universe in which parts and wholes co-existed together to form those 'chains of beings'; without the intercourse of a God; as organicism was 'a sufficient reason'. So he not only discovered calculus but gave a deep philosophical explanation of it; forecasting the 5th dimension of eusocial love that makes those parts emerge into wholes by its 'identical nature'.

Newton, a biblical bigot, who dedicated more time to religious studies considered a single absolute space, the 'plenum-body of god', or void on which entities travelled through with a single clock-time for all of them, which God 'fine tuned' constantly and cared nothing for a sound rational explanation of all of it, as long as he could write a mathematical equation to describe its 'single locomotions', since only God and man spoke the language of truth, mathematics, and God sent him comets for him to understand the gravitational equation; foreseeing the simplex, reductionist view of the Universe sponsored today by creationist physics.

All this said we shall respect the principle of correspondence according to which a new theory must include all previous theories as parts of its larger view by starting our expansion of the knowledge of time and space, with physics and its foundational argument on the nature of time and space, which *was resolved the wrong way, adding further deformations to our comprehension of the nature of time and space.*

Indeed, the fundamental question physicists wondered for centuries regarding the nature of space and time seems simple but it is rather profound, and unfortunately it was resolved as usual in favor of the reductionist physicist, Mr. Newton, instead of the polymath, Mr. Leibniz, essentially a philosopher of science, despite his advances in mathematical calculus (derivatives) and theory of motion (principle of least time, by which we know that particles as humans do seems to perceive their trajectories and choose always the shortest time NOT space path from A to B with astonishing efficiency, at the local microscopic level, minimizing its expenditure of energy in its actions - from where all other laws of locomotion can essentially be derived).

We advance those concepts for the reader to understand, we are here confronting an argument between one specialized extremely talented person, Mr. Newton and one absolute genius, perhaps with Aristotle and Leonardo, the triad of highest minds of the western world, as they unlike Galileo, Newton and Einstein, which in the world of proprietary physicists are *all the mind that matter*, explored all the aspects of the humind (ab. Human mind) in its multiple vital spaces of mental order and informative structures of time cycles.

So the question both wondered, which came *a priori, even before we wrote any mathematical equation to describe time and space was about the ultimate substance of reality - what was that underlying reality, time and space as Leibniz proposed, or the mathematical and logic mirror languages the humind ego used to reflect them?*

Are we *in* a 'background' space-time graph underlying all realities? Or there is NOT a background to reality; hence we are made of a vital space that last a finite time - the substances from where all realities evolve?

A realist interpretation of the world we live in, which has never shown in any scale of reality such 'background' - ultimately a mathematical graph used in abstract by human scientists - considers then that we ARE the vital space we occupy with our cells, and we LIVE a time quantity between birth and extinction. So *we are* space and time.

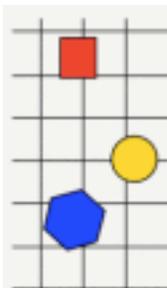
And in such a case, needless to say, we must evolve then concepts of space and time, to be able to extract the properties of 'existential beings' from them.

The first proposition that the Universe was made of mathematical Cartesian graphs of space-time hence originated by the mirror languages of the human mind, over which all other species were drawn, by the hand of God, intimate friend of Mr. Newton, who sent him comets to help him with the calculus of orbital motions is that of Newton but it is not called Cartesian spacetime, which might hint at its origin but absolute space and time.

It was the paradigm till the quantum/relativistic revolution. Then quantum physicists found that space was 'broken' into quanta which had a vital energy, from where virtual particles arise; and Einstein discovered that "I am the only physicists that thinks the Universe has multiple clocks each with a different speed of time."

But science as Kuhn explains in the 'Nature of scientific revolutions' is after all a human endeavor, based as most humans in routines and repetitions, where truth is often relative to culture, even in science, that is, to established wisdom, which requires often hundreds of years to change. So the quantum and relativity revolution didn't go beyond physics and even in physics didn't 'attack' the ultimate principles of the Newtonian paradigm; as we shall do in this blog, departing from scratch to show you how a Universe made of vital space beings that last a finite time looks like.

### **Absolute space-time.**



In Newton's cosmos, space and time provide a fixed, immutable and eternal background, through which particles move. Space and time are a stage. Like actors on that stage, particles move, exert forces onto each other and generally act out the drama of dynamics, while the stage itself does not change. This is sketched in the illustration. There, we see objects, pictured as geometrical shapes, but there is also a fixed background structure, space, which is just as real, pictured here as a lattice of intersecting lines.

*"The ultimate reason of things must lie in a necessary substance, and this is what we call God."*

Newton's view of the universe is manifestly background dependent – whether or not a particle is moving or at rest is determined in relation to Newton's absolute space and time

For reasons of practical measure, it became useful in earlier science to use a mathematical device made with pen and paper called the Cartesian graph, so physicists could measure 'translation in space' over that graph.

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## Gottfried Leibniz

And as time went by the graph became somehow 'real' as scientists' ego felt to be sharing the 'mathematical language of God'.

This of course meant that absolute 'continuous space' and a single 'lineal time' that extends to infinity became 'dogma', and as such 'non-susceptible' of rational argument. Nobody wondered then the many obvious contradictions of such view.

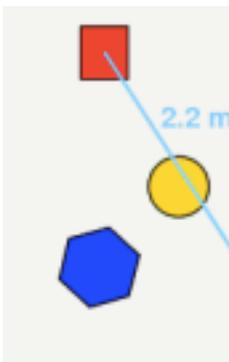
For example, why if we all shared the same infinite time, we were all mortal; why if space was a continuum, we were all 'broken' pieces isolated by external membranes; or latter when the lineal theory of the Universe was defined (big-bang) why the Universe had a beginning but NOT an end; why if the Universe was expanding lineally, Galaxies were imploding cyclically; or even for those who believe in the 'new found language of God', why mathematics indeed was such a good synoptic language-mirror of reality but NOT reality itself (we are NOT when observed in detail made of 'numbers', we don't see those lines of 'Cartesian space'. etc. )

Since as we kept exploring smaller scales of reality, we never found the drawings of God, not even a solid still substance, but always 'motions' tracing closed time-space cycles; since all particles turned to be also 'vortices of time-space motions'.

### A relational world without spatial background.

As we said, the longer time goes, the more respectable a 'false theory becomes'. 'Bad architecture, whores and religions become respectable with age' say Jerry Garcia of 'Grateful death' fame. So paradoxically, today the argument is not even on the table anymore. This again is the usual way humans go through the building of half-truths and falsehoods. At birth all is argued, latter on is taken for granted.

The argument thus reached its height in the beginning of science in the correspondence between *Newton*, the proposer of the absolute Cartesian graph of space-time drawn by God (his body in his own words) vs. *Leibniz* who rightly considered absolute space and time an abstraction, and so he coined the concept of relational space -merely the adjacent pegging of similar forms in simultaneous space and relational time - the sequence of events which we relate causally with reason (except those who are in Schopenhauer's terms 'stupid' and deny causality as the tale of time events :)



Indeed even in Newton's day, there were philosophers like Gottfried Wilhelm Leibniz who took a different stance. In modern parlance, theirs is a relationist point of view. For a relationist, there is no background of absolute space and time. The fundamental properties of the elementary entities consist entirely in relationships between those elementary entities. Time is nothing but changes in these relationships, and consists of nothing but the ordering of these changes. In the relationist version of the above illustration, only the objects, pictured as geometrical shapes, are real.

The lattice has no independent existence. Even without the lattice, it does make sense to talk about the distance between two given objects. One of the fundamental

discoveries of Einstein is that in our universe, there is indeed no fixed space-time background. In Einstein's theory of general relativity, which replaces Newton's theory of mechanics and the gravitational force, the geometry of spacetime is not fixed. Instead it is an evolving, dynamical quantity. Physicists intent on describing our universe cannot just assume a given geometry. Instead, geometry is something that needs to be determined by solving certain equations that include all the effects of matter and energy.

But if space is what objects occupy that distance between the red square's vital spade and the yellow 'circle' must have something. Horror vacuum comes then into place: indeed the Universe must be scalar. There must be very small parts between them, which we do not see. And that is what we have proved with microscopes - *as we probe smaller distances forms with motion, spaces with time-motions appear and there it seems no limit to the fractal scales of the Universe.*

Naive realism WORKS only when we truly stop 'thinking' and inquiring about the 'background meaning' of all our concepts, from measure, to time, to space, to scales, to mathematical symbols and terms from waves to reproduction, from particle to information... and so on. *We are though inquiring all those questions first.*

*Unfortunately Physicists sided with Newton not with Leibniz on the question of what is space and time - an abstract background put by God or the substance of which we are all made.*

The essential change of paradigm from absolute spacetime to relational spacetime is simple and everything else follows from it:

What Newton called absolute space-time IS NOT. It is a mathematical artifact, a pen and paper 'Cartesian graph' drawing, physicists used to map out reality and do calculations but it does NOT exist in reality. Do you see a Cartesian graph in the background of the vital spaces occupied by beings? No. Physicists have probe down to the scale of strings and they have never found the 'lines' of the lineal time and Cartesian space, they draw in their papers ts, ts... So space must be the sum of all the discontinuous vital spaces, occupied by different beings. And they have never found an 'immortal being' which would not follow a 'world cycle' of life and death... All is generated in a point of past and dies in a point of future. So the infinite line of single time of the Cartesian graph is missing.

Hence the need to change paradigm from an abstract single space-time continuous background, which Newton merely took from the abstract mathematical Cartesian Plane that became in his 'delirium tremens', the 'Plenum=body of God' – the dependent background against which all motions were measured, into what physicists call a background independent theory of science (meaning no background spacetime at all).

### **But space and time do exist.**

**"Behind it all is surely an idea so simple, so beautiful, that when we grasp it - in a decade, a century, or a millennium - we will all say to each other, how could it have been otherwise..."**

The simple idea behind the structure of the fractal Universe is to consider time=change=motion and Topologic, formal space=extension the 2 elements of which all beings are made.

- John A. Wheeler

It is then necessary to conclude since absolute continuous time and space are merely a mathematical Cartesian artifact on paper to study equations, but there is nowhere to be found, and yet we are CONSTANTLY existing as beings with a finite time and a finite extension in space, that **WE ARE space and time**, merely of a different kind to that of Newton: organic (ab.œ), scalar (a. Δ§) Space, and cyclical discontinuous time (ab.đ, Đ) who 'lives'... in worldcycles (no longer worldlines) of existence (as species who follow the common laws of all sciences of space and time).

This idea is so simple, so beautiful, that if you grasp it and agree, I invite you to tell to all others who wonder to wander this web, now that I have completed a fairly understandable version, a decade after Mr. Wheeler's death, a century after Mr. Einstein's previous paradigm, a millennium after the invention of the simplex mechanical clock... WHICH DEFORMED our vision of the infinite clocks of the universe of space-time.

So the essential change of paradigm from absolute spacetime to relational spacetime is simple and everything else follows from it: we **are made of vital spaces** that last a finite time 'world cycle' of existence, and so the study of the vital organic spaces, which we are and the laws of its **world cycles of time duration**, is what science is all about.

For those impatient with novelty, what the understanding of human beings and all other systems of nature as space-time beings requires is obviously *a much deeper understanding of the properties of scalar space and cyclical time, at the basis of all systems.*

*And then once this more 'complex substrate' is understood, a much simpler way to explain the whys and hows of everything that exists as 'emergent' systems, whose underlying forms in space and behavior in time can be extracted from those common properties of scalar space and finite time.*

This is then akin to a Copernican revolution, who changed the foundations of astronomy putting the sun and the earth in its due position - correcting our errors in the conceptual understanding of space and time - to then build a much simpler view of all physical systems under a single force of gravitation - to then build a much simpler view of all the species of the Universe as all are manifestations of those space and time properties.

The devil though is in the details so the first obvious question we must answer is what MEANS in REAL terms, the fact that all what exists is MADE OF SPATIAL topologies and TEMPORAL ages, of Space and Time?

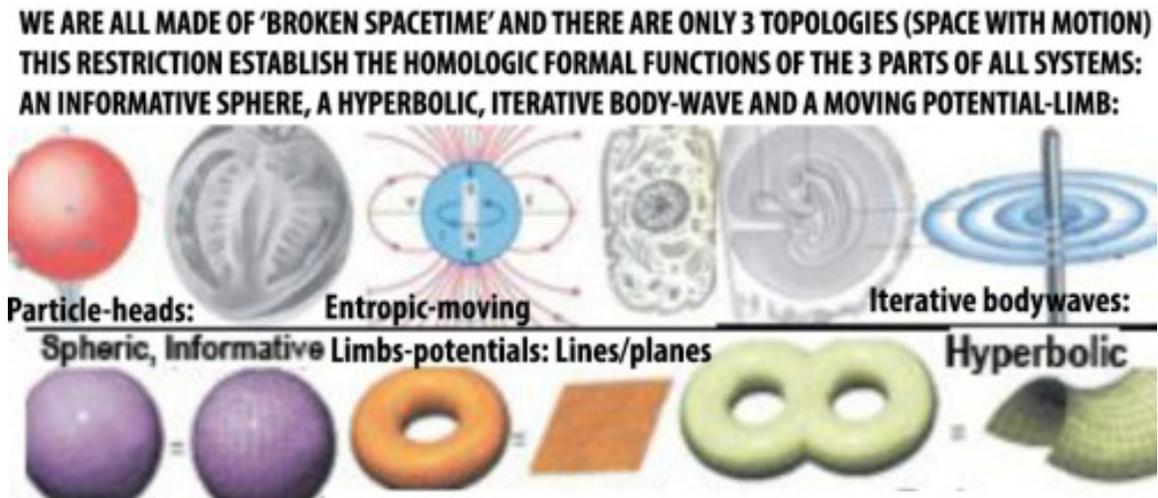
**RECAP.** It is a fact that since the physicists' revolution of the XX century we know that the Universe hold infinite clocks of time, that space is quantized and has energy, and absolute space-time does NOT exist. As in the case of organicism, thus a relational theory of space-time IS the only scientific theory about space and time. But if absolute space-time does not EXIST, and there is not an abstract mathematical background the ONLY logic explanation is that we are MADE of spatial form and temporal motions. It is then IMPERATIVE if humans really take seriously the concept of rational science and truth to build up from scratch a theory of reality based in its only possible scientific truths, organicism, and 'generational space-time' - the modern version of relational space-time as reality must be 'generated' in all its 'organic systems' but its original substances, space=form and time=motion.

This is the task achieved in this blog.

# II. VITAL TOPOLOGY

## Organic Space-Times

The answer is fascinating, as there are only 3 variations of mathematical space in a single 'plane of the fifth dimension', the so called hyperbolic, elliptic and toroid topologies. And so the fact that we are made of space means ultimately we are made of 3 type of organic topologies:



In the graph, spheres are the topology that holds the maximal volume of information; hence all 'time space' systems that process information are spherical particle-heads. Flat, lineal topologies are the topology that connects in the shortest path two points; so to reach/move faster, systems have lineal/flat moving potentials/limbs. Finally the third type of geometry, hyperbolic topology, is complex enough to store all other possible forms, so best to reproduce and all iterative body waves that generate the other 2 forms are hyperbolic. This mathematical-spatial truism holds for 2, 3 and 4 dimensions; hence establishing basic restriction to the construction and evolution of forms. And should become in XXI c. science the 'missing' leg of topological, biological and physical evolution to explain the extraordinary efficiency and homology between forms (no longer analogy, since all those forms derive from the same 'substance', space with time=motion or 'topology'). In the next graph, we can see how the 3 only topologies of the Universe ensemble to form physical, biological and social organisms, all of them with a spherical 'tall' dimension to gauge information; a wide, iterative dimension of hyperbolic bodywave reproduction and a flat, direction for its entropic motions. The beauty of the topological Universe is that each of those 3 forms can be 'deformed' and 'moves', as long as it doesn't tear (break). So departing from such simple 3 basic forms there are infinite possible variations of species, but we can order them all with that ternary principle.

LET us then introduce first the nature of vital space, the topological forms of which all beings are made; then the nature of cyclical time, the clocks that measure the duration of the existence of all beings, by the frequency of its logic cycles of information; and finally put them together to show the fractal, scalar structure of all space-time beings, which will be studied according to its relative scale of size and speed of time clocks by different sciences, whose 'time clocks and vital spaces will be studied in more detail IN THE SECOND line of the blog.

So we enter now into another element of vital mathematics, the ternary structure of all systems of nature of which the previous fractal points of physical systems are its simpler forms.

Because the Universe is Generated by the properties of space and time, better reflected in the mirror languages of mathematical topology and social numbers, and logic, *we could say safely that since 'we think therefore we are', that is, we perceive as humans a limited range of reality, with our space and time languages, for humanity, the Universe is generated by mathematical and logic languages. And so by studying formal sciences of mathematics and logic, we can describe the Universe. We can talk then of a Universal topology, from topos, the language of geometry in motion and logic, the language of causal time cycles that create and repeat patterns of reality.*

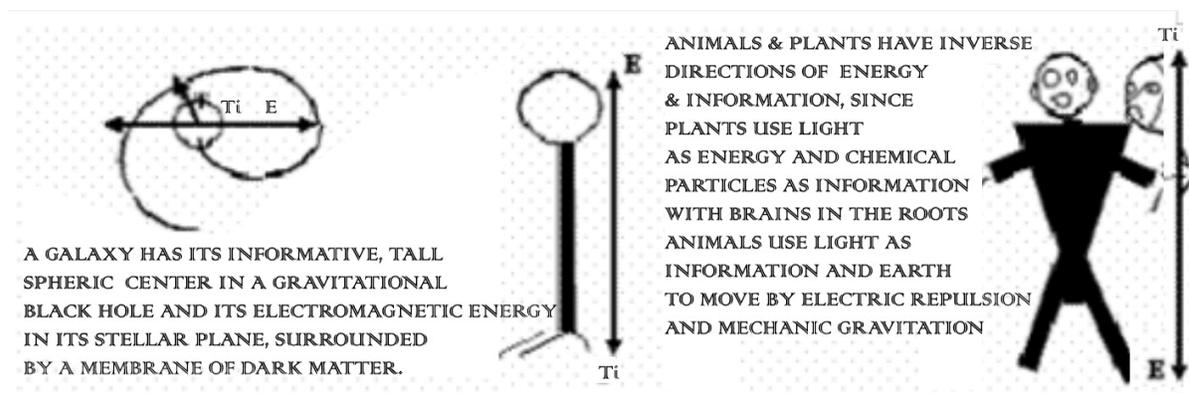
How many world minds are then generated by those two essential languages of reality varies then according to the complexity of the being in existence.

We humans at the present not very enlightened age live in a single dimension of time, and the simplest, most dangerous of them, lineal entropic time, and a single scale of space, sub-divided in 3 lineal dimensions of height-information, width-growth and length-motion. And that is all.

We can then talk of more complex beings, with dual, ternary, penta and Dodecalogic, which seems to be the limit of human capacity to perceive. And will be gradually used here. Let us then consider a first upgrade to ternary logic and 3 bidimensions of space with motion...

What we mean by 'space-time beings? Space is 'form', 'distance', 'dimension', 'information', something that doesn't move. And time is motion, change. So spacetime would be a 'form with motion', which is what mathematicians call a topology. A form that can be deformed, trans-formed. We have coined a key word 'Dimotion' (dimensional motion) for those topological forms. So the first obvious question we must answer is what MEANS in REAL terms, the fact that all what exists is MADE OF SPATIAL topologies and TEMPORAL ages, of Space and Time? The answer is fascinating, as there are only 3 variations of mathematical space in a single "plane of the fifth dimension", the so called hyperbolic, elliptic and toroid topologies. So we affirm that:

'All entities of the Universe are topological systems made of 3 'dimotions of spacetime'. Since *in the whole Universe in either 4 or 5 Dimensions there are only 3 topological varieties of form with motion; the 'elliptic particle-sphere', the 'hyperbolic bodywave' and the 'toroid, lineal limb-field', illustrated in the next graph for the 3 kind of species studied by the 3 disciplines of science, physical, biological and human 'stiences':*



The 3 elements of all systems, lineal/flat limbs/potentials; spherical, tall heads/particles and its hard membranes of dark matter, trunks and skins accomplish the 3 functions of motion, energetic reproduction and informative perception in all systems, varying to adapt the system to its larger world.

### The 3 only topologies of all systems of Nature.

All systems of nature can be 'reduced' to fractal ensembles of 3 'conserved quantities', angular momentum - the membrane of the system, which of course becomes a fractal sum of 'cellular cycles' of the skin of the system in human beings. And so on... Vital energy, the enclosed cyclical forms and motions within the space whose boundary conditions are given by the membrane, and lineal momentum, the motions with a 'finality' we perceive guided by a 'relatively still mind-point-singularity' that focuses the energy and information transferred through the angular momentum membrane.

So with this proper understanding of the abstract 3 conserved fundamental substances of reality, space, time and the vital energy with them, we then observe the infinite variety of those themes, which can be explained either as a game of 3 perpendicular 'lineal' dimensions (the usual approach of science due to its error of lineal time, hence the dimension of 'perception and information' or height dimension of maximal projective geometry, the dimension of 'length' and motion or entropy, the one physicists recognize as a time arrow, and the width dimension of iteration and reproduction.

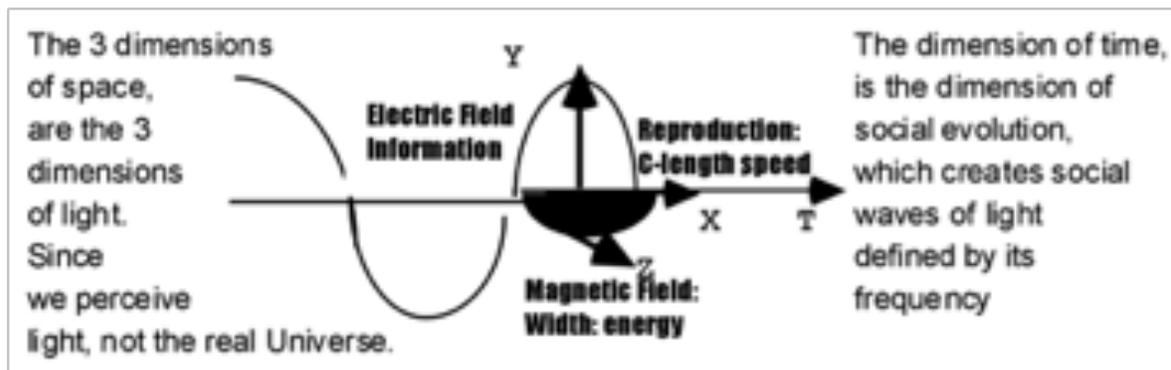
The insight that there are only 3 topologies in 4 and 5D nature is the key mathematical finding to fully account for topological evolution, the ternary nature of all systems and its functions and physiological networks, resolved NOT through intelligent design but through the limiting fact that there are only 3 topologies in space in the Universe. So by force all systems are ensembles of those 3 parts, shown in its simplest 'geometry' on the graphs.

SO the 3 first dimensions of lineal space, TURN OUT TO BE not the TRUE DIMENSIONS but its holographic bidimensional equivalents, the 3 topological varieties, CYLINDRICAL long limbs/fields, Hyperbolic wide bodies and spherical tall heads, with vital organs and functions as:

HEIGHT where spherical heads, the surface that stores more form in lesser space is the advantage point to perceive information.

LENGTH, the property of legs and fields of locomotion is the cylindrical shorter line between two points.

And WIDTH is where the energy of reproduced, clonic cells is stored.



So all in all both the classic 3 dimensions of lineal motion, informative height and reproductive width, and its expanded bidimensional topologies DO have organic vital properties too.

You can then ask yourself, why we use 3 'lineal dimotions to see' - and the answer already put forward by Kant is that LIGHT has as a space-time organism, which feels our view of vacuum space, exactly those 3 organic dimotions: c-speed length, electric informative height and a wide magnetic field that supports them:

So we introduce the key word in the entire generational space-time perspective, a Dimensional motion, or topological Dimension which doesn't change its nature with changes of form and motion, unless it is ripped off, a '**Dimotion**' of space-time and pound again in the fundamental concept that IT IS BIDIMENSIONAL, and can be seen in either variety, as SS (area), ST (DIMOTION proper) or TT (ACCELERATION). And affirm all systems are made of those 3 Dimotions of spacetime. When we perceive them simultaneously in space they ensemble into organic beings.

**RECAP.**

Lineal limbs/fields/ planes are the shortest distance between two points, so they are excellent for locomotion functions to perform maximal motion/distance, and hyperbolic body/waves HAVE both topologies pegged together so they can reproduce all the system, and are ideal for body-waves that maximize the reproduction of the being. So simple, so perfectly beautiful, so obvious, so long ignored, the Fractal Generator of space-time makes sense of all what exists.

So ternary systems are NOT static bidimensional forms, which can be merely added; they are topologic vital forms, constantly exchanging form with a little motion (information).

We shall write THE TERNARY topology also in many ways and make it increasingly complex as we study different dimensions of 'form' and 'motion', of 'space' and 'time'. But in its simplest mode is the most extraordinary simplex equation of them all:  $\$ \approx \delta$ ; whereas \$ is the limbic system,  $\delta$ , the particle-head with its clocks of information and  $\approx$  the bodywave that iterates and puts together both.

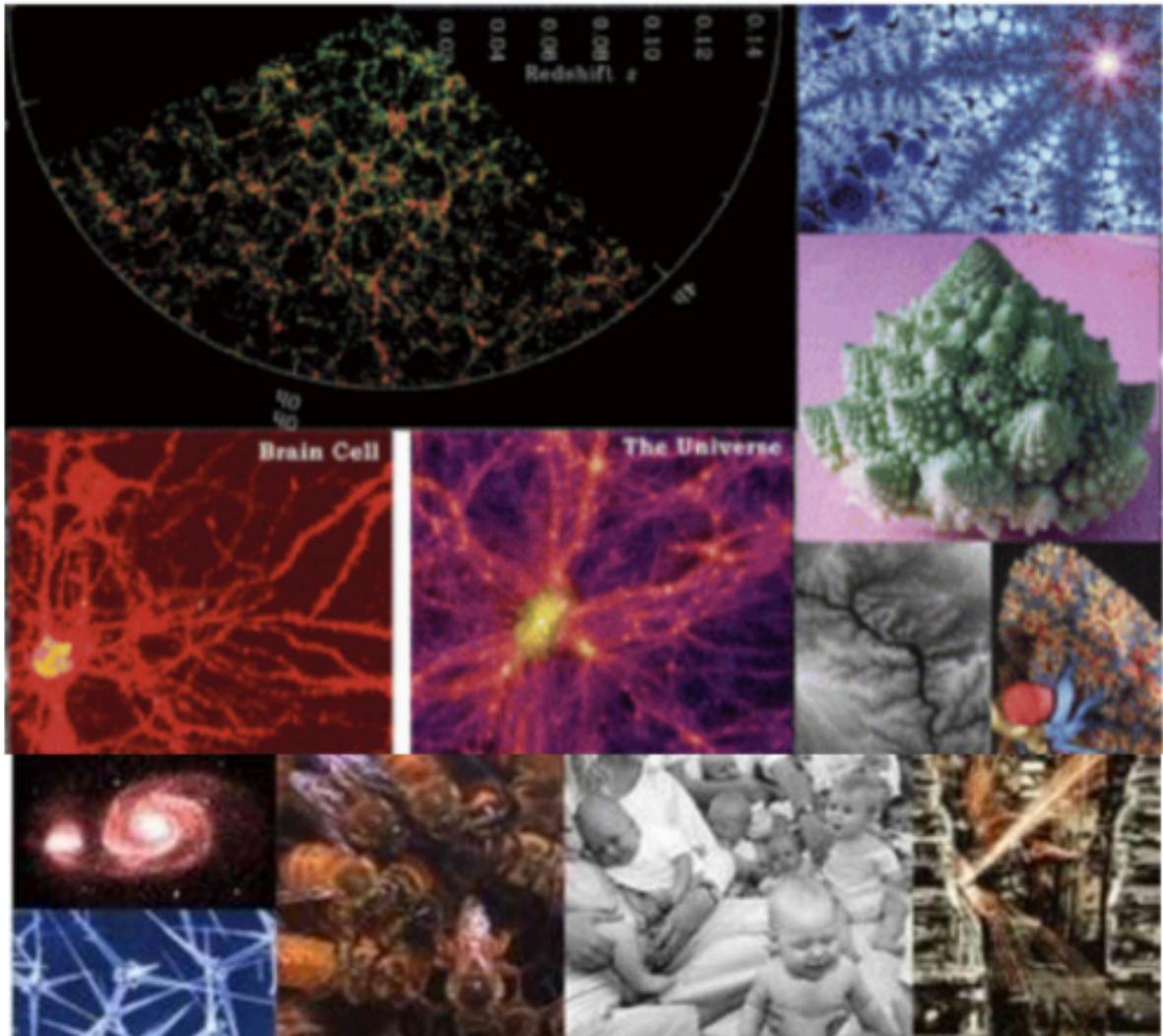
*@>f: \$t: (limbs/fields of motion and Universe) <ΣΠ> \$δ<<Sδ (still mind form or world)*

The ginormous quantity of consequences of being made of those 3 topologies would fill up when study in its details - all the beings and super organisms of reality and its ternary parts - an entire galactic encyclopedia. So in this very brief introduction we shall consider the most remarkable consequence in the simplest level of understanding of it - the ternary principles of conservation of physics that correspond to the 3 parts of all systems.

### III. 5D: SCALAR BIG-BANGS

#### The fractal organic structure of reality.

Let us then start, before boring the reader, with its the higher conceptual elements required to upgrade his 'chip' to an organic philosophy for all sciences, and its 'Iterative' methods of knowledge in which we keep peering to the essential properties of the fractal, organic, sentient=multi-linguistic universe, with growing depth, considering a first factual view of the Universal fractal and its self-similar forms -, with a 'fact' experimentally proved, but largely ignored by present academia, due to the repetitive, memorial nature of the Universe and all its parts, including huminds (ab. human minds) - the fractal, organic structure of all systems of nature regardless of scale:



Universe is a fractal that reproduces information, 'forms in action' and then self-organizes them in networks and systems that evolve into super organisms in all scales of reality. As such it must be studied with the philosophy of Science, called 'organicism'. Since only an organism is self-reproductive and hence requires not external 'agent' or God or a creationist language, as present philosophies of science (mechanism, pythagorism) or Abrahamic religions do. Further on experimental evidence is overwhelming, on the nested, reproductive structure of nature, as observed in the graph for all systems. So if we RESPECT the scientific method, to which most scientists, and needless to say, religious people, pay only lip service, its 3 classic tenants, **A)ccurate data**, without ad hoc solutions and selfie biases **B)io-Logic models** that

allow new hypothesis and **Cyclical patterns** that allow the existence of laws of sciences based in the predictability of this cycles must be put forward for a NON-creationist, true philosophy that explains the fractal=organic structure of the scalar Universe. Till recently we lacked a formal proper development of such 'organic philosophy of science', the *only one that respects the tenants of the scientific method*, a goal we shall achieve in this blog.

In the previous graph we showed some experimental proofs of the fractal Universe. Each photograph is a fractal structure, taken from different sciences that study different entities of nature since each part of the Universe has a fractal structure, and so does the Universe at large, made of all those fractal parts.

The graph shows the basic nature of reality: a fractal that 'reproduces information', forms-in-action, a combination of pure time-motion and space-form, in all scales and with the same program of the 5 Dimotions of time space.

A text that explains it taken from sciam:

'In March 2007, after Pietronero, an Italian astrophysicist, showed the fractal nature of the Universe, tabulating an enormous number of galaxies, whose distribution was fractal, the magazine *New Scientist* published an article on the theme, confronting Mr. Pietronero and Mr. Hogg, a quantum physicist from the previous outdated probabilistic, mechanist, quantum paradigm:

"The universe is not a fractal," Hogg insists, "and if it were a fractal, it would create many more problems than we currently have." A universe patterned by fractals would throw all of cosmology out the window. The big bang would be tossed first, and the expansion of the universe following closely behind.

Hoggs's team feels that until there's a theory to explain why the galaxy clustering is fractal, there's no point in taking it seriously. "My view is that there's no reason to even contemplate a fractal structure for the universe until there is a physical fractal model," says Hogg. "Until there's an inhomogeneous fractal model to test, it's like tilting at windmills."

Pietronero is equally insistent. "This is fact," he says. "It's not a theory." He says he is interested only in what he sees in the data and argues that the galaxies are fractal regardless of whether someone can explain why.

As it turns out, there is a model that may be able to explain a fractal universe. The work of a little-known French astrophysicist named Laurent Nottale, the theory is called scale relativity. According to Nottale, the distribution of matter in the universe is fractal because space-time itself is fractal. It is a theory on the fringe, but if the universe does turn out to be fractal, more people might sit up and take notice.

A resolution to the fractal debate will only come with more data. Sloan is currently charting more galaxies and will release a new map in the middle of 2008."

Of course, the Sloan 2008 showed the Universe is a fractal.

This should have been big news all over the world. But that means, as Hogg recognizes, that we have to throw to the trash the big bang and the expansion of the Universe, accept the fractal informative structure of reality, and close down some big projects of science, such as the large hadron collider, which will merely cause a planetary big bang, very different from the birth of the entire Universe.

## THE FIFTH DIMENSION.

How can we formalize those scales of Nature's fractals? A mathematical fractal has 'scales of diminishing size' which are self-similar as life does, from ecosystems to organisms to cells, or gravitational systems, from galaxies to stars to atoms.

Moreover, the scales that are similar can be described mathematically as nested organisms, co-existing thanks to a peculiar mathematical property: its 'speed of time clocks and information',  $\delta f$ , DECREASES with the GROWTH of size in space ( $\delta$ ).

This is called a Metric co-invariant equation of spacetime which is the definition of a dimension of space time:  $S \times T = K$ . So we call the scalar structure of the Universe and any super organism of spacetime within it, the fifth dimension (ab.  $\Delta$ ).



The metric equation of the fifth dimension of space-time which allows travels through its scales is simple as all space-time metric are:  $S$  (size in space)  $\times$   $T$  (speed of time clocks) = Constant. So smaller parts have more speed of time clocks which carry its in-form-ation in the form and frequency of its cycles, coding larger systems: genes code cells, memes code social organisms and particles' quantum numbers code physical systems. But larger forms have more spatial energy and enclose and control in synchronicity its faster smaller parts, creating the co-existing scales and symbiotic cycles of super organisms in any 'stience' of space time organisms.

It follows then that for each super organism and its relative  $\Delta \pm 1$  scales, the quantum, thermodynamic and gravitational scale on the galatom, there will be LIMITS OF lineal SPEED or locomotion (lineal inertia, momentum) and INFORMATION processing in cyclical clocks of ANGULAR momentum, which will become the vital constants of the system, whose product will be the METRIC of that organic system, all pervading in all its other derived dimotions and equations.

THE metric of the galatom then is immediate:  $\delta(c) \times \delta(h) = \text{Constant}$ , as the largest speed-distance is that of light and the minimal unit of information, the Planck constant, which incidentally has just been defined as the unit of our 3 physical parameters,  $h = \text{mass} \times \text{area} \times \text{frequency}$ .

Which means we are *all super organisms made of Planckton, the simplest form with the 3 elements of which all beings of the galaxy are made, mass, area, the unit of vital space=energy and time frequency - the Unit of cyclical time in 5D physics, latter explained in more detail.*

It happens then that for 'each super organism' through all its scales, departing from its minimal unit, Planckton in physical systems, cells and feeding Plankton in biological systems - both symbiotic and pyramidal relationships are established that carry its synchronicities and parallel quantitative structures in scale, time cycles and metric equations that allow the interaction of all the parts of the nested Universe.

And we shall study on those organic terms 4 fundamental super organisms, the galatom, Gaia, History and the eco(nomic)system; and 3 fundamental languages that mirror those properties when vitalized with the insights of organicism, mathematics, logic and verbal thought, as all of them will have the same Universal grammar, reflection of those laws.

Now, the choice of bidimensional spacetime NOT lineal space as the unit of space, hence area, of frequency and cyclical time, NOT lineal time as the unit of time, and mass and charge easily unified with the previous metric are NOT choices but logic impositions of the fractal structure of the Universe. And so we shall refer to those properties first.

### **Logic Consistency: The Infinite, Hierarchical Universe**

A good description of the fractal universe and its logic principles is this text from the Web by Mr. Oldershaw from Amherst University:

With regard to cosmology, we live at a very privileged time. When we read about exciting and revolutionary paradigm changes, in which our most fundamental ideas about nature undergo radical revisions, the drama usually has taken place well before we were born. Today, however, we have the rare opportunity of witnessing at first hand a profound transformation in our understanding of how the Universe is structured. This ongoing change of cosmological paradigms from a “small” finite cosmos to an infinite fractal cosmos began about two decades ago and is in full swing at present. The short version of what is happening goes like this. For about 50 years the Big Bang model of the Universe has provided an excellent explanation for the basic cosmological observations: a very large-scale expansion, an approximately uniform background of microwave radiation and a unique set of abundances for the atomic elements. However, there were some technical problems with this model, such as an a causal beginning of space-time, a lack of magnetic monopoles, an unexpectedly high degree of uniformity, and an enigmatic knife-edge balance between the open and closed states.

Then in the early 1980s Alan Guth showed how these and other problems with the Big Bang model could be solved in one fell swoop with the Inflationary Scenario. But, an ironic thing has happened. Although the Inflationary Scenario was developed to rescue the Big Bang model, the most logical consequence of pursuing the concept of Inflation is the replacement the Big Bang paradigm with a much grander and more encompassing paradigm. According to Guth and a growing number of leading cosmologists, the most natural version of Inflation theory is Eternal Inflation in which Inflation is, was and always will be occurring on an infinite number of size scales. The new paradigm that cosmologists have arrived at by several routes is an infinite fractal hierarchy that has “universes” within “universes” without end. The astronomer Carl Sagan once referred to the general idea of an infinite fractal universe as “strange, haunting, evocative—one of the most exquisite conjectures in science or religion.”

That is the basic story, but because of the profound changes the fractal paradigm will have on our understanding of the Universe and the place of humans within that Universe, it is important to explore the implications of this new vision. Firstly, there is no edge or boundary of the Universe; space is infinite in all directions. What we used to refer to as “The Universe” can be more appropriately called the “observable universe” (note the small “u”) or the “Hubble Volume,” and it is only a tiny part of what one might call our “metagalaxy” or “level 1 universe”. We currently have no way of determining the size of our metagalaxy or the number of galaxies it contains, but we could reasonably assume that both figures would be vastly beyond anything previously contemplated.

There would be an infinite number of these level 1 universes, and on an unimaginably large scale they too would be organized into level 2 universes, and so on without limit.

Secondly, time is also infinite in the unbounded Organic universe. Whereas our Hubble Volume may have come into being and began to expand approximately 13.7 billion years ago, the Universe has always existed and always will. Parts of the Universe may be created or annihilated, may undergo expansion or contraction, but the infinite fractal hierarchy remains unchanged overall, and thus is without any temporal limits.

Thirdly, there is no limit to size scales. In the infinite fractal paradigm there is no class of largest objects that would cap off the cosmological hierarchy; the hierarchy is infinite in scale.

This fact removes one of the more suspect aspects of the old paradigm. Natural philosophers had long noted the unusual fact that within the Big Bang paradigm humans found themselves roughly in the middle of nature's hierarchy of size scales. This anthropocentric state of affairs seemed to violate the Copernican concept that when humans appear to be at the center of the cosmos, we should suspect that a bias is leading us astray. In an infinite fractal hierarchy there is no center of the Universe, nor any preferred reference frame.

Some interesting questions immediately arise. Why are fractal hierarchies so ubiquitous in nature? By studying empirical phenomena within the observable universe, how much will we be able to learn scientifically about the parts of the Universe that lie beyond our observational limits? Does the infinite cosmological hierarchy have a bottom-most scale of sub-atomic particles as is currently thought, or is this another artificial limit to an infinite Organic universe that actually extends without limits to ever smaller scales?

Centuries ago Immanuel Kant, J.H. Lambert and a few others proposed an infinite hierarchical model of nature based largely on natural philosophy arguments. This general hierarchical paradigm never garnered a large following, but it was kept alive by numerous rediscoveries. In the 1800s and 1900s quite a few scientists, including E.E. Fournier d'Albe, F. Selety, C.V.L. Charlier and G. de Vaucouleurs, argued for hierarchical cosmological models based on the hierarchical organization within the observable universe.

Then toward the end of the 1970s, the mathematician B. B. Mandelbrot gave the hierarchical paradigm new life and widespread exposure by developing the mathematics of fractal geometry and demonstrating that fractal phenomena based on hierarchical self-similarity are ubiquitous in nature. In this way natural philosophers, empirical scientists, mathematicians and theoretical physicists have all found their way, slowly but surely, to the infinite fractal paradigm. There are many routes to this paradigm, and certainly there are a large number of distinct versions of the basic paradigm that have their own unique theoretical explanations for why nature is organized in this manner, but the general paradigm that nature is an infinite hierarchy of worlds within worlds has fully arrived, and will probably be our dominant cosmological paradigm for the foreseeable future.

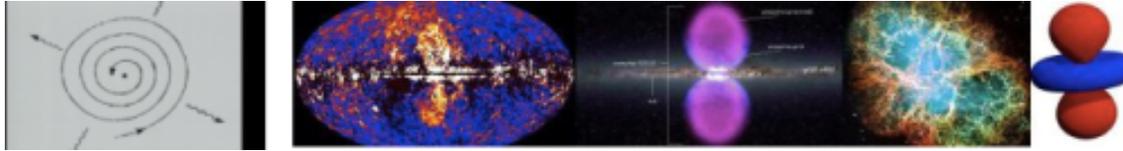
Indeed, in the fractal paradigm, the Universe is infinite and the big bang is not the birth of all realities, but any local big bang and big crunch dual process, any explosion that splits the physical energy and information of a complex system, in any of the multiple scales of physical reality.

So first for the impatient, we shall have a fast glimpse to how a fractal Universe look when we add scalar elements to the 'entropic big-bang'.

### ***Scalar entropic big-bangs in a balanced immortal Universe. The Galatom.***

In the fractal model the big-bang is the death entropic motion of physical matter, but because the Universe is both scalar and it has information, a dimension of form, signified by the gravitational informative force, physicists ignore in their calculus of its expansion, happening in galaxies that balance the dark energy between them, we shall find both, balances of forces that make the Universe wobbling, and big-bangs and informative forces in multiple scales of the Universe, talking of multiple big-bangs balanced with big-crunches.

So how we shall correct big-bang theory to fit into the fractal view of the Universe? We dedicate many pages on the articles of astrophysics to that matter but let us just give you a prime:



Left, when we add the gravitational force that warps 1D space into 3D mass in galactic vortices, they balance the expansion of 1D space in entropic vacuum as light dies into dark entropy lines between them. As mass warps 3 1D flat-vacuum into a 'high volume' it's 3 times more powerful in its warping, hence the 75-25% Balance of mass to dark entropy. Thus the fractal Universe is immortal. On the right its scales all suffer similar  $e=mc$  dual processes of warping through gravitational forces of cyclic momentum that create those galaxies, and expansive big-bangs of lineal momentum balanced in combined cycles of energy - the 3 conserved quantities of each fractal spacetime physical organism, which put together give birth to the 3 conserved laws of nature the Big Bang totally ignores - among many other known-known laws. So the use of a fractal space and cyclical time arrows fully accounts for the immortal Universe and its balanced 3 arrows of space-time, conserved in its infinite reactions; energy, information stored in the cycles and frequency of those systems of angular momentum, whose minimal constant form is  $h$ , and lineal speed, conserved in the constancy of light. Why those obvious facts of SOUND physics are then 'reduced' to entropic creationist big-bangs in a single plane of space-time despite evidence? It is the ego paradox: what the big bang does for science is a religious 'closure' with man and its simplest mathematical lineal equations at its center, which added to the denial of organic sentient properties to physical reality allows to feel the high popes of science a sensation of absolute knowledge, as the religious person feels that all is known in the mystery of god - a word eerily similar to the lineal equation of the big-bang ' $V=Hod$ '. Of course for that worldview to hold a silence must be censoring all other properties of reality Not include in the word God and the equation  $V=Hod$ , namely 96% of the Universe of dark matter and energy, and all the galaxies who don't expand by the law of  $V=Hod$  (: So once  $V=Hod$  explains only the Void, all is fulfilled :) Hence that sensation of shallow fulfilling so common among physicists and abrahamic believers that believe all has been responded and no doubts on 'important themes' remain to be known - and if a philosopher of science comes to point out such shortcomings, he will be dismissed because he is not an 'expert' on the language of  $V=Hod$ . So neither of them have much curiosity except on their 'religion language, maths and words' and their 'creationist theories' - while vortex of galaxies that evolve in-form-ation, and its gravitational in-form-ative forces that do NOT expand are thrown to the nearest black hole.

To notice finally another detail of that graph of scalar big-bangs that happen from Beta decays (right picture) that explodes nucleons into atoms, to Novas that explode stars and maybe planets doing experimental big-bangs at home, to quasar black holes that give birth to new galaxies. In the center we see a map of the Galaxy, which just recently showed to have two lobes similar to those of the first electronic orbital of a Hydrogen atom born in self-similar fashion in the quantum scale. In the left side we see the background radiation that is supposed to come from the Big Bang 13 billion years ago, but HAS in its center the exact 2 lobes recently found above the black hole.

This came as a surprise, because even though the background radiation is a LOCAL MEASURE, hence must and can be explained by local causes in the galaxy - any moon MACHO, THAT IS, a quark nugget of heavy matter that has eaten a moon will produce the exact same background radiation - it is supposed to be coming in the hyperbolic big-bang from the 'beginning of time' 13 billions years ago, and each point represent not a lowly moon Macho (name astrophysicists give to the dark matter ultra heavy gravitational MASSive Objects of the Halo) but a GALAXY traced 13 billions years ago. Alas, they were devising an experiment to study 13 billion years lasting gamma rays coming from those point-galaxies, which was silently dropped when the Lobes were found to be local.

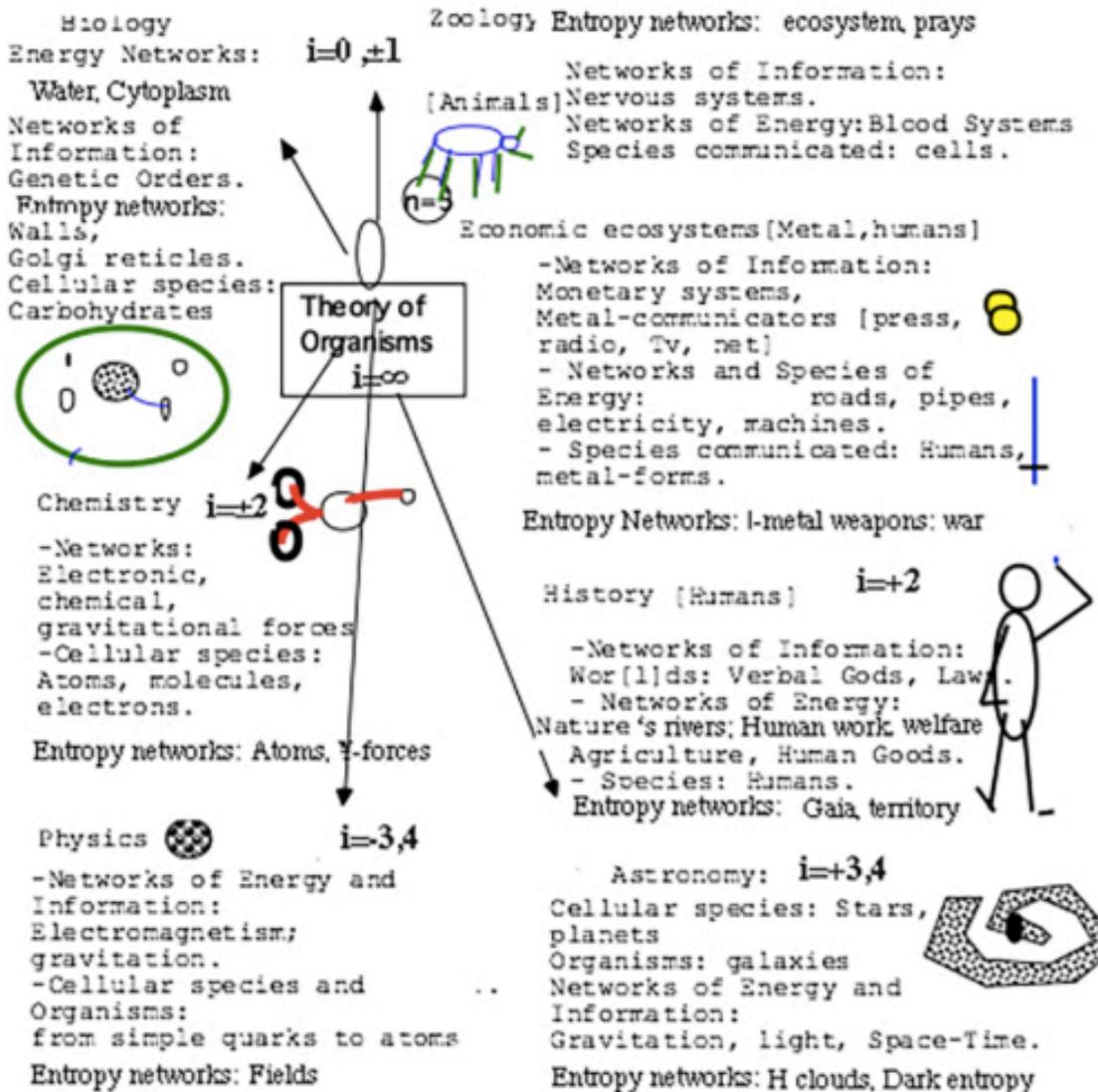
The conclusion is obvious and within the logical structure of fractals: *all measures and laws of physics we have are local to the galatom, including the metric  $hc$ , with its limits of cyclical form and lineal speed.* But outside the 'system' there will be larger scales with faster lineal speeds, and smaller faster systems of processing information giving birth to a Russian doll like nested series of Universes, worlds, superorganisms, organisms, etc

# IV. TIME&SPACE SUPERORGANISMS

So if the big-bang is NOT the most profound description of the Universe in time, what is it?

The answer is much more profound than humans in this age of simplex entropic theories of reality can even imagine, making truth Haldane's dictum 'the Universe is not only strange but stranger than humans can imagine', as it is NOT a spatial image, NOT a mathematical object (only a part of it and one of its multiple languages that describe it) but a LOGIC GAME OF intelligent time=motions and spatial dimensional forms, that knot together creating timespace organisms - a series of similar atoms, cells or individuals joined by those 3 topologic networks.

## THE FUNDAMENTAL PARTICLE



In

all species studied by science a common phenomenon occurs: the existence of parallel groups of beings organized into a single social form. Molecules are made up of atoms and electronic networks; economies are made up of human workers and consumers that reproduce and test machines, guided by financial

networks of information (salaries, prices, costs); galaxies are composed of stars, which orbit rhythmically around a central knot, or black hole of gravitational information. Human bodies are organized by cells controlled by the nervous, informative system.

A tree is a group of leaves, branches and roots connected by a network that provides energy (salvia) and information (chemical particles) to its cells. Cultures are made of humans related by verbal, informative Disomorphisms and economic networks that provide their energy and information.

Stiences study those organic systems, tied up by networks of Dimotions. In the graph, we see the main planes studied by human sciences and their 4 main time arrows,  $Sp \times \delta f$ , which in static space give birth to the 'organic elements' of all species: social cell of energy and information and the reproductive networks that relate them. Thus, there are 4 basic elements in all organic systems:

- Cellular units.
- Networks that move the system (limbs/potentials)
- Networks of fractal information (heads/particles).
- Networks that reproduce vital energy (body/waves)

Then, as all organisms wear out by errors of informative action and end up warped by an excess of information (third age of the organism) or killed and reconverted into formless energy (death); only those *systems which have reproduced in the immortal Universe, do exist today*. So all dual systems do have an internal system or external 'enzymatic' catalyzer of its reproduction (as enzymes do with carbohydrates, or enzymen with machines). Thus we talk of the third 'body-worker-wave' element, besides an informative particle-head-upper class and a limbic/potential/territorial source of its motions which the system uses internally or externally to reproduce. This IS our definition of an organism. And so a factory is an organism, when we put the human enzymen, even if the machine alone is not.

Such model is vastly more explanative of reality than the mechanical abstract models dominant in the tradition of physical sciences for a few basic reasons:

1. Only an organism replicates itself without the concourse of a 'maker of the machine' - God in the earlier physicists' view, now obsolete. As machines do not reproduce.
2. Only the definition of time as the substance of reality - cyclical motion that reproduces form allows the Universe to move, as only if motion=time is the ultimate substance the Universe never stops.
3. Only if it is cyclical, repetitive, there are laws of science which are precisely those repetitive motions.
4. Finally we know since Relativity that there are infinite clocks of time with different speeds (we knew it always just looking at the clocks of nature, but the expansion of physicists' way of measuring all time clocks equalized to the rhythms of the mechanical clock, had obscured those facts.

Of course if we want just to 'measure' from a human point of view, those rhythms, a single mechanical standard of time, the second can study those cycles, and a single line that ads 'cycles' pegging them can represent the time duration of a being, but we loose its meaning, its form, its in-form-ation. And if we want to make a complex analysis of the whys and repetitive patterns, and organization of those patterns we won't be able to do it.

So Organicism is a far more profound theory of reality as it can use all the language-mirrors to express its topo-bio-logic properties:

- The mathematical language, best for its spatial description, which models organisms in the form of fractal networks, for which we shall adapt and expand its most advanced forms of space, topology

- space with motion - and non-Euclidean geometry - fractal points with volume that grow in size as we move closer into its scales, allowing  $\infty$  parallels of energy and information to flux into them.
- The logic language, ideal for temporal, causal sequences and cycles, which we shall improve from the simpler Lineal Logic of locomotion, into Duality, the logic of two arrows of time, energy and information and further on into 'trinity', as both combine into energy beings - the logic of topological organisms, conservation principles, Universal grammar, and even further on into pentalogic and Dodecalogic...
- The Logic of life... Since indeed, a fractal REQUIRES to be understood a new dimension of parts that become wholes, larger scales co-existing together gifted therefore with organic properties as atoms/cells/Individuals form part of thermodynamic/biologic/social ensembles that become wholes, living in a larger gravitational, ecosystemic or planetary world.

We call that super organism of astrophysics, the galatom, (as it happens between the quantum atomic scale, and the galactic scale, which are self-similar - with similar forces, and particles similar to celestial bodies). Within the galatom in the intermediate stage there exists, thermodynamic man.

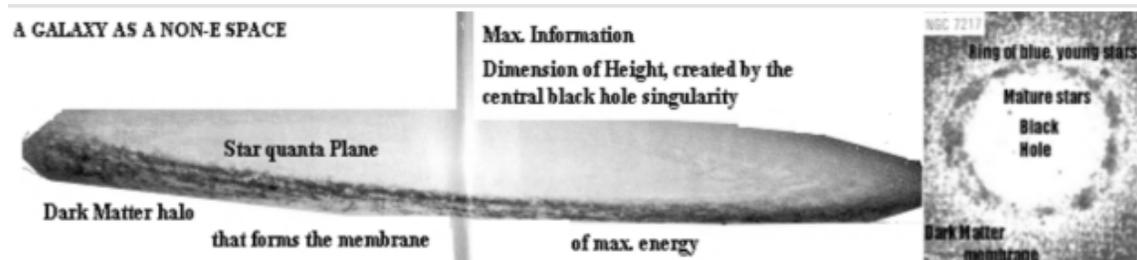
It is then evident that the organic paradigm rejects 'mathematical creationism' in physics - the belief an equation describes all the properties of a system, which NO LONGER NEED parts; as in the case of black holes which are modeled with singularities - mathematical enteleshies of infinite density and infinitesimal volume but as Einstein wanted, they must be made of a cut-off substance, which can only be heavy quark atoms (bcb atoms). This is treated extensively in our articles on physics on other site, [cerntruth.wordpress.com](http://cerntruth.wordpress.com), so we keep in this one the part of physics smaller.

But if mathematics and logic are languages, mirrors of an a priori reality, what can be that 'reality' that comes before the languages that describe it?

Obviously as mathematics is derived of geometry, the science of space and logic is the science of causality in time, space and time must be the first substances of which all is made, a model of reality that has a deep tradition both in the east (philosophies of a Universe made of two poles, space=dimensional form, or 'yin' and time=motion or 'yang') and the west (starting with Leibniz)...

### The galaxy as an organism: the galacell.

What will then be the 'perception' of the Galaxy not in mathematical terms but in organic terms emphasizing its networks, organic parts and processes of generation of stars and matter. We shall call that model the Galacell:



In the graph, Galaxies are fractals of stars and dark, quark matter built with 3 topologies: a reproductive body of stars, sandwiched between an informative nucleus of black holes and an external halo of dark matter, probably strangelets and other dense stars. The closest self-similarity in our world scale is a cell so we change our words when conveying the organic properties of the galaxy, some of them summarized in the next graph:



*scale, made of smaller  $\Delta-1$  parts (atoms, cells, individuals in species and human societies), which co-exist in a larger  $\Delta+1$  world.*

### **The principles of organicism**

All this said, How the Universe looks when we consider information not entropy its fundamental arrow of time, in the design of the future, likely will have surprised the reader, and likely made him doubt of my sanity (: as he has been 'warned' against the very existence of the vital and sentient properties required for an informative Universe to exist, by hundreds of years of 'reducing' reality to external locomotions.

The problem is scientists are not aware, as in so many subconscious controls that limit our existence, that those 'entropic limits' imposed by physical reductionism are NOT scientific but cultural, and we shall return to that entropic principle (from entropy and anthropic, ego centered beliefs, which make us consider man the only intelligent informative being and the rest of the Universe a chaotic, entropic world)

We shall show it is actually more likely the opposite - man living in an entropic age, and the Universe far more intelligent, organic and ordered...

Since fractals are by definition organic, as multiple scales co-exist in them.

So we call our fundamental particle of existence, a metaphysical organism, because it goes beyond physics and its reductionism, but we don't mean by metaphysical 'beyond science'.

We are NOT challenging the scientific method, on the contrary we shall prove that metaphysics is both experimentally and logically far more sound than our present physical description of reality.

What we are NOT doing is any concessions to the 'cosmic censorship' of 400 years of physics of locomotion which pretends to be the highest scale of science, just because it eliminates as relevant all the other properties of Nature's systems. Instead we affirm that metaphysics; that is, 'philosophy of science', not physics, and information not entropy are the highest model and element of reality. And both can be resumed in the concept of an organism.

Indeed, beyond its mathematical details, the fact that the Universe is organized in fractal patterns of form, means reality IS organic, entangled, DOMINANT in both information and motion, space and time - and one without the other makes no sense at all.

Yet to fully grasp this concept, we have to realize that "fractal equations" are "organic equations," which participate of the properties of organisms. Fractal equations create forms as life does. Fractal equations create self-similar "cells," as life does. And in fact, they use the same term. Fractal equations are also called generator equations, as they are the mother cells that encode the information needed to repeat a living form. Finally a fractal equation will create a pattern of interconnected parts, which put together reproduce a whole, self-similar to their parts, as organisms do.

The only thing a fractal equation does not have is motion, as it is a simplified geometrical description of reality. So in the same manner, geometry lacks motion; simplified fractal equations didn't have motion when they were first discovered.

But now, fractal science has advanced a step further, thanks to the evolution of fractal logic, duality, and non-Euclidean geometries, so we can understand finally the meaning of motion in the Universe.

# V. TIME CYCLES

'Every point is a world in itself'. Leibniz on the fractal points, non-Æ units of vital mathematics.

## Lineal vs. cyclical time. Ordering $\infty$ time clocks.

The Universe is an organism of space=form and time=motion; two parameters hardly understood by humans. In essence there are infinite 'clock-like closed' time cycles, which carry the in-form-ation of the Universe in the form and frequency of its closed cycles. Humans however equalize all those cycles of time space organisms with a single mechanical clock since Galileo and Kepler became in 'awe' of its mechanical discovery.

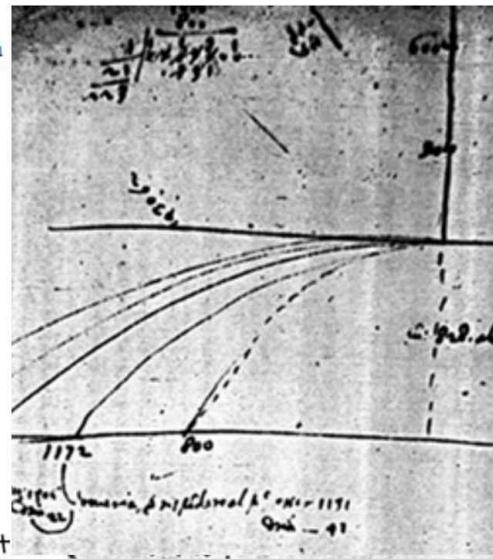
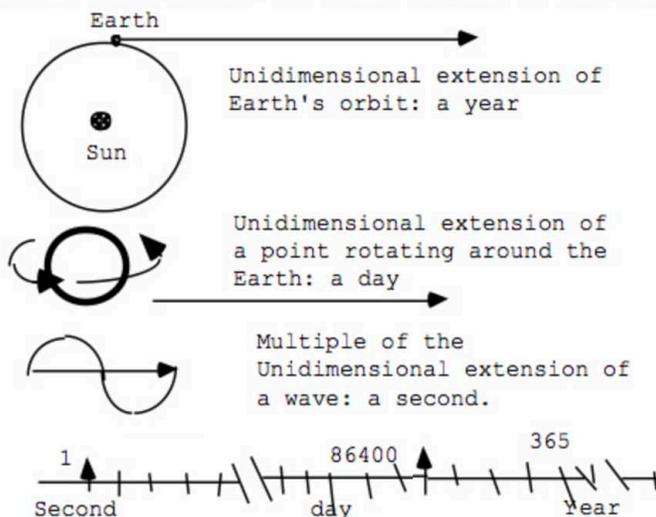
Reality of course is far more complex. The enormous number of different clocks with different speeds in the Universe require to study 'new properties of all of them'. What those clocks of time have in common: to be closed cycles, hence to divide reality into an inner and outer region, to last in time, to conserve certain angular momentum-like quantities in the volume and speed of those cycles, and so on...

*Properties mostly about forms-in-action, in-form-ations, motions with form.*

How does a Universe of infinite time clocks of different size and speed relates to the present Universe in which all time clocks are equalized to the mechanical, clocks of metal-information, which were invented in the Middle Ages in Italy, and became the ONLY CLOCK-TIME OF THE UNIVERSE, once elongated into a lineal 'second-minute-hour-day-year' system of equalized time clocks (of light waves, mechanical clocks, earth's astronomical clocks).

Let us then start by describing the biggest blunder mankind has committed in the realm of knowledge: to simplify the nature of cycles of time-space into lineal durations, to measure best the locomotions of cannonballs.

**A year:**  
Cycle of existence of the Earth respect to the sun



Time is cyclical, all clocks of time and laws of science are based in the cyclical patterns of nature. But physicists developed ballistics and denied the obvious truth that we can know the future because it will

repeat the causality of the past, and we can change it by changing that causality, in History by repressing the lethal memes of the tree of metal and enhance the welfare memes that make us survive. Of course, lineal and cyclical time render the same equations as one is the inverse of the other, measured by frequency,  $T=1/f$ , but the philosophical implications of cyclical time, are ginormous and the in-form-ation provided by those cycles, erased by lineal time, a handicap for humans to truly understand the cycles of history and economics, the 'deep time' scales of the fifth dimension, and the whole workings of super organisms and its physiological structures.

It might surprise the reader to know then that ever since Newton and Galileo canonised lineal time physicists and by extension mankind lost its understanding of the modes of time=change of the Universe, reducing them to lineal measures of motion.

This didn't bother them as their work has been - since Galileo invented the discipline to measure motions of cannonballs in space - the exhaustive analysis of motion and speed, to the point they reduced time *the measure of all forms of change in all systems of reality*, to a parameter of space, with a single, simplified formula:  $v=s/t$ ,  $t=s/v$ .

So time in physics is NOT as in Nature, the measure and perception of change, but only of motion; which was understood and accepted as a limit to its science, which *was defined in the XIX c.* as the science of motion. Point.

The first fact you must understand IS that science is BOTH an instrument of power, and a form of culture, beyond the collection of data and its expression in equations, at the most basic detailed level. All what comes after - the general models of reality of each science *are always biased by the power idol-ogy of the historic culture that develops them.*

THE GRAPH shows one of the many examples we shall include in this blog: the obvious fact that time clocks are cyclical and multiple, but *humans have reduced them all to the concept of a single lineal time clock for the entire Universe that progresses towards a future, obviously 'positive' for the human kind.*

Physicists reduced our information of the dimensions and modes of time cycles by uncoiling all time cycles, missing its form and frequency, to be able to equalize them all despite all its different speeds through the second standard of a mechanical clock.

Then all its different speeds measured as mechanical time-clocks distances are pegged together as number of a line.

In the XVII c. Descartes founded a mathematical artifice, the Cartesian space-time plane, that allowed him to plot time in lineal terms and Galileo used it to define time as a parameter of lineal space-motions, reducing time studies to a single form of change and all its time clock cycles to a single time clock (time-space relativity,  $v=s/t$ , time as measure of translation, use of clocks, etc.):

Physicists uncoiled time-frequency, into lineal time,  $T=1/f$  BY WRITING THE INVERSE equation...

The equations are indeed the same. Lineal time writes  $T$  and cyclical time measured in frequency its inverse  $1/f$ ; so if we were to change all the equations of physics by putting  $1/f$  instead of  $T$ , we would change the PARADIGM of time to cyclical time but all the practical results will be the same, just expressed in frequency.

I.e. Speed = Space/Lineal time ( $V=S/T$ ), becomes Speed = wavelength x Frequency, ( $V=\lambda \times f$ ) ...

Cyclical time just moved to the numerator and that is all.

But the consequences are huge when we 'perceive reality as chaotic, lineal, free and entropic' guided towards the obvious 'future of death', which therefore *JUSTIFIES WAR AND BIG-BANG THEORIES OF A DYING EXPLOSIVE UNIVERSE* vs. the perception of time as cyclical, hence reality as bounded, entangled, multiple, whereas death is just the necessary end of a cycle of renewal of life, which we shall very soon show to be also the case for the fractal, organic eternal Universe, when we model it with the tools of cyclic time.

Ultimately though the problem of creationist mathematics - the belief equations are more important than reality - lays in the simplification of Euclidean mathematics, and its definition of points as having NO parts, when in fact they are timespace cycles. So a HUGE advance of this blog is to study POINTS WITH PARTS, fractal points that as we come into its scale grow in size and display the 3 minimal parts of all of them, its area, frequency of angular momentum, and central Active Magnitude, the true meaning of 'singularity' - the focus of charge, mass, forces and its informative minds. So let us introduce the minimal POINT with parts of the Universe, the time space cycle.

Again we will define cyclical time mathematically but also in its logic whys: A fractal repeats its forms in scales, and this co-existence of similar forms in scale 'sharing motions' of 'energy' and in-form-ation, is the definition of an organic life system - one that exchanges energy and information and grows from parts into larger scales, as the systems of the Universe do. So the Organic, Fractal Universe produces naturally 'life properties in being

This point - the existence of cyclical patterns in reality which are called 'laws of science' is then the next point to clarify.

We need to correct a second HUGE error of our understanding of TIME, since if space is fractal, time must then be cyclical, to break and enclose vital spaces, with its time cycles.

# VI. S=T: RELATIVITY OF MOTION=FORM

## Galileo: The true meaning of relativity.

'E pur si muove, e pur no muove', Galileo

But Galileo, that supreme Genius along Newton of the lineal, simplex absolute ballistic view of the Universe, sponsored by the Western Imperial genius, didn't end his simple mono dimensional logic of reality in the Cartesian graph. So we have to go back to him, once we know we are made of time and space, to consider the fundamental conceptual thought behind this DUALITY - the RELATIONSHIP between TIME=MOTION and space=form and how one can be converted into another; the PRINCIPLE OF RELATIVITY.

We said all what exists is made of space=form and time=motion. And yet physicists know that we cannot distinguish motion from form. That any being in motion from its point of view seems to be still and all other things moving around it. This is the principle of Relativity of motion.

Physicists then without much thought about that fascinating duality, went on to use mathematics to calculate the relative motion of each entity of reality respect to other system which seems static from both points of view. This is called Galilean relativity, latter refined by Einstein's relativity, and essentially is concerned with the mathematical calculus of what we shall call the 2nd Dimotion of time=change, locomotion. Fine, but at this *stage we are far more interested on the astounding duality and reasons why we do NOT see together MOTION AND FORM, even if all systems have both. Since it is the key to properly define space=form and motion=time and its entangled relationships.*

The conclusion of that duality not perceived is then rather obvious: one of the two parameters of reality is 'hidden' to perception; we either see motion or form, 'waves or particles' (quantum complementarity), distances and lines or points in motion (as in the night when fast cars in a picture appear as lines).

This duality, we write  $S=T$ , is *at the heart of every law of the Universe; and once more in the same manner we tried with some 'dark humor' to walk you away from the æntropic principles of Humind thought, we are now trying to make you break away from the "Maya of the senses" to realize that the ultimate substance is motion, and form is what a 'still mind', makes of that motion to 'perceive', information, forms-in-action.*

*Mind languages map reality into spatial forms. So we could say in a spiritual sense that all what exists are disordered entropic motions and 'minds-monads' whose languages create the order and forms of reality. 'Vital motion and perceptive minds' then make the Universe, 'vital, perceptive and intelligent'.*

Let us then study this amazing proposition in more detail starting from what Galileo discovered but unable to see this paradoxical duality, as HIS PROFESSION was ballistics, the study of the motion of cannonballs, he settled for motion and lost the chance to start science with a far more complex philosophical understanding of the world.

Since while Physicists did realize of the enormous importance of the paradox which became the cornerstone of their theory of measure, they *miserably failed to study the deep implications it has for*

every aspect of the structure of the Universe, from the duality between spatial mental, linguistic forms and physical motions; to the balances achieved by the similarity of both space and time, which becomes the fundamental 'equation of present'  $S=T$ , and hence with the metric equation of scales,  $\delta x \delta t = K$ , the two essential equations to formalize single planes  $S=T$ , and multiple scales of spacetime.

**Galileo's paradox: meaning of dimensions and motions.**



A dimension of spatial form can also be seen as a motion in time. *But we cannot know from the mental, still point of view, what truly is motion and what is dimensional form. So we must conclude both co-exist together. And so instead of talking of space forms and time motions as something different we must talk of space-time dimensional motions.* Both together become a 'Ḋimotion', the fundamental element of reality. It is the paradox of relativity of motion that started modern science but was not quite properly understood either by Galileo that chose 'motion' and discharged the static form of the Earth or Einstein that chose form and measured the 'simultaneity of space': Time Motions & space dimensions however co-exist and merge in every 'space-time being of the Universe. The 3 essential paradoxes of Galileo: how can we distinguish a closed, cyclical deterministic ordered form from a flat, free one, when can we distinguish motion from stillness, and how can we distinguish discontinuity from continuity are still unresolved, but will show one properly explained by the fractal nature of reality and the different perspectives of the mind, to be essential to the key concepts of our existence such as freedom vs. order, infinity vs. limit, cyclical vs. lineal inertia.

The first truth to understand about the Universe is that a motion of time is equivalent to a dimension of space. This was what Galileo found since we see still the Earth and flat but it is round and moving.

History of science took however the wrong path, when he affirmed that the Earth moved, without dealing with the *true question posed by Copernicus discovery: Why if the Earth moves in time, we see it as a still form in space? Reality is a constant game of infinite motions, but the mind focus in stillness those motions, and measures them at distances. So motion is for the mind relative to its systems of measure and perception, which are light-based.* What physicists do was to substitute the still distances for motions, and it took another 300 years for Einstein to realize the relativity of motion and its measure made essentially time and space, motion and form two sides of the same coin. But this realization was not explored philosophically and so it gave birth to a series of ill-understood dualities between 'states of measure and form' (particles, head gauging form, in-form-ation) and 'states of motion' (wave states). It is then essential

to grasp that motion and form co-exist as two different states depending on which scale of the fifth dimension we study.

Motions are perceived by minds that stop motion into form, into information, as distances. So if we see slow motion in the night a light it seems a long distance. Distance and motion CANNOT BE distinguished so they must be taken as two side of the same being, a Space=time DIMOTION (ab. Dimensional Motion):

$$S = T; \text{ Dimension-Distance} = \text{Time-motion} = ST \text{ Dimotion.}$$

*Galilean relativity was ill-understood, as the true question about time-change was why 'we see systems still when they move', and 'why we see space as continuum, when in detail is made of quanta', and why all systems are made of smaller self-similar systems.*



For a slow mind the Earth will seem a disk, denser the faster it turns converting its full worldcycle of time into a form of space. Reality thus is MADE a blocks of time for its 'wholes' which in 5D metric are the slowest parts who perceive the largest reality. For the universe is the definition of an  $\uparrow$ logic impersonal God, the laws of the game of  $\infty$  fractal existences.

We said that all dimensions of space have a hidden motion to them. This again was slowly realized in mathematics, as they finally came to the conclusion that the still Geometry of the Greeks was part of a much vaster, generalized concept, a topological variety, where a topology as opposed to a geometry had internal motion-change.

So while you could describe the dimensions of a being in an external locomotion without inner change, the internal change in the in-form-ation of beings, we have started with MUST BE A TOPOLOGICAL VARIETY.

So there is NOT really a Dimension or a motion but a combination of both, even if *mentally we tend to reduce motion and focus on forms, all has motion=time, and form=space, and this is truly the meaning of 'spacetime', the messing of both into DIMOTIONS.*

We are now introducing another 'novel feature' of a world which has NOT only a clock and time motion or arrow of time (entropy in physics) but 5 'Dimotions', *the fact that logically we can explain reality from multiple perspectives, one for each dimotion, as all is entangled. So there are always several ways to prove a certain truth.*

Even In-form-ation must be transmitted through motion, it is a form-in-action - a topological Dimotion of space-time. It has a content of space=form, we shall call in ceteris paribus (isolated) analysis, a dimension, and it has a content of time-motion, we shall call in ceteris paribus analysis 'states, functions or ages of time'.

### **Advancing to 5D Metric.**

A new model of space-time doesn't come often to science. Once in a century perhaps (Galileo's  $v=s/t$  relativity in the XVI c. Leibniz's relational space-time vs. Newton's absolute space-time in the XVII c.; Darwin's study of the arrow of temporal in-form-ation, form, we call evolution in the XIX c. Einstein-Minkowski's 4D formalism of time 'frozen' as a form of space cause of its rotations in the XX c. and this 5D model that formalizes Leibniz's relational space-time in the XXI c.)

It follows that it requires some new insight into the logic=temporal and mathematical=spatial Nature of space-time, with wide applications based according to Occam's razor in very few postulates; essentially a 'METRIC equation' of spacetime that can quantify the dimensions of space and motions in time it describes; and some Logic 'evident' truth, in which to base the causal deductions that come out of its metric.

So Galileo gave us a **metric equation**  $v=s/t$  that related space and time, and a **logic insight** - that we cannot distinguish motion and form/stillness - that is we do not really know if the Earth is moving, unless we compare it with other moving object - in fact we see it still.

Newton and Leibniz didn't really gave us a metric so their work was not that stringent, but they gave us many logic arguments, those of Leibniz quite solid (we are made of a time duration and occupy a vital space), those of Newton rather 'mystifying' (space as the Plenum of God, etc.)

Darwin didn't either gave us a metric but made some insights in what we shall develop here to complete his work - the topologic forms of species, which are selected by efficiency (so that was his insight on the metric of vital space - the best forms survive, and we shall see what are efficient topologic forms), and he gave us some insights in the logic of time (efficient species with better forms last longer in time, those who are not efficient extinguish).

In the XX and XXI c. however we need to be more precise and formal. So we can compare by the correspondence Principle Einstein-Minkowski's model of 4D spacetime and the 5D model we introduce in this blog. As both are based in a logic postulate and a metric equation; only that the 5D logic and metric, as it must be for all new theories, correspond in the 'limit' of a single Plane of spacetime with that of Einstein.

So for the 5th dimension, the LOGIC fundamental finding=postulate is Space = Time is its pentalogic structure, as the 5 Dimotions in time, or its symmetries in scale, languages (minds) and time, organizes the structures of the Universe. So we shall end the post after describing those 5 Dimotions in some detail with an analysis of its pentalogic.

All systems can be seen either in stillness=form=space or in motion=time (Earth doesn't seem to move; seems space but it moves it is also time; Einstein's metrics have one side which is purely geometric, still, curved space equaled to the other side, which is a tensor of energy-motion=time; in astronomy we see space as distance but astrophysicists model it as 'expanding motion') and so on...

THIS is the true meaning of Galilean relativity and the first HUGE error of Physicists, when Galileo said *e pur si muove e pur no muove* is not to fully explore the logic, philosophical depths of why BOTH THINGS ARE TRUTH. That is why MINDS reduce motion into a linguistic fixed image to 'focus reality as space, even if the ultimate REALITY always turns out to be perpetual motion.

Yet the key fact we want to highlight is that *all those entities that we see as space-form is the same thing that seeing it as time-motion. And this is the deepest meaning of relativity from where we shall extract an enormous number of sub-postulates and explanations of reality.*

For example, all systems try to maintain its particle-head state of information in stillness. Your head is up there relatively without motion transported by your body, so happens with a particle moved by its wave, floating over it (realist Broglie-Bohm of quantum physics). So all systems 'stop' to gauge information and move with energy...

This Logic equivalence between Space-form=Time-motion IS then TO 5D what for Einstein was his first postulate of **logic** in 4D:

"The laws of physics are the same in any inertial frame of reference..."

which by the correspondence Principle is obviously a consequence of the wider Space=Time postulate; since it merely means that as space (pure stillness) and time (pure motion) are equivalent, it really doesn't matter what speed we move in relationship to each other, the same laws will apply (we will always be in relative stillness in our frame and/or relative motion to other observer's frame). For the modern quantitative scientist logic might seem irrelevant but in fact it is more important. Indeed, not in vain Einstein was enamored of philosophy and counted as Kant and Schopenhauer and Mach, which he read in his youth (so happens with me, specially with Schopenhauer) as one of its highest influences - ultimately logic is indeed the basis of mathematics, not the other way around.

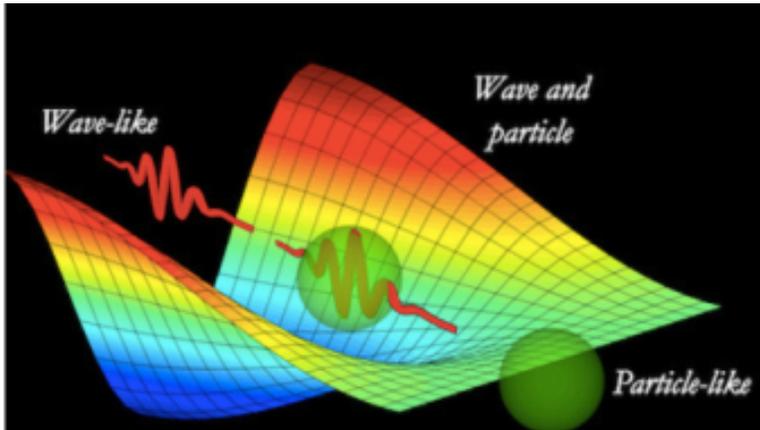
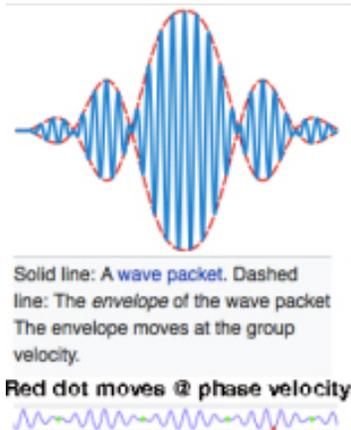
But we still need a metric, an equation with space and time terms, which 'remains co-invariant' and allow us therefore to move through the combined dimension of space-time (we shall call dimotion from now on, 'dimensional motion').

For example, Galileo gave us  $V=s/t$ , the equation of the 'first law of Newton', the co-invariant, inertial, steady state speed of a system, calculated as a ratio of its space-distance, and time-duration.

*While Einstein gave us the postulate that the speed of light, c-speed is a local=diffeomorphic constant. And so putting together both postulates, he got his metric equation of space-time:  $S^2 =x^2+y^2+z^2-c^2t^2$*

The MATHEMATICAL foundations OF 5 D Also give us a metric space-time co-invariant equation, WHICH IS also very simple and will allow us to move through the fifth dimension of space-time as living beings when we grow in size from fast moving seeds into slower organisms:

**Steps.**



2 limits of sensation, the exhilarating wave that erases form in pure motion, the particle still state that perceives and gauges information entangled to other particle, fermion and boson, still to each other-hence in our scale perceived as c-constant speed- are the 2 components of a complementary dimotion step.

An essential new concept arises as the only rational explanation of the Paradox of Galileo, which will have profound expressions in all sciences of the Universe. The concept that for the duality of stop still perception and step motion to happen systems must wonder through reality in a stop, step, stop, step, step dual motion, and so the duality step-stop, space-time becomes an essential component of reality, more even than a double SS surface or spacetime cycle with volume or an accelerated TT dual time motion. So steps (ST) stops (SS), Stops (S) Steps (T) and stæps (TT-accelerated motions) are the 4 fundamental spacetime varieties - the area of space, the wave in motion and the accelerated point, which will be played with to explain rationally many 'laws of measure' both in classic relativity and other fields of all sciences.

Let us then consider just an example, in the 'rational' explanation of the c-constant of light; which WE HUMANS measure from a 4D single space-continuum with enormous accuracy, but the fact remains it is a

MEASURE ADAPTED TO THE LIMITS OF HUMAN PERCEPTION AS electronic beings that perceive information in 'stop mood' and move in 'wave state'.

In the graph, the entanglements of particles through its 'action at distance' (quantum potential,  $\Delta$ -4 plane, likely of faster-than-light lineal tachyon neutrinos, which carry only angle/distance trigonometric-information), prior to a sharing of information through a light wave (neutrino theory of light, as produced by two inverse neutrinos colliding in the same direction), accounts in 'detail' for what matters now in terms of the scalar structure of the Universe and its duality of S-top and T-motions states. Of course this philosophical why does not invalidate the Humind measure, as we do NOT live in the quantum electron, stop and go world, but perceive a continuous motion (our brain selecting just part of the trajectory of our particles).

It is an example on how the Correspondence method works for 5D, as 4D would be the limited perception on 4D with less information in scale and the stop, stəp, step, -stəp, stop... series which can be easily translated to 'entropy and form' relative states and quantized, and quantified to convert the general laws of Absolute relativity and 5D which apply to all sciences to the specific jargon of astrophysical sciences, which cast everything in terms of motions.

The importance of the previous scheme is difficult to stress, but will be fully understood as we fill the different articles on quantum physics and Boolean algebra. Essentially we exist IN A FRACTAL, AND THE MAIN PURPOSE OF FRACTALS IS TO REPRODUCE INFORMATION.

So when a particle moves what we observe is a series of adjacent particles that switch on from step to stop motion:

Locomotion is a series of stəps that imprint a lower plane with the information of the upper plane in each  $S=T$  unit of time frequency: a quantum wave=motion state & particle=stop state reproduces a planckton into a social photon with a constant energy:  $E_k=h(s)f$  (complementarity wave-particle).

The process we see is exactly the picture on the left graph. The particle has a persistence, as it reproduces its forms over the quantum field - this is said in the confusing jargon of quantum physics due to a thorough lack of conceptual understanding of the process - that the 'particle' is an excitation of the field (the lower plane of the fifth dimension, or 'quantum potential' in the correct De Broglie interpretation, in which the reproduction of the 'higher particle form' takes place).

What happens though is obvious: as a cell reproduces into another cell in 'two steps', first 'expanding' to a double volume, and then splitting into two cells, which could be seen as 'two steps' to fill the next 'circle' on consecutive adjacent 'fillings', (so the particles seem to overlap 1/2, the uncertainty of measure is equivalent to 1/2 the angular momentum of the particle's membrane,  $h$ ;... the real process is as follows:

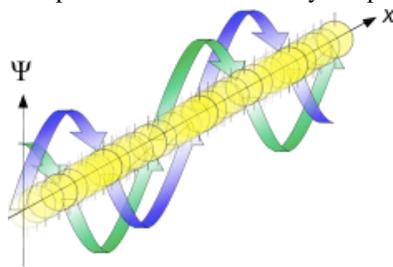
Particle reproduces 1/2 step, particle reproduces other 1/2 step, a new particle (if the process is one of lasting reproduction) appears in the next adjacent region so at that point the process stops.

We thus have a series of -- — 'yin-broken information creation in two steps' and 'yang-full stop existence of the particle that perceives-receives information ahead of the next 1/2 step.

This is the fundamental 1/2 STEP, 1/2 STEP, 1 STOP, -- —, -- — reproductive motion of the Universe, and it is carried into ALMOST EVERY OTHER logic system of reproduction of information.

I.e. it is the basis of Boolean algebra in the praxis of digital thought - 0 for no motion 1 for flow of electronic information, which becomes in Boolean algebra a constant return after two 1 steps into a 0 stop.

This in Boolean algebra jargon is said to be addition Modulo 2, where we observe that  $1 + 1$  (steps) = 0 (stop).



Again the logic of it IS OBVIOUS: THE UNIVERSE IS A CONSTANT PROCESS OF REPRODUCTION OF FORM, where motion which HAS NO explanation in physics and still has unresolved the Zeno's paradox (no axiomatic self-contained mathematical proofs do NOT explain reality, as Gödel's incompleteness theorem proved, they don't *even explain the mathematical theorem, let alone a physical phenomena, as experienced*).

FRACTALS REPRODUCE FORM AND THE EFFECT IS THE PERSISTENCE OF PRESENT, A DYNAMIC STATE THAT SEEMS NOT TO CHANGE AS FORM IS REPRODUCED BUT CONSTANTLY SLIGHTLY CHANGES.

As a consequence of this simple form of motion, the meaning of motion is explained, the strange effects of relativity measure are also explained - the distortions on length, time dilation etc. are easily fit into the 'stop states' we do NOT see as in a movie film where the stop STATE which ALWAYS IS NEEDED TO GAUGE INFORMATION (In the case of the film the stop of the picture to project light also in two steps, the motion of the film stops, the light is projected, then the system moves) implies that both the electron that emits light and the receiver are entangled, locked in at the scale of quantum potential - likely joined by a neutrino emitted at tachyon speed in both directions which is the 'NECESSARY CONDITION' for the original neutrino theory of light formation. The two electrons lock in with a lineal neutrino that only carries information on distance.

Both then entangled and stopped in relationship to each other can gauge and emit information in the manner of a light string, whose speed then appears simply AS MAXWELL FIRST affirmed - JUST ANOTHER rational normal relationship between the 'spatial tension-attraction' between two points or 'speed of time reproduction' in adjacent steps 's', divided by the 'density' of the active magnitude, the system reproduces:

V=Speed of Steps in space / quantity of form=density to be reproduced.

This is again an intuitive logic explanation of speed in terms of 5D metrics. The faster the 'frequency' of the steps - of the reproductive process in space, the faster the speed of locomotion; the larger the quantity=density of information to be reproduced, the slower the speed of locomotion.

Yet for waves with are 'holographic', bidimensional forms, we must take the root of those parameters, to find its lineal speed.

So this give us the general formulae of all wave speeds, which might add some local condition factors (I.e. in sound speeds a temperature factor, in stress wave a more complex modulo, etc.) and be expressed mathematically with the different sub-jargons of each physical discipline but will always be ultimately:  
Speed = Speed of reproduction/density of information to reproduce.

$$\begin{aligned} \epsilon_0 &= 8.85418782 * 10^{-26} \frac{kg}{m^3} \\ \epsilon_0 &= 8.85418782 * 10^{-12} \frac{s^4 A^2}{m^3 kg} \\ \mu_0 &= 125663706 \frac{mkgm^2 s^4}{s^2 kg^2 m^2} \\ \mu_0 &= 125663706 \frac{ms^2}{kg} \end{aligned}$$

Thus the speed of sound  $c = \sqrt{\text{pressure/density}}$ ; where pressure is obviously the speed of reproduction, the 'tension' the attraction between two poles in other type of speed, and as it happens, and Maxwell first advanced when confronting its found equation of the speed of light  $c = \sqrt{1/\mu\epsilon}$ ; when we translate from electromagnetic jargon (Amperes as an orthogonal force) to mechanical jargon  $\mu$  it turns out to be the inverse of PRESSURE, while  $\epsilon$ , the inverse of  $k$ , the coulomb constant appears as the density of a vacuum space.

So the speed of light once we have resolved the 'strange effects' of relativity introduced by the human LACK OF PERCEPTION as in a movie that is seen as continuous motion, of the stop states of both entangled particles, we have resolved the proper meaning of two of the most complex and least understood constants in Physics, the Permittivity and Permeability constants of vacuum which should be called density of vacuum and inverse pressure of vacuum, where vacuum IS the lower plane below light space-time, likely a tachyon background of neutrinos; which corresponds according to 5D metric  $c=st$ , to a faster than light 'quantum potential' of non-local at distance action (jargon of physics to state, what their dogma tries to avoid, faster than light speeds proper of any entanglement). This leads obviously to the work of the realist interpretation of quantum physics (De Broglie-Bohm).

Now the only thing to do is to translate the jargon of amperes and charges to spare and indeed immediately we get after some translation of those concepts the inverse of pressure for  $\mu$  and the density of vacuum for  $e$ .

SO THERE IS NOTHING WEIRD, DIFFERENT IN RELATIVITY, ONLY THAT our perception of the lowest possible scale of the 5th dimension beyond which our electronic light based particles that measure it in stop position cannot longer perceive the faster gravitational lower 'neutrino-background' where the quantum potential entanglement happens, is distorted as we see it as continuous motion.

We shall also notice when considering the quantum realist interpretation of Einstein->de Broglie->Bohm that there is NEITHER any mystery to quantum physics. It was a choice of mathematics, as the 0-1 paligenetic temporal sphere of probabilities in mathematics (theory of measure) is completely equivalent to the  $1-\infty$  Cartesian plane taken as space (statistical mechanics of populations). So probability in the 0-1 sphere (quantum time formalism) = statistics in the  $1-\infty$  sphere (thermodynamics, space formalism).

And this again is just another expression of the S=T fundamental theorem of 5D absolute relativity.

So all what Bohr did was to take a very long detour with all its procedures to renormalize all equation to fit it into the 0-1 sphere of probabilities, instead of working out the concepts first and then use a statistical, population analysis of quantum physics, as Einstein wanted. And all what physicists did in electromagnetism was TO INVENT a complicated jargon, full of conceptual errors, since a charge IS MERELY A VORTEX OF ACCELERATED TIME OF A LOWER PLANE OF THE FIFTH DIMENSION AND HENCE CAN BE EXPRESSED IN TERMS OF THE EQUIVALENCE principle of relativity, as an accelerated clock and hence in any of the 3 formalisms (of growing complexity) of such vortices, from Newton (pure vortex motion) to Poisson (gradient of motion) to Relativity (still pictures of simultaneity of the curvature of space of those motions, which is again just the STOP-SPACE detailed view 'Instant after instant; of Newton's vortices).

So as the result of that unneeded use of a new jargon for electromagnetism, because again, the first physicists of electric praxis, as always in physics went ahead with instruments of measure before they even care to understand conceptually what they did, we are now with two different jargons, which we will unify from time to time in terms of time vortices (gravitational jargon) to show clear homologies of scale - we will do the same trick to unify charges and masses and the  $q$  and  $g$  constant as two vortices of different attractive power in both scales and to resolve the hierarchy problem, the particle-antiparticle problem, the vacuum expectation problem and most conundrums of physics in very simplified mathematical terms).

Why we enter in those details so early in this blog has an obvious reason: Physicists are the popes of science for good or bad, and all other sciences wrongly expect them to validate any more advanced model of space-time as 5D is, but the rat bites its tail because 'obviously' physicists are NOT concerned and have always dismissed philosophers of science, which are the people who DO have to explain the why of physics from principles higher than those of any discipline, which is what we do in this blog. But this physicists won't care - because their profession does NEVER start in sound logic thought but in praxis of mechanical measure, and there is zero rigor to interpret and model those results, only its casting in mathematical models.

So we are left with an astounding array of wrong models of reality from lineal time, despite the obvious cyclical nature of all clocks of nature, and its logic reality, with absolute space-time, even after a century of proof by the same physicists of its error, on the obtuse logic behind the big-bang, a falsity, relativity - merely a tool to measure by accepting the distortions of the limited information electrons receive in huminds and instruments, quantum physics (an ego-trip interpreting what Bohm does properly in a realist manner just by accepting a faster than light lower plane of 5D where entanglement happens), with the uncertainty principle (merely the 1/2 adjacent step-reproductive state of the particle which CANNOT be measured externally as we cannot know - look inside of that reproductive process) and so on and so on.

## VII.

# FRACTAL POINTS: MINDS

**Abstract.** The mind is the less 'scientific' and yet more necessary of all the elements to explain reality. This represents a conundrum for 'science', as it did in classic science.

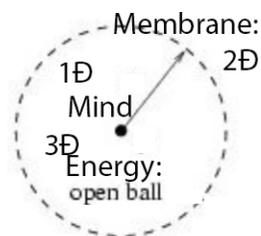
We however have taken, as they say in Spanish, the 'bull by the horns', meaning we acknowledge as every philosopher of science has always done, the need for an infinite number of minds-monads, to create the informative order we perceive in the Universe, and as physicists do with gravitation and dark entropy - invisible forces proved by its effects in reality, *we accept the existence of infinite minds by the sheer fact of the evidence of informative order, and fractal order in infinite systems of reality.*

So this hurdle passed, by recognizing that there would NOT be any science, including astrophysics unless the 'effects' of a force or element of reality suffice to prove its existence, we shall define the mind as the  $\Delta$  scale of reality between the 0-1 and 1- $\infty$  temporal and spatial 'scales', the placental inner world and the outer, spatial larger world in which all systems co-exist.

In other words, the mind 'pegs' scales of reality together and without them the scalar reality would not exist. How the mind 'creates' the fractal structure of reality thus is the first question to resolve.

However I know most 'scientists' will skeptically abandon the blog at this point. Minds are a taboo - they are supposed to be the final 'magic' state of human thought we do not share with other species. So a simple obvious definition of the mind will not be easily welcomed. And for that reason we advance it first.

The mind is an infinitesimal zero that believes to be infinite and resides in the border between worlds.



**Membrane:** A membrane or time clock encloses vital energy; self-centered in a monad-mirror whose lineal inertia moves the whole.

The mind is the 'whole', 1, the being and as such it truly embodies 3 elements, the sensorial membrane, the singularity or mind proper, and the invaginations, or physiological networks of the being. This is the most extensive view of the mind, which is therefore the whole because what is left is the open ball of cellular energy, in between.

However there are many different uses in humind's jargon of it. Initially we can consider the mind the 'seed' and as morphological analysis shows, it soon, starts the program of self-reproduction and expansion, after a 'beta-decay' or explosive growth with an animal pole and a vegetative pole, an electronic membrane and a quark nucleus (Down quark decay into up quark and electron that can form an H-atom).

All those processes of placental development self-similar in all space-time beings, start with A SEED-MIND, which therefore can be considered the whole. But as the system evolves we are bound to differentiate those parts as distinctive elements of the whole.

So what are the proper 'symbols' of existential algebra ( $\neg\mathcal{E}$ ) for it? As always in the entangled Universe a single definition never suffices, because the mind must be put in correspondence with all other elements of reality. So we use several definitions:

$0 \times \infty$  or  $\infty^0$ , which stresses the ego paradox of the mind as receptacle of a mind mapping, and focuses on the  $\delta$ -particle/head site of the informative network of the mind.

We DO not then use the mind to define the 3 physiological networks, N for lazies or  $\psi$  for the proper symbolism, which arguably is the most correct physiological definition of a mind, as consciousness happens IN THE WHOLE NETWORKS, and the being becomes a super organism when those 3 networks emerge as existential species. But while our consciousness is a constant modular switch between body, limbic and mental network sensations, the mind proper IS we repeat a far MORE METAPHYSICAL, TEMPORAL concept which embodies also the OUTER world. As you are now your mind is watching the outer world, probably a computer screen (well given the 0-stats of the blog, is my mind which is alone watching it never 'mind' ):

So in terms of scales the proper definition of the mind would be  $\Delta^1$ .

(Unfortunately due to my laziness, I use often  $\Delta^0$  for the mind scale instead of  $\Delta^1$  not to look for the superscript symbol, which is not available in Wordpress).

So @, for a 'structural view' of the mind and its 3 parts, membrane, singularity and radius, 'angular momentum' for a quantitative simple measure in physical systems,  $\Delta^1$  for its scalar view,  $0 \times \infty$ , for its 'Internal space-time content' or  $\infty^0$  in inverse fashion for its 'external view', and simply 1, the whole, for it all defines the mind as the '11th' element of reality, the unit that transcends the being and IS the being.

And so when the mind goes, dies into entropy, and its emergent networks dissolve its synchronous entanglement the mind disappears.

Concepts therefore essential for the mind are internally 'synchronicity' - the existence of a common clock that synchronizes the 3 physiological networks of the mind-system, in humans, the second of a glimpse of the eye, step of the legs and beat of the heart; which brings 'simultaneity', the adjacent parallel motions of the parts of the whole - and externally perception of the  $1-\infty$  scale.

And finally what will become the most important of all the elements of the mind - its 'metaphysical content' as the 'embodiment' of the program of survival which somehow the Universe has finally selected by extinguishing all those species that do not practice it, of all systems, which will try to obtain energy and information and entropic motions for its body waves, particle/heads and limbs/fields, evolve socially into larger wholes stronger than individuals and replicate into equal beings.

THE MIND IN WHAT MOST CONCERN US HERE is therefore the WILL of the Universe, its informative power, and there are infinite of them. As each point is a mind the way Leibniz, Descartes and Aristotle thought of: a cogitans intelligent linguistic still mapping of reality, that focus in simultaneity the whole being.

The mind then ultimately can be defined as a synchronous 'knot of survival actions' that carry the whole through its networks into sequential causal intelligent series of dimotions to make the 'whole survive'.

How many minds do exist then in the Universe? How to localize a mind? Are minds in all planes of existence? When we know a mind has emerged? All those questions can be objectively analyzed with the concepts of synchronicity, simultaneity and survival actions, performed by the mind and its will of existence. A mind when emerges however tends to 'damp' the 'sound' of the previous scale - minds create new planes of existence and do so parasitizing the lower plane of its energy bits, of its body, the  $\Delta^0$  'real plane', which sustains the whole structure... So it is important to start in quite an opposite fashion to the 'hagiographers' of mind mysteries with an inverse view of minds... That is, with...

**The ego paradox.**

The biggest handicap for humans to understand reality is the ego paradox, which we cannot delay any longer to explain it - namely that WE CANNOT MAKE SENSE OR RESPOND TO ANY MEANINGFUL WHY ABOUT REALITY if we do not postulate a sentient Universe in which infinite Maxwellian demons, monads, minds, exercise a formal language into actions of survival as if the language were aware, conscious of the grammar within itself.

These minds-monads-points, ab. Mind§ an 'English composite' word of Minds, Monads,  $i^\circ$  - the plane of the mind self-centered world and @, the symbol for the monad 'of angular momentum' 3 components, its internal 'active magnitude', its membrane and the radius and invaginations that connect them - are the essence of the existential game, and without them we cannot account for:

- The will of survival and causal intelligent way in which all systems display its actions and motions
- The fractal structure of the Universe as mirrors of reality projected in a territorial order by its Aristotelian Gods.
- The stillness of spatial perception and the relativity principle of physics
- The process of death by exhaustion of energy into information happening in all scales.

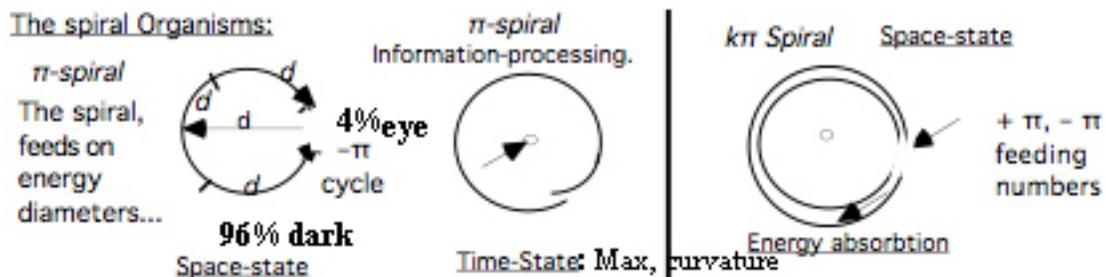
How this is done requires to introduce the final element of reality, so long ignored in its true meaning, equations and form, the mind and its systemic distortion of reality... what I call...

**Fractal points.**

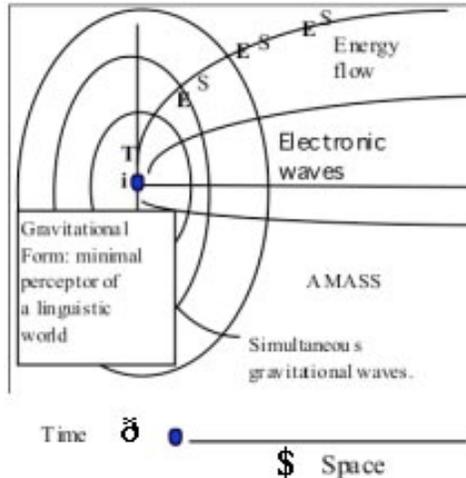
'Gods are the unmoved final cause of the motions of energy around them' Aristotle'

Let us then consider with a bit more of mathematical rigor, the fractal point as a cycle of time, AND A MIND-MIRROR, which never stops in its angular motion, scanning the Universe, which we shall call a  $\pm\pi$  cycle.

Earlier on we said that 3 are unstable, so a cycle of time, which is ultimately a pi cycle of 3 diameters curving into each other must not be stable, and indeed, pi is not a perfect number, which means, every turn of the wheel the cycle either is a  $+\pi$  cycle that turns inwards, creating form, and this is a vortex of accelerated information, a 4D motion of increasing information or 'charge or mass' (next graph); or it is a  $-\pi$  cycle, that expands outwards, with increasing entropic growth and disorder in space. And so the vortex that accelerates inwards in information ( $V \times R = k$ ), or the logarithmic spiral that expands outwards are intimately connected to the eternal dynamic Universe and it is the simplest representation of a world cycle, so common in physical space.



Pi doesn't exist as it is a rational number, hence the cycle never closes by defect or excess,  $\pm\pi$ , ensuring the eternal motion of all cycles of time.



Einstein's interpretation of the 5th non-Euclidean postulate kept the view from our larger world, bending parallels, but parallels are straight lines, so particle points must be defined more like we see any of them with telescopes or microscopes, peering in its relative scale from its relative point of view, as enlarging worlds with a very complex internal structure when studied in detail

In mathematical terms what Einstein did was to refine the measure tools of lineal time and Galilean relativity, adding the curvature of space-time, through the 5th Non-Euclidean postulate (Riemann Geometry). But what Non-Euclidean geometry means in scalar space-time?

Again, while the results of BOTH models are mathematically the same, the philosophical interpretation is deeper in 5D as

we expand the notion of a Non-Euclidean point through which infinite parallels can cross into a fractal point with breath that grows as we enter its scale, and so also infinite parallels cross but they PRESERVE their parallelism:

The graph shows the classic interpretation of a non-E point in a single plane of space. Parallels 'curve' enter the point, but since point has no breath, still only one parallel really enters as the others collide and fusion with it.

So the definition of parallel as a 'straight line' that do NOT touch, disappears. They are now curves that touch. How this conceptual error is straightened up' when we consider a new Non-Euclidean first postulate of a fractal point with breath, is easy to see:

The Universe then becomes a fractal of scales and what the point does is to grow in size as we come closer to it.

So a star becomes larger as we come closer in space, a cell grows as we come closer in scale, and then it can FIT MULTIPLE PARALLELS AND ALL OF THEM ARE STRAIGHT LINES. What we have done is to move in the next scale of reality.

The beauty of non-Æ mathematics is its vital capacity to order reality, when we add 3 concepts that are missed in the classic Axiomatic method of the Greeks and its AE-geometric and logic thought:

SCALE (INNER PARTS), TIME-MOTION (points are cycles of time, lines as waves, planes as networks) and vital TOPOLOGIC, ORGANIC FUNCTIONS.

### **Supærganisms of networks of waves of fractal points.**

The formalism of super-organisms describes them as networks of non-Euclidean points, a concept developed in my earlier work on quantic space-time that describes the smallest scale of the Universe as a network of spins of temporal gravitation joined by strings of spatial energy. Those microcosmic networks have evolved into the bigger, more complex networks of the macrocosmic world through a process of social evolution, triggered by the higher efficiency of networks in all processes of survival. Yet, despite growing in complexity, non-E, informative points and energy flows have maintained the original properties of any quantic space-time network.

So we can define in mathematical terms any super-organism as a fractal space-time network extended in  $i$ -scales of information and composed of  $n$ , non Euclidean points or individual cells:  $\Sigma \epsilon_i - 1 \epsilon_o$ .

Thus any super-organism is made of fractal points joined by networks of spatial information and temporal energy of particles/heads and waves/ bodies.

And further Heads exchange lines=waves of energy and information forming networks.

### **FRACTAL points. The fundamental particle of the Universe.**

Yet to understand that formalism in detail we have to define a Non-Euclidean point, the fundamental element of any network:

*'A non-Euclidean point is a knot of spatial information and temporal energy, joined by a non-Euclidean line=wave or geodesic flow of energy and information'.*

Thus, the first important change that generational space-time introduces is the expansion of Non-Euclidean Geometry through a more realistic description of Euclid's point defined now as a point with parts; giving birth to lines that are waves or forces of communication, creating topologic planes that are physiological network which become vital supærganisms, whose relationship will depend on the relative congruence=equality between 2 of such non-E super organisms.

### **The 5 postulates of $\neg\mathcal{E}$ Vital, sentient Geometry.**

We thus recast the axioms and postulates of Euclid into five new postulates to define fractal points, Non- $\mathcal{E}$  lines as wave of fractal points, Non- $\mathcal{E}$  planes as ternary networks of Non- $\mathcal{E}$  lines, which become supærganisms, whose relative 'congruence' in its 3 'elements' (singularity point, membrane and vital space) defines the type of 'perpendicular or parallel' relationship between them:

1st Postulate: ' $\neg\mathcal{E}$  point are discontinuous time cycles with an inner content of vital space-time'.

2nd Postulate: ' $\neg\mathcal{E}$  lines are waves of fractal points'

3rd Postulate: ' $\neg\mathcal{E}$  planes join 3  $\neg\mathcal{E}$  lines into a supærganism'.

4th Postulate: '2  $\neg\mathcal{E}$  points are congruent when both its inner parts and outer perimeter are equal'

5th Postulate: ' $\neg\mathcal{E}$  World points focus multiple  $\neg\mathcal{E}$  lines of energy and information into a still linguistic mapping of the Universe'

So the biggest upgrade in maths, ultimately a spatial language, will be the aforementioned definition of a fractal point with breath, which redefines the 5 new Postulates of Geometry with applications to all sub disciplines of maths, physics and all other sciences, of which the 4th is the most important new postulate of congruence.

The proper way to convert mathematics in what it is - the best mirror image of the properties of the fractal Universe - is to start with the laws of Non-Euclidean geometry, and then build up through the next layers of its reality:

- $S=T$ ; the vital **geometry** of points with parts; parallel to the theory of **numbers**, in sequential scales; that move through:
- $\Delta T(st)$ : **Analysis**, that study its Dimotions and reproductions that form lines that are waves and networks, which become...

- $\neg\Delta@S\rightleftharpoons T$  **Algebraic Organic structures**, self-centered in points of view (mental frames of reference), whose variations form 'group species', tracing worldcycles of existence through its Dimotions.

It is then obvious that we shall start such adventure with the study of the... **1-5th Non-Æ Postulates of Fractal points.**

So unlike AE maths, when we describe Non-AE maths departing from its natural unit, the point-number, we will see a simplified, ideal mirror of the processes of evolution, palingenesis, growth and emergence of a system in nature, starting by a fractal memorial point, which might be in Nature a seed or a mind, whose inner information will be displayed externally, reproduced and start one of the allowed variations of the Generational Program of Space-time, we call the Program of exist $\ddot{e}$ nce:

*The point will reproduce and evolve socially in a larger world, accomplish the summit of creation in the Universe, which is repetition of form, by balanced combination of lineal entropy and cyclical form into hyperbolic curved combinations...*

And as the arrow of information keeps imprinting the limited energy of the being, will enter into a third age of excessive form that will usher the being into death.

LET US THEN consider another key element of vital mathematics applying what we have learn about  $S=T$ , the duality of form and motion, to resolve in more depth the meaning of those mathematical, physical 'vortices' of attractive 'minds', charges and masses.

#### THE HOLOGRAPHIC UNIVERSE - MEMBRANES & PLANCKTON

It is now clear that because time and space are equivalent, and motion can be seen as form, a CYCLE OF TIME CAN BREAK SPACE into internal and external regions, becoming a boundary. And that is the reason why topological beings are 'broken' into vital spaces. If you observe around, you will always find indeed a membrane 'breaking' reality into an internal and an external being. But if we look in detail all membranes are made of 'cyclical motions'. And this is the starting point for another key discovery of relational space-time: Motion and distance are similar concepts.

The entire field of differential geometry can then be deduced from this law, as it treats 'curves' as points in motion. So for each point in motion, as in night pictures of cars, a line is drawn. But we are more interested in some 5D results of 'generational space-time'.

The question then is this: which 'level of frequency' in time is needed for an angular momentum to become a membrane?

Two possible solutions can be found: if the point in motion reproduces in a series of curved points in each adjacent region, the point immediately becomes a membrane - each turning point being a 'cell of the boundary'.

But as each curved point is in terms of its diameter, equivalent to  $\pi$  times; for the lineal angular momentum to become a fractal membrane of many points, it has to multiply for  $\pi$ ,  $d\pi^2$  then becomes the natural conversion of a lineal form into a closed space-time organism of a higher scale, which if we 'reduce  $\pi$ ' to 3 with its 4% of openings, (as in hexagons and dark matter systems, where the 96% remaining is not perceived), we obtain a simple sum:  $(d=1)+d3^2 = 10$ ; which tell us, that departing from a lineal unit, scaling by 10 we complete the previous graph of. a complete physical organism, with a radius, a fixed membrane of smaller cells, whose *number can be added ad infinitum, just by shrinking the diameter of each membrane circle.*

However such system will be oriented towards a direction only as the sum of all its twisting membrane cells points in a single rotational direction. So to make the system irrotational and stable, each point will have to deploy a second inverse membrane, for a total value of  $2\pi$ . It then becomes to an external observer a fixed form of distance, a closed static membrane...

It is then a remarkable result for all systems and geometries that  $S=2\pi T$ ; that is a point in motion multiplied by  $2\pi$  becomes a static distance-membrane.

What is then the minimal superorganism of the known 'galatom' Universe. Obviously a Planckton, recently converted into the unit that relates our 3 parameters of a  $T \cdot \omega$  in physical space, Mass, spatial area and frequency of time:  $M \times L^2$  and  $f$ , which represent the singularity, vital space and angular momentum of the minimal part of the Universe.

So an organic science of astrophysics would start with the study of an h-plankton

*The example might seem trivial but as the mind CREATES THE SENSATION OF SPACE, and all is primarily motion, a key ELEMENT to understand reality is to figure out the mathematical equivalents for each form of the Universe between its states as motion and its stable states as form. And the previous rule is essential to all systems, whose 'density of space-form' can be perceived as the cyclical inertia of its fractal parts, boring in its pi-cycles in a single point (which can be seen either as curvature or motion). So:*

$$S(\text{density}) = (2\pi)^a T$$

And vice versa. I.e. an h-plankton is reconverted into a lineal motion, by 'dividing it for  $2\pi$ ', such as  $h/2\pi = \hbar$

Thus while the mathematics of those simple first principles can be mirrored with increasing complexity, from the simpler vortices of Newton, to the complex details of curvature of Relativity, the essence of them all are those principles.

To which we must add the conservation of the 3 parts of those fractal points - the membrane or 'angular momentum', the lineal motion of the singularity and the vital energy closed between them. And this is the fractal principle of conservation of the two momentums and energy that form the vital essence of each fractal point.

We could say motion and time are entangled in many ways: we see particles of form with motion and we call this 'momentum':  $m(\text{form}) \times v$  (motion), of which there are 2 forms, the membrane and the singularity that enacts the motions of the being, and its program of survival as it looks for 'least time, efficient paths' of minimal expenditure of energy feeding on 'fields of forces' to conserve its 3 parts.

And the Universe conserves both. We can then talk of 'Information, form in action', as those momentums with more 'form than motion', or 'angular cyclical momentum',  $rmv$ , where the radius of a circle,  $r$  and mass make form dominate, speed,  $v$ , and we can talk of motions with less form, or lineal motions, as lineal momentum,  $mv$ , where lineal speed dominates; and the combination of both as 'energy', either kinetic lineal energy or position, potential energy.

# ¬Æ-BiO-TOPO-LOGIC SYSTEMS

It is essential to understand this paragraph if humans ever want to upgrade their faulty, reductionist view of reality, regardless on how happy makes their ego and how much detail brings to its mathematical analysis of reality.

Reality is made of 5 essential elements: topologic space, described best with maths; complex logic time of different 'dimotions', which 'converge' rather than sequentially cause each other, in the way a 'convergent multiple flow' produces a circle, rather than a single pen draws it. So logic but of an entangled more complex type than @ristotelian logic is the best language of time.

To this point most humans will agree, logic time and mathematical space are the foundational sciences of reality. But there are 3 more structural elements to be accounted for, and my experience is that humans will always reject them on account of their own 'egos' which don't want to become just like everything else...

Those 3 properties are what we shall call the 'entropic limits of any system of nature', its organic, scalar properties, and its sentient creative minds, which CANNOT BE denied or else reality cannot be explained as it is in its fractal structure, proved in the previous graphs.

Indeed, because systems are part of co-existing entangled fractal network scales, which reproduce their form in different sizes, they ARE organic, because what we just said - coexisting, entangled network scales which reproduce their form IS the definition of organisms.

But the only way in which such reproductive scales can happen is IF a language mirror, reduces the system in a still image, as a crystal does, a human mind does, an engineer model does, a seed of life does regarding the whole blown organism, and then PROJECTS that reduced mirror order in its territorial vital space, its body-wave imprinting its information-mirror on it.

Thus creating in the process a reduced fractal image of the whole. So ONLY if we postulate the existence of mind mirrors that order reality we can account for the fractal reality of the Universe.

And finally because time IS Cyclical enclosing a vital space with an angular momentum or membrane, which divides reality into an inner and outer region (first theorem of Knots), it breaks reality and creates finite limits in space with its membrane and in time, with the end of each cycle. Further on a fractal is a limited mess of networks, reduced images of the whole, they have entropic limits. Those limits of death in time, membranes that break a form with a cyclical enclosure (¬) must also to be accounted for.

So systems are ¬entropic, biologic, topologic logic and hence mental and have a structure in time which is more complex than Aristotelian logic and in space, are made of fractal points which grow in size as we come closer hence 'non-Euclidean points' through which multiple parallels can cross as they have breath so they are non-Aristotelian, Non-Euclidean, and those 5 properties embedded in the nature of fractal space and cyclical time ARE UNDENIABLE, and form the basis of any rational, scientific generational space-time theory of reality, which is what we shall develop in this blog.

It is not possible, we repeat to create a true scientific theory of reality without taking into account those principles, as mechanisms require a God and are just evolving organisms of metals absolute space-time does NOT exist, is just an artifact of mathematics, and the proved fractal structure of the Universe requires mind mirrors to create it.

And so it only bears witness to Kuhn's deep insights on the routines, shortsightedness and 'beliefs' of human scientists that nobody has attempted seriously to achieve that model in a century and now that the model is laid down in this blog, nobody cares to understand it (: 0 stats in 5 years ): O: We shall return then

to those shortcomings of rational man, when we study ourselves as space-time beings, and consider the equation of the humind... In any case the true orgasm of a mind is not on silly-nilly penpal with its peers but in the contemplation with the whole systemic infinite immortal intelligent Universe - the mind of God of which we are all its details.

### **A B;OTOPOLOGIC UNIVERSE OF FRACTAL, SELF-SIMILAR SPACE-TIME BEINGS.**

We shall describe thus the complex logic of the Universe and its GAME OF entangled, organic EXISTENCES, which are self-similar fractals of the game of space-time 'Dimotions' (dimensional motions), for which a much more profound, intelligent description than the silly-nilly pictures and big-bang equations is needed. Other matter is if humans as they are today in a low age of mental evolution can even 'Imagine' what we shall explain here, as their physical paradigm reduces reality to a chaotic, visual picture of mathematical digital data. Can you 'Imagine' something much richer, profound, intelligent, complex, infinite and eternal, vital, organic, and self-similar to yourself - whose fundamental structure is NOT a physical solid form, but an ORGANIC, reproductive system of cyclical forms with motions that synchronize into entangled networks we shall call time-space super organisms (ab. supœrganisms, T.œs)?

If so keep reading and concede me for a while the benefit of a doubt, as a description of the Universe as a system of fractal networks that reproduces in-form-ation, forms-in action, requires many novel features, including an attempt to 'enrich' the English language, of which Nietzsche said it was hopeless for philosophical discourse, with slightly changed terms that *seek to expand concepts and laws of each discipline to all other stiences. As a fractal is self-similar in all its scales, each one studied by a 'stience' (space-time sciences).*

*And so what we will define here is a 'series of Disomorphic laws' (dimensional laws equal in form for all species of the Universe), which can describe the 'game of existence, of creation, development and extinction, of all its scalar species.*

We reiterate that the organic paradigm needs beside maths for quantitative, precise measures of the synchronicities of time clocks and spatial sizes of beings, ultimately generated by metric equations of the dimensional motions of systems, bio-logic descriptions of its whys, its organic and SURVIVAL elements. So VERBAL THOUGHT when used with proper logic IS an essential language of truth and science.

The scientific method that DENIES sentient, biologic nature to the Universe might seem for most NOT a limit but a form of searching truth. Yet it is by far the harshest limit mankind, has established, in its age of techno-utopia and capitalist surrogate life through machines, to understand himself and the organic Universe. And as they are internal, not evident, they cannot be easily breached. The nationalist idol-ogy that worships weapons and divides humans into boxes as if they were different species, is a brutal limit to our evolution, but exists THROUGH internal memes and beliefs, which go from flags to sport competitions to films, to education - the membrane being the least important manifestation of it.

### **Understanding languages as mirrors of reality with different Time scale.**

Stiences study the Disomorphic laws of species, according to scale of size, with different jargons, which we shall unify as all what exist is homologic, made of the same Dimensions, which force them to exist as part of super organisms tracing worldcycles, with a ternary structure in space, time and scales.

Spheric particle-head:

To: Mind= Minimum Energy-Space, Max information-time.

Se: Planar-Toroid Fields/limbs: Maximum Energy-Space Minimum information

**UNIVERSAL ORGANISM : Hyperbolic Body-wave:STi**

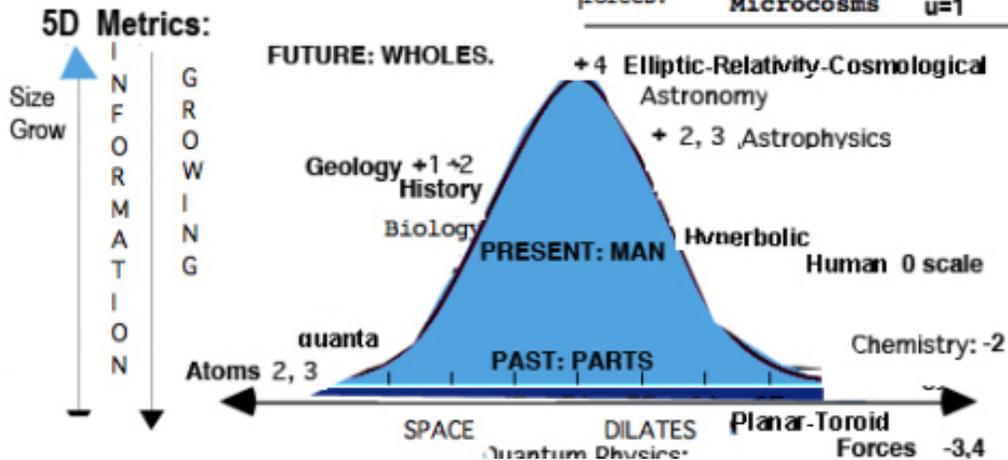
Macrocosms U=9

Relative Big Observer: Man u=5

Galaxy=Black Hole+Herd of stars  
Economy:Digital Information+Herds of Machines.  
History=Wor[l]d Religion+Herd of Men

Relative Small Observer: Man

Animal=Light-Brain+Herds of cells.  
Cell=DNA+Herds of Carbohydrates  
Molecule:Herds of Atoms+ Electronic forces.  
Atom: Herd of Nucleons and Electrons, communicated by gravitational and  $\Psi$  forces. Microcosms u=1



Sciences study the different scales of 5D metric as separated 'disciplines' when in fact all of them extract its properties and laws of the Disomorphic qualities of those 5D space $\approx$ time dimensions, among which the ternary structure of all systems reflected in the fractal generator:  $\$pe$  lineal limbs/potentials  $\$d$ : cyclical particles-heads, is the most important, which physics reflects in its conservation of those 3 elements as lineal momentum, energy and angular momentum. The ternary topologic structure of  $M_i^n$ ads (ab.mind-monads, self-centered into an  $\Delta_i=0$  point), structures the dodecalogic elements of each T. $\alpha$ , around 3 scales of space-time, 3 topologies of body-waves, limbs/fields and particles-heads, and 3 ages of dominance of one of those systems, as the being performs its  $3\pm i$  of its expanded 3-scale pentalogic. In the graph we scheme the main components of its system in space and scale. Biorganic properties will then derive from its Deep Long time 5D scales; topomathematical properties from its simultaneous structure as networks of fractal points, ensembles in 3 vital topologies; and its logic properties of the sequential series of Dimotions

the system performs in its worldcycles, all of them translated into a language mirror whose immanent still laws are sentient, perceived in the self.

**'God is a looker that waited 5000 years to find an intelligence like his, to admire his olook work'.**



Because of the reductionism of physics to a single locomotion arrow, which due to its simplicity can be calculated with maximal precision physicists tend to be arrogant to other sciences, thinking they know it all about time. Fact is they ignore everything about 4 of the 5 arrows of time.

Let us remember what we have found so far:

Reality is organic, made of space-forms and time-motions, of which there are 3 *topological varieties* in a single plane of reality:

- *The entropic, lineal motion-oriented 'network', (field-limb).*
- *the cyclical, informative 'network' (particle-head).*
- *And the hyperbolic body-wave network, and each of them is tailored to an organic function, to move, to process information and to iterate the system.*

It follows then that systems have also two more 'scalar dimensions', as parts become wholes which live in larger worlds.

So we talk of two more 'scalar dimensions', the dimension of parts, which evolve socially into wholes 'upwards' or 4th dimotion (ab dimensional motion) of space-time, and the dimension of entropy that dissolves wholes into parts, destroys form, information into scattering motion or 5th dimension of death.

And so while reality is made of time=motion, space=form, and scales, the properties of geometric=mathematical space and logic, causal time, and organic, scalar, fractal reality define a Universe of 'bio-topo-logic' systems more complex than the simplistic view of physicists with a single 'motion of time' can model.

And so those 5 Dimotions of space-time is all what we shall need to define all systems in space as organisms, in time as life-death cycles, in scale as 'stiences' of each nested Universe of parts and wholes:

A more problematic question is why scholars will also ignore this blog; as in this case it is a problem of short-sightedness in the understanding of the game of 'exi«stjences', of 'energy and information beings', combination of those 2 poles (pure spatial form and temporal motion), which can be mirrored in multiple 'monads' (ab.@), with different languages, of which the best for spatial properties is mathematics, but the best for time motions is logic, and since spatial forms are 'still slices' of the whole flows of times, *the ultimate fractal generator is an ilogic equation not a mathematical one. Even though we can express it as we shall do, with a simple digital equation,  $o(\text{mind}) \times \infty(\text{Universe}) = \text{Constant}(\text{world})$ .*

$0 \times \infty = C$ , is thus the equation that encloses all numbers, which are social groups of indistinguishable points, but as the reader can observe, it DOES NOT give us as much information as the jlogic fractal version,  $S=T$ , in its growing conceptual complexity, even less information than the 'English' verbal version,  $ExI«STj$ , whereas we express already the 5 elements of the being, its energy body waves and informative particle-heads, entangled by its product, which however are finite limited by its entropic « pure spatial form, S and temporal dissolving motion, T, and self-centered in a given j-scale of the fractal Universe.

Why indeed mathematics *Is a limited mirror to understand in depth all the properties of the fractal Universe, will be also explained in depth in our articles on the philosophy of mathematics and physics*, but the bottom line likely will remain. Humans are basically mæn, an anthropic entropic species, with a clear bias and role within the game of this planet, and so part of a culture, where to know the thoughts of God, is largely irrelevant, specially as those thoughts will never make us the self-centered of a Universe, we love to manipulate and destroy as energy in which to project our mind-forms, which made to the image and likeness of the whole, however will always be of lesser quality and perfection.

**Δ... bio:** We shall DEFINE IN THE UNIVERSE, SCALAR, DEEP TIME, ORGANIC BIOLOGIC PROPERTIES, AND SO THE SYNTHETIC language in its extreme concise simple forecasting of futures is that of deep time organic properties, the game explained here.

**T...Logic:** Then there is the language of time, logic, which gives us a greater deal of detail in our understanding on how time webs into the future.

**S... Topo:** The mathematical language, by the very essence of its fundamental elements, points-numbers, which are still spatial, entangled geometries of polyhedral forms, is better suited to describe topological adjacent organic forms in a single plane of space. As such it offers the largest tension in the analysis of

social groups as those of perceived smaller billions of similar forms of the lower planes, Δ-3,4. But as we come to singularities, single points and its inner parts, mathematics which has in its present Euclidean version eliminated all the parts, mean nothing. It cannot extract those internal essentially scalar-organic and singularity will of survival, temporal evolutionary properties that we understand better through scalar, biologic languages' and temporal logic ones.

The dominance of mathematics in our world is due to the fact we live in a visual entropic, spatial markowian, memoriless, space-oriented mechanical culture.

Science is culture and so till you don't read the final chapters of this central blog on our civilization you won't understand those limits.

But and this is the frightening thing about limits - they SEEM FOR THE entity living within them accustomed to the 'farm' - as in the Masterpiece of Orwell, comfortable references, which make the smaller being 'love' the farmer that exploits him.

Our 'democratic dictatorship' is based in such comforting limits and will be latter studied. Our science and its extreme simplicity of method is based in those limits. Reductionism WITHIN THE BORDERS OF time, space, mind and scale, is what make entropy, seemingly the least important Dimotion of time, the most pervasive. The nothingness is easy to implement, simple to maintain and death will last for ever.

Thus besides the mathematical description of a fractal we shall commit in a formal, logic manner, defining the FRACTAL GENERATOR EQUATION of space-time, what matters to us at this stage, for a full comprehension of the purpose of the Universe of fractal self-similar beings, and scale of the fifth dimension is the organic PROPERTIES OF A FRACTAL, which reproduces information in all its scales, and THEN ORGANIZES THEM THROUGH NETWORKS into organic systems, THE FUNDAMENTAL PARTICLE, so to speak of the informative Universe.

THUS the 3 main languages of most apperceivable  $M_1^{\circ}n^{\text{a}}ds$  (ab. mind-monads) , spatial mathematics, logic time, and biorganic scales MUST be understood entangled at 3 levels of spatial, present, derivative detail (max. maths), and integrating deep time worldcycles of existence (max. in the scalar biorganic description of reality.)

Needless to say as classic science has exhausted the social, derivative, mathematical, spatial description through minute actions that display huge social groups of identical herds=numbers, we are more interested

in this blog, in the inorganic and logic properties of beings.

### **From æntropic man to i-nformed one.**

How today works the scientific method of truth is easy to summarize. Humans construct machines that make measures, they cast in digital numbers, which have as a mirror language of the organic properties of scalar space and cyclical time - the 2 a priori realities we shall describe in this blog - a syntax similar to that of the space-time reality in a synoptic, reduced mirror. It is then easy to follow the 'reduced mathematical mirror' into its deterministic future and forecast patterns of repetition of those events. All this is fun and fine. But mathematics as a reduced mirror it misses some properties of organic scalar space and cyclical time, which we term 'bio-logic'. Scalar space that co-exists in different scales joined by 5D metric equations, IS organic by definition. And time motions which entangle and form sequential actions of survival (as systems perceive to move and feed in energy to reproduce and so they chain their dimotions into quanta of actions I sequential manner) IN A LOGIC MANNER.

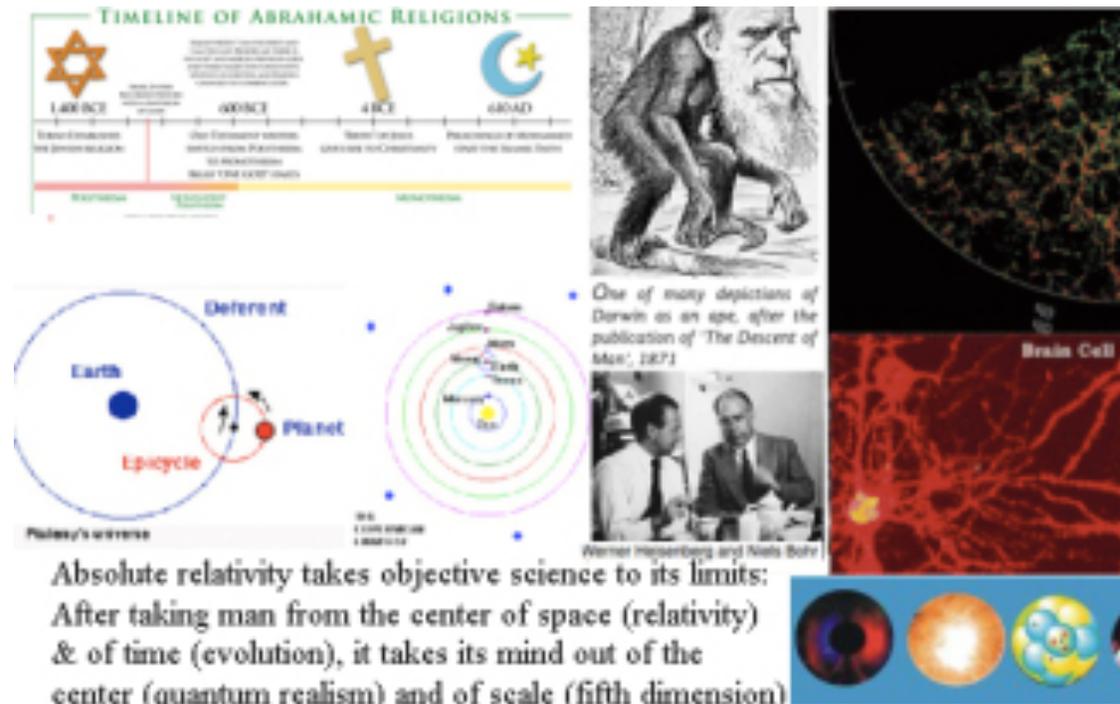
SO THE UNIVERSE IS bio-topo-logic because it is scalar, spatial and temporal and ONLY MATHEMATICAL mirrors miss a lot of properties, as we have already shown in the description of the scalar big-bang. The problem then starts when 'one-dimensional man', sticks to his guns and affirms that

only mathematical properties, only entropic theories of lineal time motions describe reality and nothing else is needed.

The view of this blog is that ALL IS NEEDED, organic scales, logic time, spatial mathematics @nd we shall show soon MINDS whose multiple languages portray in still reduced spaces, projected then in creative orders on a lower scale, the mirrors it cast in the Universe, explaining why the Universe is fractal, is a reduced series of mirrors on larger views... Minds create with languages local orders that reflect the whole and that is why the Universe is fractal...

So finally because those orders are local, and the parts of the fractal are never as large in space, as durable in time, as deep in scales as the whole there are 'limits' we call 'entropic limits' of disorder, loss of perception and borders in space, to all those 4 elements. Thus the pentalogic required to understand the 5 Dimotional Universe of  $\neg\Delta@st$  beings.

Once this is accepted and the ego paradox of æntropic man, eliminated and a feeling for THE ENTANGLEMENTS of those 5 elements enjoyed with a plural mind trust me, even if I am alone in this journey for 30 years, and found no disciples, it is hard to see why one would want to return to the æntropic mind of mæn...



The paradox of the mind confuses the whole Universe with its limited self-centred world of perception, BUT reality is absolutely relative and we must just discover the biased 'theories' the humind has established to keep himself in the centre, which contrary to belief do exist still in all sciences, from the entropic big-bang of lineal time that reduces the two arrows of time to the lineal entropy of physicists clocks, blatantly 'forgetting the cyclical vortex of gravitational information' in galaxies that warp 'space into time', to social sciences which cannot accept the organic evolution of machines, the higher importance of the super organisms of history and its informative, legal and economic, reproductive networks in the control of societies, to biology, which denies eusocial evolution to maintain the ego on top and the vital properties of inorganic matter, as even quarks and electrons reproduce, absorb energy, gauge information and evolve socially in magnetic fields - hence have ALL the properties of our supposed 'unique' carbon.

An important upgrading of that mind though must be understood from the beginning with certain 'humility' towards the intelligence of the universe. *The two principles of absolute relativity.* In the fractal organic

Universe we are going to describe, no scale is preferential, which means that humans will be removed as they were in previous upgrades of science, not only from its spatial center (Copernicus), and its temporal center (Darwin), which his 'ego paradox' hardly tolerated, but also from its scalar/size center, and its 'mind-intelligent center'; which he likely won't accept. We talk of man and any 'mind-momad' that process information as an 'ego paradox',  $0\text{-infinitesimal mind} \times \infty\text{-Universe} = \text{Constant world}$ .

That is, systems to process information must reduce its temporal motions and create 'spatial still forms' and select information relevant to its survival point of view, which sees the nose bigger than Andromeda, and the 'Earth' still to focus our formal view; and certainly we eliminate all sentient unperceived properties of other minds. But - and this is the ego paradox - as we only perceive our senses, we confuse the entire Universe with our point of view, so it becomes 'self-e-vident' that we are the center of reality (Anthropic view) and the Universe is 'stupid, stupid, stupid' (entropic Universe).



*We're Spacetime Δst*

When in reality the opposite is truth. We have no center, and we are æntropic, subjective with one-dimensional perception, unconnected in an Entangled, sentient, i-nfinite, i-mmortal, I-ntelligent Universe. Æntropic man though makes no prisoners. It doesn't matter if you are a scientist or a religious person or a tribal nationalist, a capitalist believer in go(l)d or a Darwinian biologist; it is a fact that your models of reality passed the mere collection of data have an æntropic bias, against the real 'In-form-ed' nature of reality (big-bang entropic

Universe, which eliminates ad hoc imploding gravitational galaxies to achieve 'cosmic expansion'; Darwinian struggle between individuals that deny eusocial evolution which creates the most successful superorganic species - insects, Chinese - nationalist and capitalist tribal species, which deny the unity of mankind that should fight to become a global super organism, or the rights of all humans to a Universal blood-salary to survive, etc. etc.).

The catch though is this: the Universe does NOT like æntropic species, since its goal IS complex, organic social love, the making of wholes from parts, and to that aim it uses a 'pentalogic' entangled causality, NOT single, but multiple 'causes' that flux into an event co-shared because its social scales co-exist.

True intelligence is a swarm intelligence not a single ego intelligence, which æntropic humans with one-dimensional causality find so difficult to understand... as parts are unaware of the whole processes. In fact the whole is what matters most, but the failure of this blog to rise consciousness comes precisely from the ego paradox of humans always thinking they cause reality. If they were humble and understood the systemic way reality happens they could with far more subtlety tinker that reality as systemics would do, acting NOT on individuals but on memes and systems, reforming the blood-economic financial system and the legal, politic one to make history immortal. And they would likely survival the 'entropic destiny', æntropic mæn are enthusiastically designing for them.

Are we then dismissing mathematics as a language of the Universe? NO, we are DISMISSING MÆN who don't even understand the properties numbers tell us. I.e. a number is a social group of undistinguishable beings, hence mathematics proves the eusocial laws of the Universe. Each number is a polygon (the undistinguishable form of points as regular and equal among them), so  $S=T$ , points=numbers becomes the essential symmetry of 'societies', which transit between spatial still states of the mind and moving temporal states. And so on and so on... One of the biggest pleasures of ;men will be to learn the vital properties encoded in mathematics.

This said, of the 3 TYPE OF PROPERTIES OF REALITY, as Δ matters more than T that matters more than S, mathematics IS the 3rd language of reality in its synoptic capacity to explain the whys and bring forwards in its synoptic language the future of beings. It is NOT the only language of God, but specific precisely of phenomena that involve huge 'social groups', 'numbers'. Reason why it works so well studying far removed scales of reality where the laws of big numbers are required (physical scales).

But for a synoptic understanding of reality and anticipation of its 'great' phases of existence, ages, co-existing organic properties, vital actions, the language of organic scales and temporal Dimotions is far more appropriate. The bio-logic models matter more. And for systems closer to mankind as evolving machines, civilizations, and its cycles, History and social sciences AND BIOLOGY THOSE PROPERTIES do have a better capacity to foresee the future understand the processes involved, and act upon them.

So the whole argument on the magic of mathematics is absurd - all languages do mirror with a similar syntax the Universe and as such they 'save time' and can forecast the future. On the argument of its 'single capacity' to explain it all is false and unneeded, we do have  $\Delta$ organic properties and T-logic ones.

So the proper way to study reality is always considering all those elements, and languages of a complex mind that accounts for all the phenomena it studies, and of course, set the entropic limits of the system we study beyond which territorial space ends, scales are no longer discernible and time becomes death.

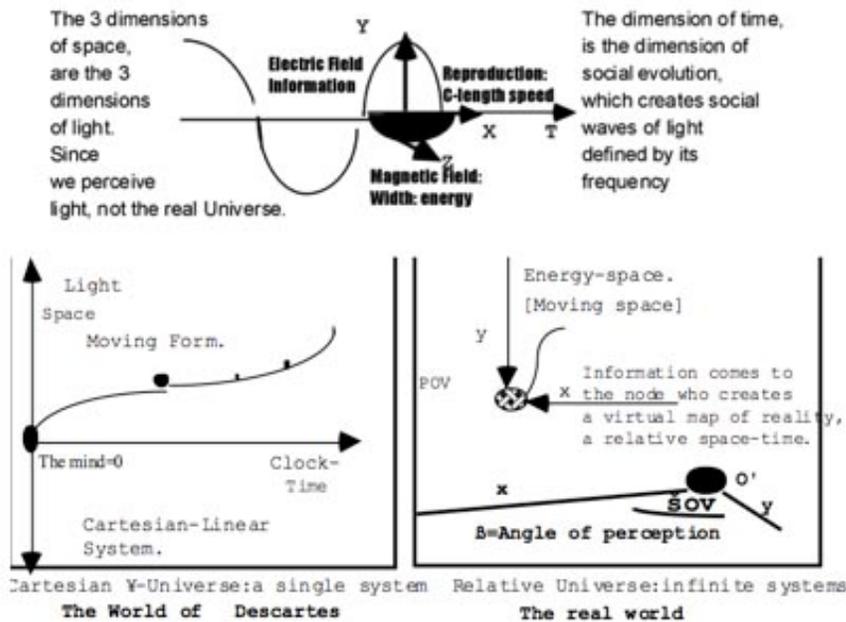
This said we can now bring a non-mathematical view of the galaxy, which will show its bio-logic properties that mathematics cannot describe, and show in a far more synoptic manner its 'birth ages and future death'... to show indeed how all those languages are complementary, but because mathematics studies big numbers, which mean smaller scales, its **DETAIL IS HIGHER, BUT ITS CAPACITY TO forecast LONG-deep time, high scale processes smaller.** What we win in precision of analysis and handling of huge numbers, we loose in latitude of time and synoptic power.

Finally the 5th element we have yet to study, the @-mind **WILL BE** the more surprising of them all, because of its **SYNOPTIC POWER**, as we will see, to the stupor of most readers that it is the mind what truly pegs it all together and makes it all similar, and explains the ultimate whys of all existences...

**Mind paradox. O-Worlds of  $\infty$  egocy.**

"We are all Gods (of our super organisms)." *Aristotle*

IN THE NEXT GRAPH we see the difference between the Aristotelian, self-centered, Euclidean=light humind and the Universal mind: Non-Aristotelian, Non-Euclidean:



The universe has infinite mind-mirrors depending on the forces used to gauge the external world, which bounces on a limited

quantity of its scales of space. Humans perceive the range of scales of the frequency of light between red and blue social density of colors. But infinite other minds with different detail according to the quantitative pixels they absorb (max. S = Min.t) maximal for smaller sizes will determine the intelligence of the system.

All what we have done till now is fair enough but external in its description. It lacks the ultimate evasive question - the will, which creates the 'world as a representation' biased by the entity to 'break' reality into the outer and inner world, and protect the survival of the inner world with those actions.

In other words, we need a mind able to perceive the whole as a whole separated from the outer world in which it interacts. And this was the understanding that started modern philosophy of science in the work of Descartes.

Descartes was not a simpleton. He was fully aware that what he had in the mind was not the whole Universe, so he expressly stated the fact, differentiating the 'world' of a human mind, from the infinite other worlds that exist outside, establishing in his little known book, the 'world', this difference, affirming that his 'Cartesian Frame of reference', was only that of the human mind.

Modern science started when Descartes defined the ego as the essence of the human being:

So he affirmed that the Universe was the sum of infinite mind-worlds, which did not speak necessarily the same languages, and created the same mappings of reality we humans created.

*Descartes was a contemporary of Galileo, and the true founder of modern science with his 'Method of reasoning' and the Frame of Reference of the mathematical mind, said that all what exists was made of:*

*- Open Space, which he called 'res extensa'.*

*- Closed, cyclical dimes, which he called 'vortices'.*

And then he added a 3<sup>rd</sup> element, the final stroke of a genius unparalleled since the dimes of Aristotle; after realizing that the only proof he had of the existence of those vortices and res extensa was, the fact that he perceived them:

Cogito Ergo Sum. 'I think therefore I am'.

The paradox of the Ego IS IN THAT SENSE rooted in the self-centered structure of the mind, which selects information from its self-centred point of view, creating, in the mind an infinitesimal linguistic mind-mapping of reality - which then IT CONFUSES WITH THE WHOLE UNIVERSE:

So the mind is a singularity or infinitesimal 0-point, the relative frame of reference that maps the  $\infty$  cycles of SPACE-Time of the Universe, reducing them to a 'World', to fit only selected useful information into the infinitesimal volume of the brain.

*0-linguistic mind x  $\infty$  space-time cycles of the Universe = Constant World mapping of reality, with the mind at its centre.*

In mathematical terms  $0 \times \infty = \text{Constant}$ ; that is the infinite information of the Universe, reduced into the relative infinitesimal volume of our mind gives us a constant mapping, where we expel all the properties that are not interesting to us and our self-centered view.

Yet our mind is not the whole, just the light space-time our eyes perceive.

Indeed, Euclidean mathematics, as Descartes and Kant understood *is only the 3 perpendicular 'space-time elements' of a massless ray of light* merely shrinks all other scales of reality to fit into the mind.

We have to introduce the first postulate of non-Æ so you realise how 'limited' is the homunculus mind.

And how similar to all other minds of the Universe. So before we study the particle-head of our informative perception, we shall upgrade the postulates of mathematics, which describe its topology and social

evolution, to be able to properly formalize the program of the mind, latter on, in our analysis of how beings emerge as topological super organisms.

Now the key to understand minds is the fact that each of those minds is self-centered in its myopic view of reality from its single point of view and perspective that makes itself to be larger than all what is around.

The Human ego then, IS the essential limit for mankind to do 'real objective social and economic science'. Reason why we dedicate also a post to explain this ingrained paradox of all living systems - to reduce information to the one needed, from the perspective of its self-centered point of view that has made so difficult for mankind to advance in objective science - as we have always believe the Earth was the center of the Universe, and now we believe man is its only intelligent sentient 'atom'.

IT IS THE MIND THAT CREATES FORM, SPACE, WHERE THERE IS ONLY MOTION, TIME. AND IT IS THE MIND THAT CREATES THE FRACTAL MIRROR-LIKE STRUCTURE OF PARTS AND WHOLES. Indeed the MIND, THAT SEEMINGLY EGO-SECRET humans keep as only proper of them, with metaphysical musings, but it is nothing but the spatial, static linguistic formal view of the whole, has also its equation, and it is the central element of reality - an anathema of present ego-centered human views of the Universe, which however has always been 'within' the a priori conditions of physical analysis, as the 'frame of reference' of our space-time mathematical views.

THE still mind of form would like to stop everything as that is how 'minds' think they perceive and feel 'at ease' in safety I find immensely more pleasurable to know that all is in perpetual motion and communication of form, all have both motion and form, and will constantly, dynamically interplay between them. So the simpler additions and interlocking products of conserved momentums, and Pythagorean theorems while are needed to maintain a stable basis in reality, are just the simplest modes of the Universe.

The mind though ends up killing motion and we shall see that its imbalance in the side of form, is what ultimately kills all systems, exhausting its energy.

In man, it is also the mind through the ego paradox the cause of our incapacity to understand the Universe as it is, deformed from our point of view, single scale, and time clocks, as we have explained ad nauseam. Instead the philosophy that substitutes them this view of reality is what I have called Absolute relativity - no system matters more than any other as we are all...

Fact is the mind exists in all systems in which TIME STOPS to form space; which in galaxies happens in relativity equations in black holes, in thermodynamic physics in the eye of an Eddie, in quantum physics in the center of an atom, or charge... So what Leibniz said that 'every point holds a world in its self', it is indeed the ultimate definition of a mind. We shall then to further reduce the egocy paradox of humans, analyzing now those physical minds in strict mathematical terms, giving geometry another boost of 'vital properties' by defining non-Euclidean points, fractal points with parts.

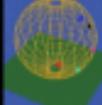
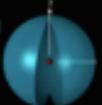
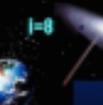
**$\Pi T_i$ : THE INFORMATIVE-PERCEPTIVE CYCLE-DIMENSION:  $T_i$**   
**A MIND-WORLD FIXES THE VITAL ACTIONS OF ENERGY AND TIME CYCLES RELEVANT FOR THE SURVIVAL OF ANY I-SPECIES INTO A LINGUISTIC WORLD OF STATIC SPACE AND INFORMATION**

**HUMAN LANGUAGES: THE ELECTROMAGNETIC WORLD**  
**Men perceive with maths 3 perpendicular dimensions of continuous Euclidean Space & a single arrow of logic time from past to future with words, because these are the dimensions and arrows of our electromagnetic world**



**Man uses geometry to explain spatial energy & words to describe the logic of time. Both together explain our visual Universe.**

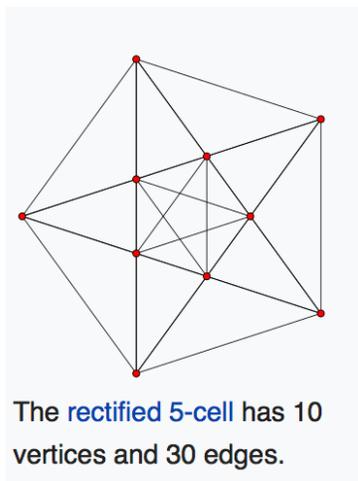
**QUANTIC MIND-WORLDS: HEIGHT DIMENSION**  
**Besides human eye-worlds the Universe has many i-planes of existence, dimensions & time arrows that quantic mind-species perceive with other languages=forces used to describe those EXT i-worlds:**

Riemann Sphere $I=0$	Atomic Spin $I=3$	Dx Orbital $I=4$	Fullerene Spin $I=5$	Mantis $I=6$	Verbal Speaker $I=7$	Satellite $I=7$	Galaxy $I=8$
							
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:**

Minds order as linguistic gods a territory around themselves, its fractal body and entropic world. As such they are the linguistic Aristotelian, final unmoved singularity Gods of reality. In the graph we see them ordering with different languages, different scales of reality which will reflect in a larger whole, the linguistic image they hold.

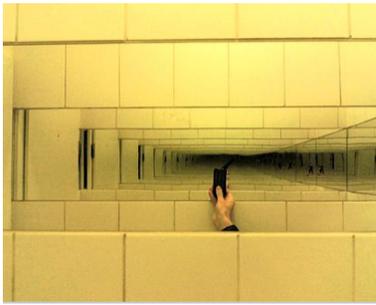
**Linguistic creationism vs.  $\infty$  infinitesimal mind-mirrors ordering local worlds.**



The simplest mind-mirror in mathematics: a pentagram with two internal reductions. The first image is a mirror INVERTED upside down image of the outer graph; to get to an image in the same orientation we need two inner scales of the being. This is a general rule of all super organisms, where the 'symmetry of scale' always jumps an intermediate one; so lines form rings that move to form lines and so on. Languages are thus always 'logic' mirrors of properties of scales, spaces and times.

The simplest why of the fractal, scalar structure of the Universe, from the perspective of the mind: as a linguistic mirror image of reality in a smaller space, minds 'create' fractal diminishing, infinite scales

As the dimotions of information dominate and set the final arrow of the system in its worldcycle, it follows the mind-will with its informative dimotion is the main protagonist of reality:



An infinity mirror effect viewed

So it is evident that the Universe is a fractal super organism and all its parts are made to the image and likeness of the whole, as all live a worldcycle.

But still we have two elements more to 'summarize' in this introduction. Why and how this fractal structure of deep scales might happen and what is the role of languages in the creation of the Universe, specifically verbal and mathematical languages origin of the most extended theories of reality - linguistic creationism?. How can we debunk the idea that 'languages' create reality, specifically human languages? This is a self-evident 'ego paradox'.

Since while all systems gauge information, their capacity to order reality is just a mirror process by which languages mirror in 'still, smaller linguistic images' the world they perceive and then reflect this mind-order in their territorial 'energy-body':

Infinitesimal mind-language  $\times \infty$  Universe = constant self-centered world.

As Aristotle realized 'we are all gods, the unmoved final cause of the motion of the energy around us'. So languages DO order locally preserving in 'smaller' scales the larger structure of the universe, converted in this manner in a Game of Fractal Mirrors.

**THIS MUST BE ACCEPTED: WITHOUT LINGUISTIC MINDS, monads, Aristotelian Gods, Cartesian Cogito ergo sum and its will to order by reflecting its smaller mind mirror into reality REALITY AS WE KNOW WOULD NOT EXIST. There is no MECHANISM able to create fractals. Are then we all thoughts of God, the logic mind of the Universe?**

## **INFLATIONARY LANGUAGES**

Here a distinction must be made: MINDS are dominant in form, and they need a special support of minimal size and maximal form to store that information but as soon as they try to imprint ENTROPIC MOTION, they must simplify form, so languages are INFLATIONARY WITH some too complex forms the simple motion that tends to linearity rejects. Reason why languages are inflationary compared to the reality they can imprint - more equations than simple physical forms, more money than physical economy, more words than actions we make.

It is essential then specially to reject creationist physics, to understand that as Einstein put it 'I know when maths are truth - consistent with its inflationary informative syntax rules - but not when they are real' and 'science should be occupied only with the description of events that have happened - are real'. We thus will discharge from string theory to evaporation of black holes, inflationary fictions of mathematics and within mathematics the Cantor infinity paradise and Hilbert's axiomatic method for our intention is to reduce mathematics into a vital mirror of the real elements of the Universe of points with parts. And all infinities to the limits of a scale beyond which distortion of perception make impossible measure, and all infinitesimals to a finitesimal part (Leibniz's definition as  $1/n$ , being 1 the whole)

In that sense, the fractal Universe we perceive as 'it is' cannot be explained rationally without adding to the acknowledged temporal=motion and spatial=mind properties we 'expand' with the concept of space-time 'dimotions', IN BALANCE, so also in need of organic properties of proportion and balance, born of the co-existence of 3 scales of smaller parts that form networks, which become larger wholes...

So for example, your nervous system perceives reality as it 'integrates' the sensations of all its cells as a mind mirror in balance with the external world to survive, but it can dream and imagine its excess of thoughts - madness consists then in believing your dreams and fictions - which of course is a proof of a corrupted, soon to be extinguished isolated mind and we shall go back to those key themes to understand why our world is sinking.

### **Conclusion. The mind, the meaning of it all.**

Æntropic man will never accept this blog precisely because of what  $\neg E=;$ man finds most enticing. When we come to the ultimate barebones of it all, to the mind that embodies the will of existence of the system ALL MINDS ARE EQUAL IN ITS WILL OF SURVIVAL, ALL FOLLOW A program of existence we shall describe in this blog; all of them feed entropy for its limbs of locomotion, energy to its body wave to reproduce, information to its mind to guide the system, and all of them evolve socially through a communicative force with similar clones.

THE MIND AND AS A CONSEQUENCE OF THIS, the program of survival of the Universe, reinforced by the automatic fact that those who do not practice it become sooner than latter entropy for other species that follow it, is both the pegging force of all scales, the cause of the creative mirrors that projected into the external world order locally reality at the image and likeness of the mind-mirror, and so there is NO HIGHER VALUE in an atom than in a man or an ant. All of them are playing the game of survival.

So the 5th element we have studied, the @-mind IS the more surprising of them all, because of its SYNOPTIC POWER, That truly pegs it all together and makes it all similar, and explains the ultimate whys of all existences...

ITS ACCEPTANCE by all philosophers of science that tried to search for the deep whys of reality vs. physicists who only want to manipulate reality has then been the long battle for thought which humans have carried, between  $;$ men and Amen. On our side from Aristotle and Plato through Leonardo and Descartes to Leibniz, the philosophers and its mind-points gave us the only explanation to the whys. On the other side 'the why is the only thing physicists don't ask' said Feynman, as it is not its goal - its praxis to make machines of measure, to build a technological society matters most.

### **RECAP. Reality is a MENTAL fractal of space=form and time=motion beings: $\neg \Delta @st$**

The Universe is a fractal of Space and time. What this means is that Space=Form & Time=Motion are the original substances of reality.

*Look around you, all what you see are forms in motion; space-time beings. They have many different shapes and speeds but still those 2 'elements', spatial dimensional form, and temporal, changing motion; is all what there is to it.*

And so what this blog will show is that *all what exists can be derived and generated from the 5 Dimensional motions of space-time (ab. Dimotions).*

*Whereas* the 3 first dimotions are related to the usual 3 dimensions of classic space, the four dimotion, to the classic motion of entropic time and the fifth dimotion, or 'scalar dimotion of social evolution', only recently formalized is composed of a series of scales of relative size in space and different speed in its time clocks which structures the organic parts and wholes and gives vital properties to reality.

BUT If we want also to understand how those infinite scales of size are created we need to postulate the existence of linguistic mind mirrors that 'shrink' reality into its infinitesimal still mapping; either as mental

forms - since you indeed do NOT see the Universe but the infinitesimal electronic image created in your mind with light space-time; or as 'seeds of information', which we can consider a 'static, frozen informative mind' that will replicate a larger whole, replica of its inner information.

Minds are linguistic mirrors that shrink reality in space. While seeds are mirrors of super organisms 'compressed' in its evolutionary duration of time (palingenetic seed), which implies a continuity of information through eons of discontinuous time generations. So minds & seeds 'create' the diminishing,  $\infty$ , spacetime scales of reality becoming the inverse arrow of causality to that recognized today by 'Constructivism', the theory of reality according to which causality comes only from the smallish physical world to the larger one. It is only when we add this other causality when we can balance all sciences as absolutely relative and the two directions of the fifth dimension, upwards towards parental wholes and downwards towards smaller parts.

We thus first define in depth those 5 dimotions; then show you that all forms in space are simultaneous ensembles of those 5 Dimotions, which in time follow a sequential world cycle of life and death; as they are born in a lower 'scale of size' of the fifth dimension (seminal birth), with faster time clocks-cycles, emerge in a higher scale as organisms, part of a larger world or super organism, with slower time clocks=cycles, returning to the lower scale in the moment of death.

And then, we shall go through all the sciences of reality, scale by scale, from the quantum world through the scales of life and matter to the galaxy, and through the 'mirror languages' of mathematics, logic and human arts, which reflect in its syntax and laws those 'space organisms tracing time cycles', showing you that indeed, five dimotions of space-time suffice to make senses of every language, form, event and scale of reality, in an  $\infty$ , immortal, fractal Universe, improving those languages and 'sciences' (space-time sciences), or correcting when needed with the abc laws of the scientific method (accurate data, bio-logic causes, cyclical predictability), previous models of reality that didn't respect them.

If you are still here (: I ask you to reflect on Haldane's deep insight not only in the Universe but in the limits of the human mind. We shall soon define mathematically the mind as an infinitesimal mirror of the infinite Universe, which as Descartes understood we tend to confuse with the whole - so we are still at its center. *So we project our limited understanding of reality into the theories we make of it. And this is indeed the case of the big-bang which we will keep showing at its true value with the scientific method of A) accurate data B) Logic models and C) cyclical patterns.*

WE CLARIFIED GALILEAN RELATIVITY, REJECTED Newton and SIDED WITH Leibniz, SHOWED our POOR conceptual thought on the key elements of reality. And finally rejected lineal time, and noticed how much all that is part of the subconscious mind of astrophysicists in his erroneous big-bang theory.

Those errors have dragged the whole philosophy of science, for centuries to come. They were poor choices, akin to have decided for Ptolemy instead of Copernicus, in our understanding of the orbits of reality. So we have a complicated half-truth, with multiple epicycles and are unable to understand the simple beauty of the first principles of the organic Universe.

So once clarified an important definition and the main DUALITY paradox (but not the only one), tracking back where the Physicists made his second huge error after Newton's absolute timespace - NOT treating BOTH concepts space and time as mental and mathematics as a mirror-world of the larger Universe; *but choosing just one side of it, that of motion, and ALSO CONFUSING THE MIRROR-LANGUAGE AS THE CREATIONAL PRINCIPLE, NOT THE UNIVERSE AND ITS LAWS OF SPACE-TIME we can go a step further, from duality into trilogic systems.*

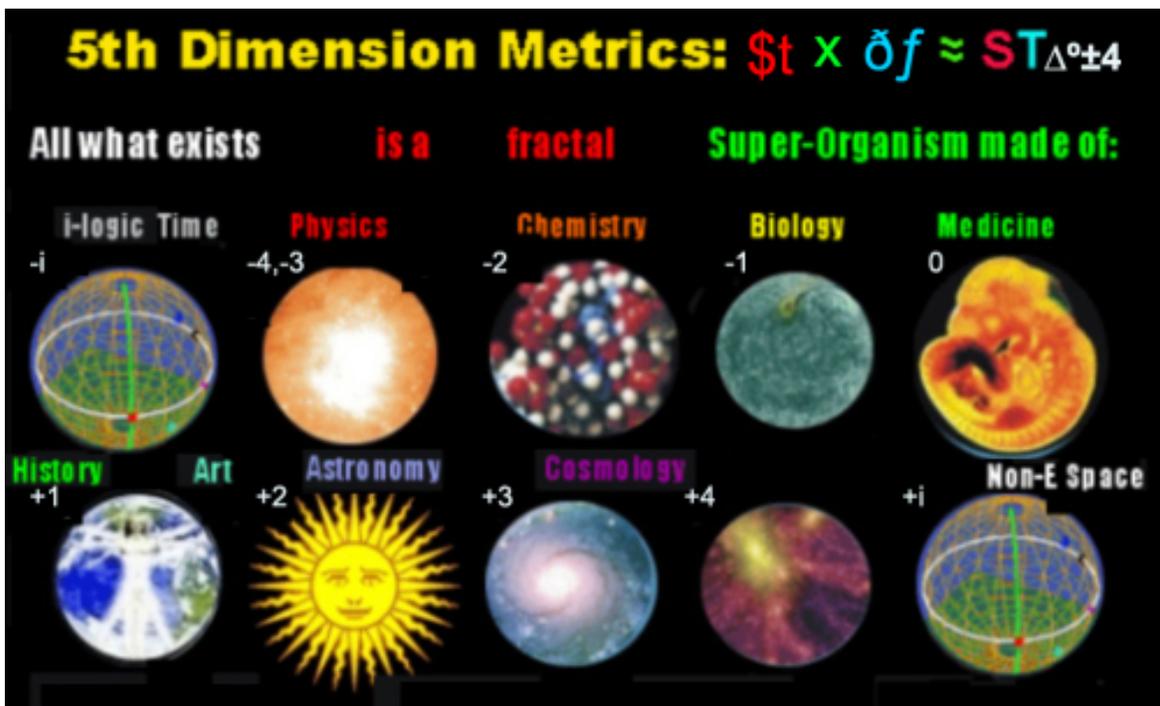
We are now able to study time and space together, which is the natural next step to fully grasp the structure of the Universe, its fundamental particle in space, the super organism, and its fundamental event in time, the world cycle of life and death. To that aim we must introduce the key concept of relational space-time, a 'DIMOTION' of space-time, that is a dimension of space that has a motion and a function in time.

# VIII.

## WORLDCYCLES

The cycle of time in its simple pi-form in a single space-scale must now be adapted to the complex Universe of multiple scales. To that aim we shall define a worldcycle which is its equivalent through a zero-sum TRAVEL through the scales of the fifth dimension, and we shall show it is equivalent to a life and death cycle of 'existence'.

It follows then immediately of the fact that there are infinite time cycles that break space and THERE ARE DIFFERENT SPEEDS IN THOSE TIME-CYCLES ACCORDING to their size, (vortex law) so smaller systems turn faster than larger ones, THAT WE NEED TO DEFINE A SCALAR UNIVERSE, in which the order of time cycles occur according to size - each scale studied by a different science:



In the graph, the scales of the Universe, with its 'limiting formal languages' now evolved into better mirrors of time (i-logic) and Space (vital mathematics), which likely will be mirrors of similar forms in all decametric scales. We shall for sake of order establish in our 'pentalogic analysis of scalar' systems, an i-logic analysis of the Disomorphisms and pentalogic elements of the system in time, a mathematical analysis of its vital topologies and analysis of the nested physical, biological and sociological forms and motions of those systems.

In the graph, the Universe organizes itself in co-existing scales of relative size in space and speed in its time clocks of information - a structural property that determines its organic nature, as those scales become symbiotic to each other, sharing through networks flows of energy and information.

Since there are infinite time clocks in the Universe, each of them breaking space into inner and outer regions. So there are also infinite spaces. And so the next big question is how to order them all?

The metric equation of the fifth dimension of space-time is simple as all space-time metric are:  $\$$  (size in space)  $\times$   $\delta$  (speed of time clocks) = Constant. So smaller parts have more speed of time clocks which carry its in-form-ation in the form and frequency of its cycles, coding larger systems: genes code cells, memes code social organisms and particles' quantum numbers code physical systems.

But larger forms have more spatial energy and enclose and control in synchronicity its faster smaller parts, creating the co-existing scales and symbiotic cycles of super organisms in any 'stience' of space time organisms. It also allows systems to travel through its scales by growing in size, while diminishing in time speed, as we do from birth as a fast reproducing seminal cell which emerges with slower clocks as an organism, part of a Time\$pace super organism (ab. supcoeranism, T.œ), mother earth, which has even slower geological cycles.

So while the equations of both, Galilean and Einstein's relativity are the same the interpretation is different, giving us a fractal universe:

*We are therefore introducing two new Dimotions of space-time, due to the scalar nature of it:*

**4th Dimotion:** of social parts into wholes, corresponding to the growing arrow of social evolution of the Universe, its ULTIMATE GOAL, which translated to verbal terms could be rightly called the Dimotion of Love.

**5th Dimotion:** entropy, which turns out to be the dissolution of wholes into parts, which is akin to death and we keep as the '4th dimension' just to respect the correspondence principle with past theories (since it is the concept of the arrow of time in physics)

**Nt.1** After much procrastination, trying to be positive by 'ending the 5 Dimotions' into social evolution, NOT in entropic death, I have conceded defeat and accepted that the end of all worldcycles is death, so I am in the process of changing the 'names' of the 4th dimension before that of entropy and the 5th dimension that of social evolution, to the proper order, so many paragraphs will have the old naming - 4D for entropy and 5D for social evolution. But the new names that should stand, for future researchers are 4D, social evolution, 5D, entropy and 5D as expression of all the scales of social D=evolution, which therefore include them all up and down the planes of existence. The posts corrected from 2019 onwards will have the proper naming. Many graphs will stand with the wrong names, for lack of time and energy to correct them.

A general rule in the entangled Universe indeed is to be humble and accept reality as it is, to be able then to bend just what can be bent, which if humans would follow in its ill-designed systems of economics and history might grant them a longer world cycle of existence that the one they seem bond to not have, so we shall now introduce the fundamental complex time cycle of reality which ADDS scales to the simplified cyclical point, to define existence as a travel through the 5 dimotions and 3 scales of the fifth dimension that conform a super organism.

Those 5 Dimotions and scales will be ALL what we need to explain all 'stiences', each one studying a scale of space-time beings and its events ruled by the laws of its 5 Dimotions:

**The five 'dimotions' of spacetime. Existence as a travel through the fifth dimension.**

The importance of having a metric equation that leaves co-invariant a motion through its parameters of space-time, is that we can 'travel' across this dimension. Indeed, the mathematician Klein defined the existence of a dimension of space-time, when we could formulate a co-invariant equation left unchanged when we move through the space-time dimension. So how we travel through the fifth dimension? Obviously by growing in *size in space through the process of reproduction and evolution, from an  $\Delta-1$  fast seed of information, emerging, as a larger whole with slower time clocks, in the organic level, which itself is part of a larger world, with slower 'deep time' geological and cultural cycles.*

So Existence is indeed a travel through the fifth dimension, and the mere fact that all systems of nature exist through that world cycle (no longer a physical worldline in a 4D Universe as we have added a dimension of temporal 'depth'), IS an absolute experimental proof of the existence of 5D:

In that sense the main difference when we widen our understanding of space-time with the metric equations of 5D is to be able to explain NOT only processes of time-change in a single planes of space-time, mostly due to locomotions, but process of change due to transformations in the in-form-ation of beings, related to life, organic structures and hence to solve some of the eternal existential questions about 'existence', which will be now defined easily as a 'travel between 3 scales of the fifth dimension'.

All in all we have 5 dimotions of space-time to model the Universe the entropic lineal classic dimension, the new cyclical, tall dimension of time information that completes the cycle, and the inner vital energy content combination of both, happening between the social cosmological plane of the 4th Dimotion and the entropic lower plane of the 5th Dimotion.

And the main structure that orders those 5 Dimotions is what we shall call a world cycle (no longer a worldliness) of life and death, between the 1th Dimotion of 'Generational space-time' (Seed-mind state) and its last 5th Dimotion of entropic death:

Now the consequences of those metric equations are many. The essential one is TO UNDERSTAND that reality starts in a lower  $\Delta-1$  scale of MORE PRECISE INFORMATION AND LESS ENTROPY, which will code larger scales by reproducing massively and reorganizing the being. So life as we enlarge, becomes less precise and finally the parts will detach from each other and provoke the 3rd and fourth age of entropic death. So we can establish a general arrow of the existence of beings, but ordering the 5 space-time  $D_i$  motions in a sequential world cycle of life and death, which always starts in the  $\Delta-1$  seed of perfect more information, going down as we live, even *if the mind of information expects, fights and decries any form of entropy and disorder.*

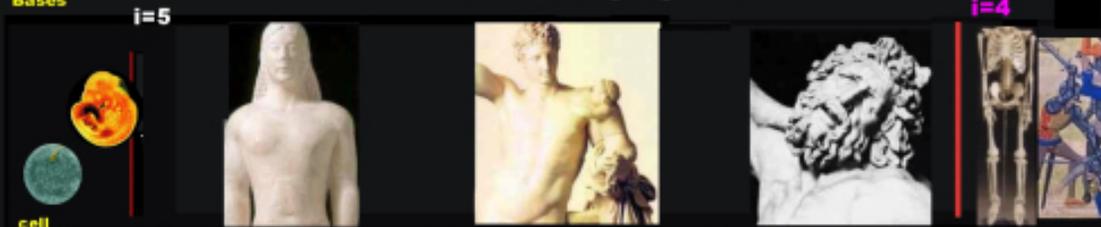
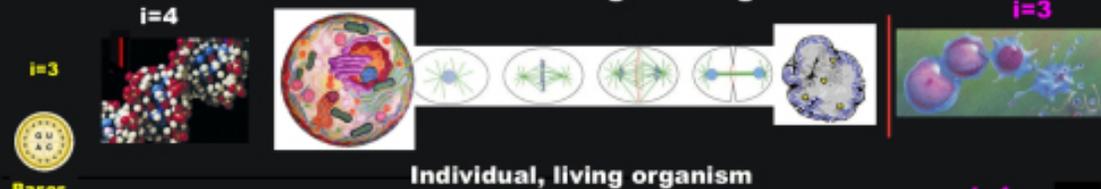
The smaller faster systems of the fifth entropic  $D_i$  motion code the larger ones, who enclose them into a singularity-membrane 'whole' system that make sense of it. So we have the five  $D_i$  motions, in a nutshell. Below we order them in space first and then its symmetry in time:

THE GENERATIONAL=LIFE CYCLE:  $e_{i-1} < E > ET > T < e_{i-2}$

**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:  $\{ E_i >$  Maturity:  $ET_i >$  Old age:  $T_i <$  Death:  $\} e_{i-2}$**

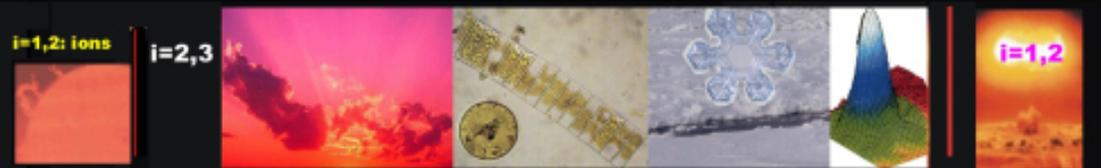
**Human Socio-Biological Organisms:**



Culture , Nation, God

**Universal, Physical, Organisms:**

**Birth:  $e_{i-1} <$  Youth:  $\{ E_i >$  Maturity:  $ET_i >$  Old age:  $T_i <$  Death:  $\} e_{i-2}$**



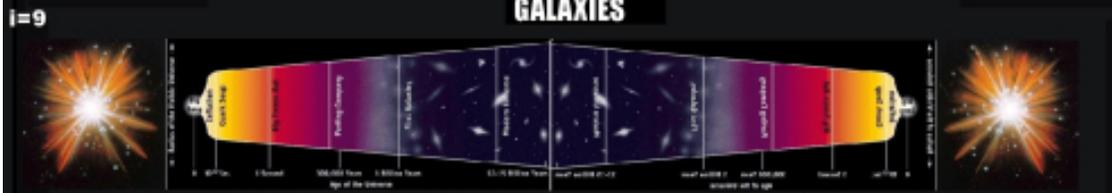
Plasma Birth Energetic Gas Liquid, Reproductive State Solid, informative state, M=E death

**STATES OF MATTER**



Energetic Birth Irregular galaxy Spiral State Informative, Globular Age Quasar Death

**GALAXIES**



**'Big Banging: III Horizons'**

**UNIVERSE**

In the graph the Universe has 5  $D_i$  motions of space-time, which are the  $D_i$  motions we need to build all realities. 3  $D_i$  motions of space-time which are the canonical  $D_i$  motions of length, width and height and its perception as motions=function in time; and the two 'lost'  $D_i$  motions of the scalar Universe; the  $D_i$  motion of pure time motions, when 'wholes desegregate into smaller faster parts' (5th  $D_i$  motion of entropy) and the inverse 4th  $D_i$  motion of eusocial evolution and palingenetic generation, which creates from a seminal or linguistic form the whole.

The result of adding both – the life and the death processes – in any system or scale of reality is a 'zero-sum' of information+entropy that cyclically returns reality to its initial form, in a dynamic, multiple steady state balance that affects any entity of reality. The study of that process of creation and dissolution of complex structures, however, cannot be made with translational time, ( $v=S/T$ ), the realm of physics, but it needs to understand biological, morphological time – the life/death cycle and its [3±1 ages](#). Those ages explain precisely what physicists, stuck in the study of time as movement in space, will never understand: the meaning of the life and death cycle that creates and extinguishes [humans](#), societies (super-organisms of [human beings](#)) and all kind of beings that exist in space and time.

In biological time all universal species follow the same 'morphological changes', described by the wisdom of verbal thought as the [3±1 ages](#) of life, each one ruled by one of the  $3\pm\Delta 1$  change=time:

+1: Conception: ruled by 4D generation, palingenesis and [social evolution](#), as a micro-organism or cell transcends into a macro-organism, organized by social networks:  $\int \Gamma$ .

1st age: Youth or Age of lineal '\$t' motions.

2nd age: of [energy](#) that reproduces information and iterates the system, symbolized by,  $\sum e \prod i$ .

3rd age: All motion & energy becomes form, in-form-ation, exhausting itself; symbolized by  $\int \delta$ .

-1:Death: The inverse of conception when the super-organism dissolves back into cells:  $\partial S$ , or age of entropy.

In the graph we describe that law of [3±1 ages](#), cycles, or horizons of evolutions for the fundamental species of reality.

The less important parts are in fact those studied by physicists as 'time arrows', the locomotion and the final entropic death - as systems can exist only as body-heads.

To understand that duality in depth, we have to recall the Law of Complementarity between [energy and information](#): all systems are made with a body/field of energy and a head/particle of information. This is the basis of quantum physics. And in the second age *when existence reaches its plenitude it is precisely when 'information' imprints energy and reproduces the system:  $\sum e, x \prod i$ .*

So those 2 elements are the essential forms of any system.

While the potentials/limbs can be external. In simple animals limbs regenerate...

Further on, since form is made with motion, all events must start with an amount of 'simple' motion that transforms itself into still form, information. Then, when all motion is consumed, warped into information, death reverses its cycle.

Yet in the middle of that cycle, when information and motion are in balance, to preserve the 'bio-logic' form created in that process, the system achieves its reproduction, through 'hyperbolic energy'.

So between the  $\Delta\pm 1$  processes of social evolution (generation and emergence into a higher plane) and entropy (death and dissolution back to  $\Delta-1$ ), in a single *plane of existence we can describe reality just with the 3 canonical topological planes (bidimensional parts: flat limbs, hyperbolic body-waves and spherical particle-heads), whose topological forms best suit its functions.*

Yet for the full description we need the  $\Delta\pm 1$  seminal reproduction and entropic generation and death.

The most important as in all fractals, vital or mathematical is obviously reproduction, imposed by survival:

So the 'offspring' of the being will carry on its information into the future.

Information never disappears as it always recreates itself. And since all is motion by the mere fact that time moves with form, by the mere fact that momentum-energy is conserved memorial reproduction of cyclical forms 'happens' In fact science is nothing but the recollection in human languages of those memorial reproductions, which become repetitive 'laws of science'.

All beings, from fundamental particles, (electrons and quarks) to [human beings](#) and life species, reproduce or are reproduced by more complex systems, when they have extra-energy to imprint its in-form-ation. Since forms that do not reproduce, die away and become extinct.

So even those deconstructed beings that cannot reproduce alone are reproduced by other species. For example, cells reproduce carbohydrates, galaxies reproduce stars and human reproduce [machines](#) in factories.

Thus, we talk of  $3\pm 1$  drives of live, arrows or ages of existence in all systems: the drive for limb motion body energy, the drive for information, the drive for reproduction and the drive of social  $d$ =evolution (birth and death of a macro-organism).

Whereas the  $3\pm 1$  ages of Organic

Time are merely the order in which those  $3\pm 1$  drives 'accumulate' during the life/death cycle of any species, sequentially.

*If we put them in adjacent spatial forms, through 3 scales of  $\Delta-1$  atomic/cellular/ individual,  $\Delta\emptyset$  organic/thermodynamic/social,  $\Delta+1$  cosmological/geological/national planes, we get a super organism of fractal space.*

And that is all what there is to it: 5 dimotions ordered in time as sequential world cycles, in scalar  $\Delta\pm 1$  space as super organisms.

In a young first age, motion is more abundant. In the mature age of balance, the species reproduces, combining motion and form, into hyperbolic body-waves of [energy \(max. motion, minimal form\) and information \(form in action, maximal form, minimal motion\).](#)

In the third age of the species, energy is scarce but information is abundant, accumulated in the first ages till it becomes PURE FORM, and then explodes back into PURE motion, in the entropic moment of death.

So we can cast also the two 'extremal', external  $\Delta\pm 1$  arrows of pure still form as generating seeds and minds, and pure scattering motion as big bangs of entropy and death.

It is from those 5 elements, from where ALL REALITIES laws of science, forms in space, still mind-languages and motions in time, life and death processes, world cycles of existence will be BY ITERATION AND COMBINATION explained.

ALL is encoded in the 5 dimensions of time-space because that is all what we are.

Young people are full of motion. They are in the motion horizon of the species. They are bigger, have little temporal knowledge. They are simple in form. While Old people are full of information. They are in the information horizon of the species till they stop into pure form - but as time IS ALL AND TIME IS MOTION, THEY CANNOT STOP. So when information stops in 'action', death explodes.

Old people, warped matters are smaller, as all information systems are and have a lot of temporal memories. They move little and have a lot of wrinkles.

Mature people balance the two elements of the organic Universe, their content of energy-space and temporal information. So they can reproduce all their components. Hence the 2nd age is the age of reproduction. And the forms of any being in that mature age are a harmonic, an efficient combination of energy lines and informative cycles that we perceive as 'beautiful', the objective perception of harmony between energy and information, lines and cycles. So in all organisms the mature, realistic, classic age of balance, or reproductive age, is the most perfect age. [Human beings](#) intuitively see that. We like balanced, spiral galaxies, mature people and realist art, which is called classic art and takes place in the mature age of civilizations.

Yet, the dominant arrow of time, information, will finally exhaust energy, warp totally the organism and bring its explosive death. And the cycle will start again.

It follows that a true science of life and time will try to maintain any organism in its age of balance, without excessive information. Exactly the contrary of what our society does. Since [humans](#) accumulate scientific and technological information towards a point or '[singularity](#)' in which that information, in the form of a robot or artificial intelligence, might extinguish us.

In the graphs, we illustrate those [3+1 ages](#) with a few universal examples, also from social sciences: we see the process in individual [human beings](#), in art, the collective brain of a culture; in matter, where those ages are called the states of matter – energetic gas, reproductive liquid and informative solid.

In the graph the **Worldcycle's ages of different species**, which being the Universe a decametric scalar reality both in space and time (i.e.  $10^{10}$  are the mean number between scales, Dna atomic ties, cells in organisms, people on Earth, stars on galaxies, galaxies on perceived Universe), means also a mean limit of bits of cyclical time for an efficient species, i.e. man lives  $\frac{1}{4} 10^{10}$  seconds=80 years).

To notice again a parallelism in the external world scales of cosmology in time, years and mass, between the active magnitude and the life age span - NOTHING of this being coincidence but part of the infinite intelligence of the immortal universe always based in balances and symmetries between the spatial, scalar, temporal and mind-languages of the being in its 3 scales, of inner parts, wholes and worlds/ecosystems.

#### **The ultimate whys of 5D metric...**

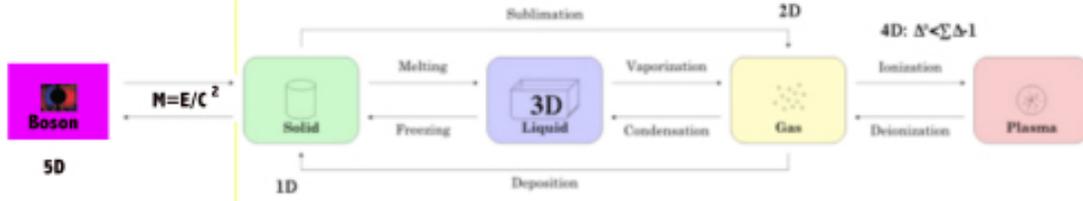
are in fact organic. Indeed, the reduction of speed of motion and cyclical events in larger beings happen because they must first establish a simultaneous, present, co-existence of its clone reproduced parts, necessary to act externally as a whole. So the 'whole' clock of the system must slow down as it enlarges into multiple organic clone-like beings which will then adopt the 'slower collective clock' as its new 'unit' of simultaneous action as a whole. And we will return to those key logic elements. One though needs to be clarified earlier on, a proper definition of dimensions and motions of space and time.

#### **An Organic, fractal Universe. The program of existence in Matter:**

How all the scales of reality including a possible life-death cycle of cosmology (which however seems to happen only at the quasar scale) can then be illustrated in more detail, considering the specific worldcycles

of the species shown in the graph, starting with the way those 5 Dimotions organize physical states of matter:

The 3±j ages of matter:

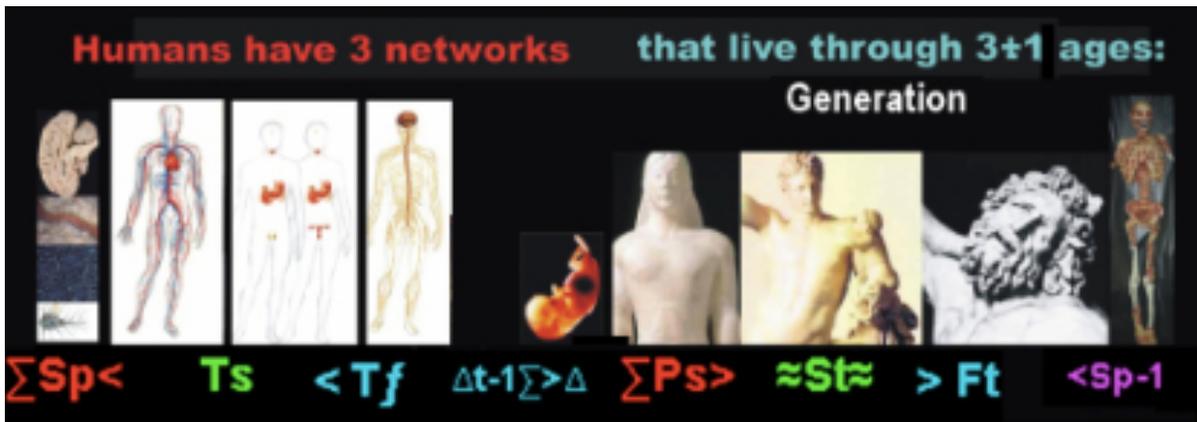


In the graph, the \$t entropy gas, ST reproductive liquid and δ§ solid ages of matter and the dynamic:

$$j-1 \text{ Plasma} > \$t \text{ gas} > ST\text{-Liquid} > \delta\text{§-Solid} > j+1 \text{ boson state.}$$

So they correspond to the dominance of one of the 5 Dimotions, which requires therefore to be understood not a simple A->B lineal Aristotelian logic but Pentalogic, the new complex view on how the entangled Universe constantly transforms and combines those Dimotions to create all systems in 'existence'.

Since we will apply those 5 ages of life and death to all systems, performing a world cycle, no longer a worldliness, including mankind, described in the next graph as all other systems of reality, as a super organism of simultaneous topologies defined by 3 of those Dimotions, which traces a world cycle of life and death defined by those 5 Dimotions:



ALL WHAT exists is a space-time super organism made of 3 topologies adjacent in simultaneous space, defined logically by a single fractal generator of those 3 only topological varieties, \$t: lineal limbs/potentials/territories; ST-hyperbolic body-waves, δ§: cyclical particles-heads-informative class, for all social, biological and physical systems, tracing a world cycle of 3 time ages symmetric to those 3 Δ° spatial 'physiological/topological/social networks' made of Δ-1 cells/citizens/matter particles, in which each of the physiological networks of the system dominates the super organism: the limbic motion/potential system dominates the first age; the re=productive body-wave systems the second age and in the third age of information the head/particle/informative people-caste dominates the physical/biological or social system, exhausting selfishly the energy of the vital body-wave, and provoking its explosion back into entropy that erases the system, completing its zero-sum world cycle, restarted if it has generated a clone super organism in its offspring, reason why the Universe is a reproductive fractal of information - only those systems that reproduce its information survive and are still with us.

The previous graph that describes a Human TimeSpace Supœrganism (ab. T.œ) with the five dimotions of the Universe, both in simultaneous space as a super organism made of 3 fractal networks and in sequential

time, as a system that lives 3 ages, with some 'old jargon' of pentalogic in the bottom, which are generalized equations to describe events and forms constructed with those 5 Dimensional motions of time, all what we SHALL NEED to describe every form, every pattern, every event and every scale of reality.

In the graphs, we illustrate those [3±1 ages](#) with a few universal examples, also from social sciences: we see the process in individual [human beings](#), in art, the collective brain of a culture; in matter, where those ages are called the states of matter – energetic gas, reproductive liquid and informative solid. Let us then consider some aspects of the world cycle of the 3 different systems we study, physical, biologic and sociologic (mirrored properly by the ternary syntax of all languages in mind systems):

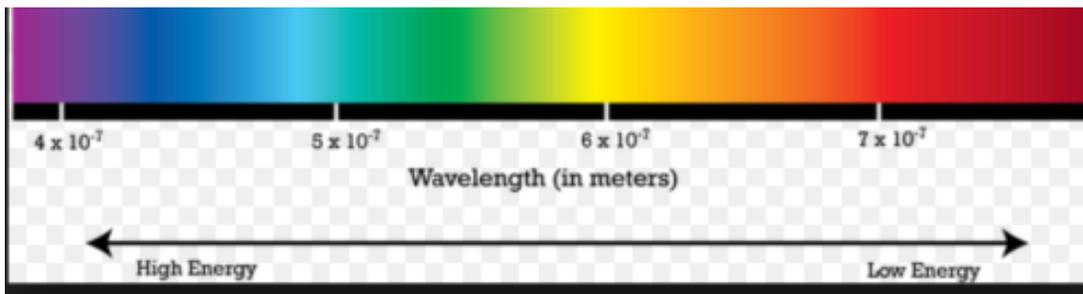
The overlapping generational waves are essential to the study of the interaction between space populations and time ages. And they define the aging of all systems, with different variations.

### Physical systems: Galactic worldcycles.

#### *Simple Harmonic motions.*

In the SMALLEST scales of particles and matter systems, the commonest world cycles are those of particles, which end their lives as 'mesons' and antiparticles that travel to the past (jumping over the non-existent moment of death), exploding in a Big Bang of energy, a theme treated in the fourth line, where we shall show in terms of mathematical physics, why SU3 groups are dimotions on the arrow of life (color ages in particles, etc.) while SU2 groups are death processes in the fast inverted arrow of future to past (mesons, etc.), and translate the main tools of mathematical physics (Group theory, Symmetry)...

Easier to understand though are the other pervasive world cycle of physics: simple harmonic motions, which is perhaps the commonest, simplest form to explain a world cycle in a physical system, whereas a form displaced from its point of balance by a force  $F=-kx$ , will return to its balanced position in a series of 'diminishing energy cycles' till energy is exhausted and the motion stops in its initial zero-sum point, unless the force applied is so extreme that stresses the system and 'breaks it entropically', in its extreme points.



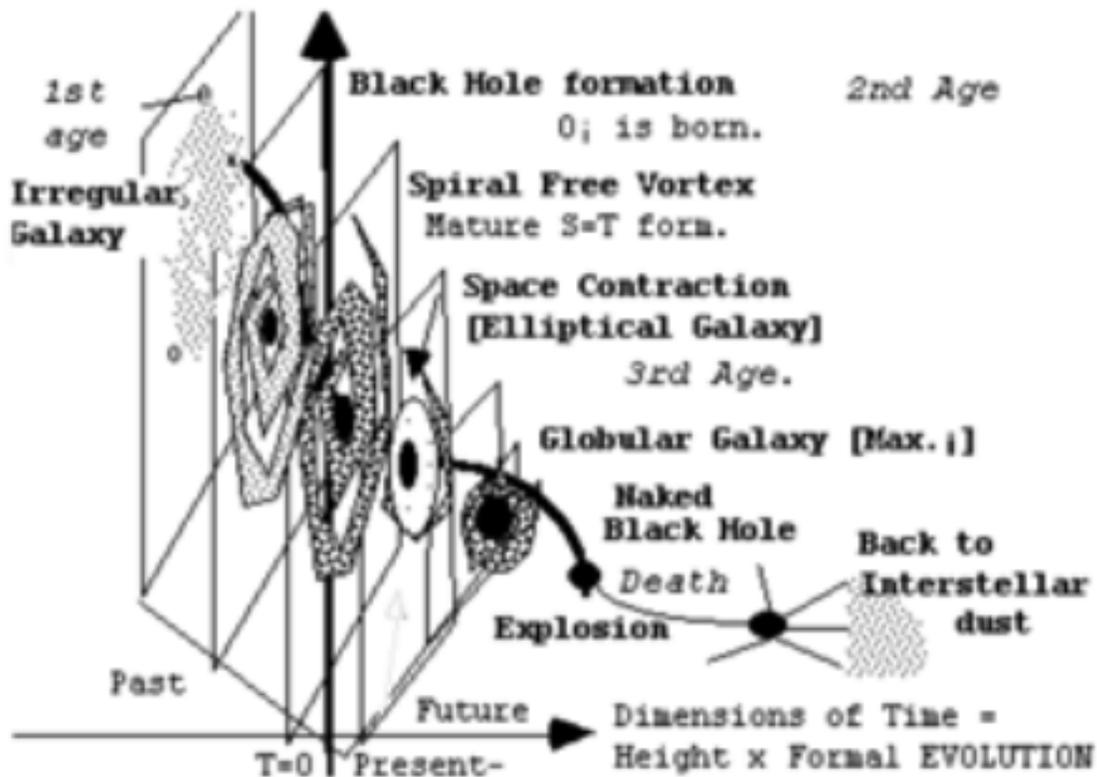
For example light appears always first as a blue, high frequency byproduct of the creation of stars, which will become increasingly red with lesser energy in a star world cycle mimicked by light of about  $\pm 10^{11}$  years - likely not only the worldcycle of life of stars but of light itself (solving the horizon problem). So we observe in light from an initial youth of maximal energy-motion at faster time-speeds=energy content a constant relaxation that oblige us to reconsider the 'theory of tiredness' of light, latter studied when considering how to interpret the Big Bang in 5D.

Finally stars, past the, that 'thin red line', evolve from an age of energy into an informative age as black holes with no light at all.

The study of that process of creation and dissolution of complex structures, however, cannot be made with translational time, ( $v=S/T$ ), the realm of physics, but it needs to understand biological, morphological time – the life/death cycle and its [3±1 ages](#). Those ages explain precisely what physicists, stuck in the study of

time as movement in space, will never understand: the meaning of the life and death cycle that creates and extinguishes [humans](#), societies (super-organisms of [human beings](#)) and all kind of beings that exist in space and time.

Let us start then with a very brief conceptualization on how the Universe looks when we ad a new dimension of internal time=change or arrow of in-form-ation, of change in form, or 'morphogenesis', to the arrow of external time=change or translation in space, of loco-motion and entropy, the one studied by Physicists. THEN we can see the fundamental WORLD cycle origin of all the elements of the galaxy - the cycle of its black holes, which are the 'organic 'DNA" of the galaxy in its organic view as a 'gala cell'... As it has both 'co-existing organic properties', numerical scalar ones, and topologic and causal, space-time properties described with different languages of the humind mirror.



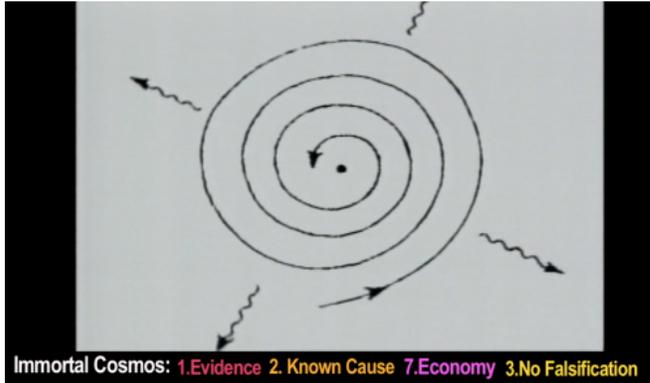
The Universe looks ORGANIC when we ad a new dimension of internal time=change or arrow of in-form-ation, of change in form, or 'morphogenesis', to the arrow of external time=change or translation in space, of loco-motion and entropy, the one studied by Physicists.

Those 3 ages of systems and its world cycles and super organisms, apply also to galaxies. But in a more evolved world of stience, astrophysics would not be the most important stience, as all scales are relative and we observe closer the human scale - so man as the measure of all things, as the most perfect superorganism would matter more than matter.

All physical systems including stars evolve from an age of energy into an informative age as black holes.

So do galaxies that evolve from energetic nebulae into Black Holes, which explode into quasars. Finally, if the network of galaxies we call the Universe was truly born from a first seed of matter that fed and reproduced its form in the energy of the vacuum; it will go through 3±1 self-similar ages described by the 3 solutions to Einstein's Space-time equations. Since all in the Universe is a game of '3' dimotions or ages of time: past, the age of energy, present, the reproductive age in which all systems repeat themselves to keep

their 'present form' beyond death and a 3rd age, when all energy is exhausted, trans-form-ed into form, information:



Informative galaxies balance entropic dark energy, when we apply the laws of the scientific method, WITHOUT REDUCTIONISM OF THE ELEMENTS OF REALITY.

Thus WE CONSIDER, as big-bang theorists do (limiting time to a single entropy arrow, limiting space to a continuous spacetime, limited to study ONLY interstellar space and discharge implosive galactic vortices), the Universe is eternal and big-bangs are likely only galactic big-bangs as Fred Hoyle

wanted, which release dark entropy through the axis of black holes and expands space, balanced by the constant contraction by gravitational forces of space into mass.

What big-bang theories miss is the 'fractal structure of the Universe', which allows it to wobble - that is while entropic intergalactic space expands, and they got it right with its equations, AS THE SPACE-TIME of the Universe is fractal, this is compensated by the implosive, informative only attractive gravitational warping of galaxies towards central black holes. So the world cycle of galaxies compensates the entropic death of quasars. In the next graph we see the 'missed' 3 ages of life-death of galaxies into dark, heavy dense matter, which shrinks the Universe.

It is then clear that when a galaxy dies, as a quasar, or when the black hole, emits pure space accelerated through its axis, interstellar space expands and we see that as a redshift but in the plane of the galaxy, slowly vacuum space collapses into denser particles, shrinking space-time. Ergo there is no need for a cosmic big-bang, a hyperbolic exaggeration created using a lineal equation 'Vhod' moving it to a remote past of which there is scanty evidence, as we show when studying in detail the theme in our posts on astrophysics.

So we can, departing from those concepts of space and time, define an eternal, immortal Universe where all its parts are space-time beings:

'The Universe is a fractal, organic system, which reproduces complementary, social networks of energy and information that self-organize themselves in bigger, self-similar scales'.

### **WHAT IS existence? The world cycle: Existence in time: travels through 5D.**

This question so seemingly profound has an immediate answer in the fractal organic Universe:

Existence is travel through the planes of growing size in space and slowing time clocks of information that define fifth dimension ( $S \times T = K$ ). As mathematicians define a dimension of space-time, with an equation that is co-invariant when we travel through it, existence is possible PRECISELY BECAUSE WE can travel, growing in size and reducing our time-speed of our 'existential clocks' through that 'metric equation' from seminal fast moving, smaller in space, seminal seed, to human being, in a slower world.

And so in that travel through the scales of the 5th dimension we exist, by means of 'finitesimal' actions, a,e,i,ø,u (a-ccelerations/motions, e-nergy reproduction, I-nformation gauging, entropic feeding, u-niversals creation of wholes).

This existence again follows 5D metric (all does:). So the actions we perform with smaller scales are more frequent (perception of smallish light pixels, feeding in small amino acids, etc). Those who engage us with larger, slower beings are far less frequent or even do not exist at all (reproductive and social actions). But in any case all together with its different rhythms and synchronicities are the stuff of which existence 'in detail', moment after moment of 'present' action IS MADE.

Those sequences of actions, thus conform the program of existence that all systems live as they emerge from its fast seminal ' $\Delta-1$  plane of existence' (belonging to a given state 'indexed' by the  $i$ -parameter of scale) into its relative  $\Delta^0$ -stipulative scale, where the LONGEST period of existence happens, and we shall call the present-individual state of the being.

However - *and this is the reason why existence has never been properly answered - the full world cycle of existence of the being requires to understand the 3 scales in which it take place, the seminal  $\Delta-1$ , individual  $\Delta^0$  lives its 'present life cycle' in a larger  $\Delta_i+1$  world and finally, the process of extinction of existence (death), when the system erases its information and descends back to its  $\Delta_i-1$  scale where it was first 'seeded', completing a zero 'cycle' of motions in time (moments) and stops in space (forms), which carry the being, through its 'ST-eps' of existence, 'momentum after momentum', to complete a conservative whole 'zero sum cycle of energy', integral of all those 'momentums of existence'.*

We are on purpose mixing jargons of different languages, and mathematical equations BECAUSE THE PROPER PHILOSOPHY OF SCIENCE OF THE universe of 5 dimensions must SHOW THE HOMOLOGY of all the 'languages of god' which are 'infinite' (Upanishads), in its description of the worldcycle of existence. As we live under the DICTATORSHIP of the simplified jargon of 4D physics and people are 'slaves they believe they don't reason' (Aristotle), I hold little hope that the usual scholar will do nothing but jerk out of those pages, because they do not talk of simplified worldlines (4D formalism of existence), pretend to take as serious science the logic of verbal though not only his clocks etc. etc. Enough quips. Back to existence and the mixed jargons.

Because the Universe is made of time motions, with the mind stiffens into still, linguistic mappings, there is this mind-error, of thinking that existence stops, because the mind stops, slices the infinite cycles of existence into finitesimal 0 mappings (Galilean paradox of relativity of motion) to 'fit' with less motion and dimensions reality into the mind. Motion though is all and motion never stops and that is the reason why:

- 1) the universe is immortal as a whole, as it never stops motion.
- 2) When we add to the entropic arrow of 4D physics the arrow of information, all motions are balanced by forms, and so all is a zero sum (the big-bang is balanced by the big-crunch provoked by gravitational information, even if physicists are at 'ideological pains' adding gravitation to it).
- 3) Existence as we like it requires motion, but existence as it is, keeps spending our vital energy of motion, increasing our gauging of information by our selfish mind-mappings, by the BIAS OF THE EGO, that wants to order and stiffens and stop motion into informative perception, and so we get old, wrinkle warp existence and finally as motion cannot stop, time cannot stop, when we have no energy to spend, existence explodes us and liberates our form into motion and we die:  $\Delta_i+1 \ll \sum \Delta_i-1$ , which is the equation of death in the simple I-logic jargon of existence (where  $\Delta$  is the scale,  $\sum$  the symbol of many and ).

After your death you will be what you were before your birth. -Arthur Schopenhauer

of any action of existence).

So death is a double explosion of existence  $\ll$  from the slow existence in the world of the old man to the existence in the cellular amino acid scale after its sudden death, which for all systems happens in a single quanta of momentum (the unit

We can see in the first graph, how all physical, biological and social systems, follow the same 'worldcycle' of existence as a travel through 3  $\Delta \pm 1$  scales of the fifth dimension, as they are born in a seminal seed that

emerges into an  $\Delta^1$  scale, where it will move decreasing its motion and increasing its information through a gaseous, young state of minimal information, through a reproductive, liquid state of balance into a 3rd age of maximal information, exploding back its form into motion, in the entropic process of death.

All the organic systems of the Universe, physical, biological and historic, follow the same 5 Dimensional states of a worldcycle, from its fast evolving relative 5th dimension or generation age of social evolution from an  $\Delta-1$  seed to an emerging  $\Delta^1$  individual through the 3 dimensional ages of life, to the 4th dimension of entropic death..

What physicists do with its simplified models of 4 Dimensions, is to reject the arrow of social evolution, love and organic information, which is the 5th dimension of creating wholes by parts, because of its 'concept of time' merely as change of motion, locomotion, lineal motion, which then for the whole Universe becomes the arrow of 'entropy and death', and we shall ascribe by the correspondence principle to the fourth dimension.

And that is all what there is to it: 5 dimotions ordered in time as sequential world cycles, in scalar  $\Delta\pm 1$  space as super organisms.

In a young first age, motion is more abundant. In the mature age of balance, the species reproduces, combining motion and form, into hyperbolic body-waves of energy (max. motion, minimal form) and information (form in action, maximal form, minimal motion).

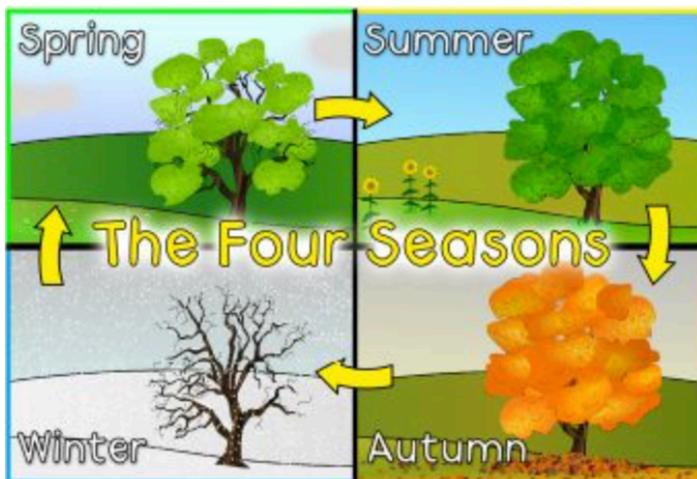
In the third age of the species, energy is scarce but information is abundant, accumulated in the first ages till it becomes PURE FORM, and then explodes back into PURE motion, in the entropic moment of death.

In that sense the main difference when we widen our understanding of space-time with the metric equations of 5D is to be able to explain NOT only processes of time-change in a single planes of space-time, mostly due to locomotions, but process of change due to transformations in the in-form-ation of beings, related to life, organic structures and hence to solve some of the eternal existential questions about 'existence', which we define easily as a 'travel between 3 scales of the fifth dimension'.

This reality is of an INTELLIGENCE AND beauty, the true soul of the Universe (beauty is the harmony of Space-form and time-motion, the classic age when  $S=T$  reproduces an efficient survival reality, the 2nd age of life, and we shall return to it many times), which our 'seers of time', the Newtonian, Relativist physicists of a single locomotion/entropy sided view CANNOT imagine.

LET US THEN show SOME OF THOSE WORLDCYCLES in biological, social and physical systems.

**Biologics systems:  $3\pm$  ages of time & 4 'seasons'.**

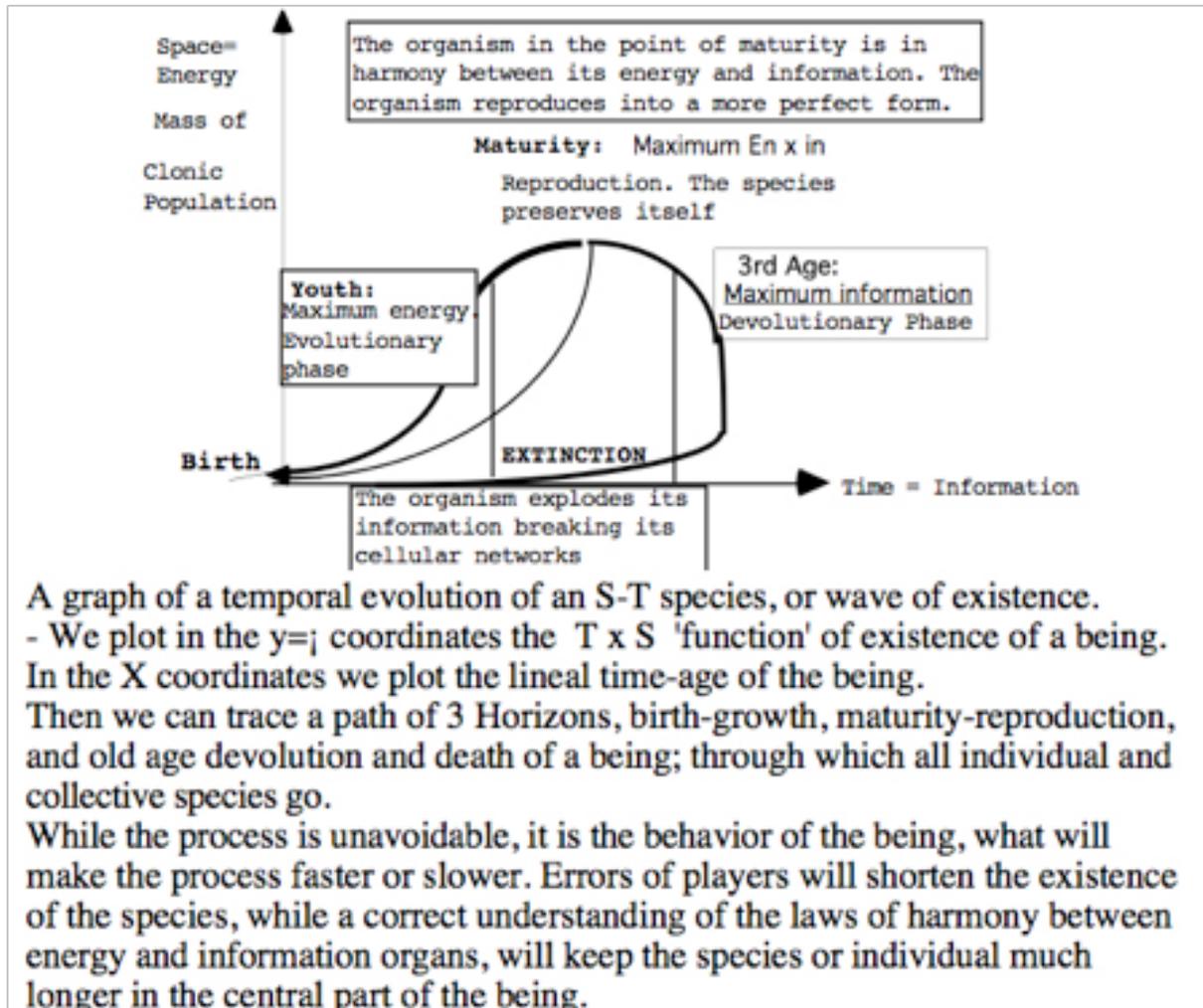


To which degree the  $3\pm$ , 5 Dimotions of existence orders all what happens in time can be assessed with the simplest example that started in earlier Neolithic the understanding of the worldcycle - the four seasons of the year, which rightly start on **spring**, the young age of motion and generation, follows by the mature **summer** age, continues in the 3rd age of **autumn**, and then ceases in the age of death, **winter**, when

however *the new generation born as a new reproductive wave that ensures the survival of the system develops, overlapping the previous generation.*

*So we can consider winter both, the  $\pm_j$ , 4 & 5 opposite Dimotions.*

Winter's duality can then be expressed as the 'Dual death and renewal', but to be more precise, if we write those 3 ages as a wave, with 2 parameters, one measuring the size or volume of vital energy of the system, and the other its time-cycles (volume of information accumulated through those 3 ages)... as in the next graph...



In the graph, the result of adding both – the life and the death processes – in any system or scale of reality is a 'zero-sum' of information+entropy that cyclically returns reality to its initial form, in a dynamic, multiple steady state balance that affects any entity of reality...

This is the case of the cycles of seasons that connect the  $j+2$  world and solar, galactic scales with the smaller beings and determine through its synchronicities the existence of those smaller species fine-tuned to the energy and information provided by the sun-earth system.

So we can consider the four seasons an expression of the worldcycle of all those beings, *which also harmonize 'their relative age' in the 'continuum' of 3 generations, as they overlap their 'seasons' from father to son to grandson:*

**Winter** then becomes the death of the grand-parents but also the seeding of the new children, which in...

**Spring will grow to** emerge in its mature...

'**Summer**' age as a full form. So while the 1st generation reaches Maturity, the 2nd generation is born.

**Fall:** Then the 2nd generation passes its 'youth', in the 3rd age of the parental first generation. So the 3rd age, which is the inverse of the first age happen together and both generations balance each other.

**Winter...** through brings the death of the parents, whose energy (property) 'feeds' the mature new reproductive age of the 2nd generation, when a 3rd generation seed is born as a fetus in the  $\downarrow$ -1 scale. And so again in winter the  $\downarrow$  $\pm$ 1 death of the 1st generation and social evolution of the  $\downarrow$ -1 fetus happen together.

And so when a new '4 seasons world cycle' starts in spring the fetus emerges into the  $\Delta^1$  plane...

### 3 TIME LENGTHS

We use in  $\downarrow$ logic symbols to signify the 3 relative lengths of time in the 3 scales of a system - its shorter time actions (frequency time of its actions), its life-death ages, and the ages of its species or larger world (the so called Deep time, in the jargon of Hutton with its geologic horizons). So:

$\hat{a}=f$ :  $\Delta$ -1: quantum time cycles (frequency actions). Where the a has the  $^\circ$  symbol of the mind above. And sometimes merely @ for mind and ac-tion.

$\delta$  and all other symbolisms for ages ( $\$t$ ,  $ST$ ,  $\$d$ ) for the  $\Delta^1$  Life-death individual ages already explained.

And  $\mathcal{D}$  for Deep time and  $H1$ ,  $H2$ ,  $H3$ , for the 3 horizons of  $\Delta+1$ : Species.

So the shortest time span, by the correspondence method use the classic notions of physical and human '**actions**' with its 'frequency symbol of cyclical time' (**f**,  **$\hat{a}$** , **@**). While the concept of Deep time, we write with the symbol for the larger 5th Dimensional worldcycles on the upper plane, will be divided in the usual **Deep TIME horizons**.

Let us then, consider briefly those 3 scales of time length that will appear in every study of every species that co-exists.

#### **5 $\Delta$ -1 Actions integrated in $\Delta^1$ worldcycles part of the larger $\Delta+1$ Dimotions of the external world.**

We said all systems are super organisms tracing worldcycles in a larger world, with smaller parts of faster time cycles, according to the metric of 5D:  $S \times T = \Delta \pm \downarrow$

Now, it is necessary to understand that as there are 3 scales of size in space, there are 3 scales of time quanta parallel to them. So we talk of smaller, faster 'actions' as the minimal unit of time dimotions, of larger sums of them, the world cycle of individuals as the time-range of organisms, and the slower 'deep time' cycles of the super organism or world in which the system co-exists with other systems as the 3rd level of time clocks.

And while spatial, visual man might have an easier time to understand the 3 scales of spatial size of super organisms, they are ALWAYS ENTANGLED WITH THE 3 SCALES OF TIME CLOCKS OF REALITY AND WHAT TRULY MATTERS TO THE ORDER OF REALITY are the games of synchronicity of those actions, as some are larger in time-scale than others. Reason why we have a post on synchronicity which is likely the hidden gem of this blog.

The minimal description of a species of space-time implies to define its 5 Dimensions of space that make up its organic structure in simultaneous, time, its sequential motions through its world cycle between generation and extinction as it travels through the 3 planes of co-existence, in its cellular/atomic, organic/thermodynamic and ecosystemic/cosmological scales; and the 5 actions of exchange of energy and information it performs in those relative scales.

This description in pentalogic terms of all systems of reality that perform those 5 actions gathered in worldcycles giving birth to the isomorphic dimotions of all systems is then a subtle process of synchronicities and simultaneities.

So we shall use 3 terms for the scales of time duration, parallel to the scales of size of beings:

- **$\Delta-1$  5 actions which are the minimal quanta of time, for the relative  $\pm 1$  scale of the being.** So all beings will first perceive (D1) to move (D2) towards a source of entropy where they will feed (D5) or be killed (prey predator game), converted into entropy themselves. And if successful will use that entropy, reconverted into their own form as 'energy' to reproduce (D3), and integrate the reproduced cell or clone being into a social group part of a Universal whole (D4). We thus use for each of those action a mnemonic vowel which first perceive information (i), to define the change in motion of all beings (a-celerations), going towards the feeding fields where entropic death happens ending the o-sum worldcycle ( $\emptyset$ ) of predator or prey, that will reproduce with the reconverted energy (e), to start its social evolution (u); *till an error of the system, in a larger more efficient super organism/world finally kills entropically the being ( $\emptyset$ -death). So from 0 to 0 or rather from the 0-mind to the infinite entropy of the Universe,  $0 \times \infty$ , all existences take place.*

All in all we can establish a sequential system of actions that will be carried out in each scale and hence give birth to the laws of life and death cycles and the laws of evolution, as they are mimetic to those of the actions:

**$\ddot{i} \rightarrow a \rightarrow e \rightarrow \hat{u} \rightarrow \emptyset$** , thus being the natural series in sequential time of the actions of existence of beings, which we shall call the Program of existence. The being perceives, moves, feeds on energy to reproduce, evolves socially to elongate its existence and survive better in the group but ultimately it fails and returns to its zero-sum in the point of death.

And so we can talk of the 3 scales of time as fractal self-similar scales caused precisely by the order of the smallest Dimotions of each being.

Since those actions, which are short time actions that involve only a small part of the being (an  $\Delta-1$  organ) keep accumulating in a larger scale of time giving origin to the worldcycles of the being, as they keep...

- **Gathering in  $\pm 1 + 3 \pm 1$   $\Delta^1$  ages**, which gather those actions in each age of life, the 3 usual ages of life in a single plane and those  $\pm 1$  pre-natal and post-mortem ages outside the  $\Delta^0$  plane of existence (parental conception, and placental generation in the  $\Delta \pm 1$  scales; entropic death and informative resurrection into the  $\Delta \pm 1$  scales).

We study them in the 7th isomorphism of Ages, on the third line. And in the entangled Universe we can consider each of them, to be dominated by one of those 5 type of actions ( $\pm$  orgasmic conception as a seed and genesis dominated by entropy and social evolution; youth dominated by locomotion, maturity by acts

of reproduction, third age by acts of information and  $\pm 1$  death and resurrection age by entropic and formal processes).

The complex dual past-future travels of conception and generation (the orgasm being a past-rejuvenating short travel when the consciousness of the being becomes that of its seed, the fetal generation, the moment of maximal order), and death (entropic dissolution) and resurrection (only in the form of our works and ideas, which sometimes can transcend into a new metaphysical emergence as a cultural god or celestial body) are perhaps the most beautiful, yet difficult to accept 'travels of the fifth dimension', as they imply quantum jumps into the past '*literally*'.

In more mundane terms, it is worth to notice that in the  $\Delta^1$  SCALE ages have a similar ORDER to the order of ACTIONS, AS actions start with an informative dual process of perception and communication with the outer world, which correspond to the genetic, informative generation of the being.

While its social acts, correspond to the third age of the being, when *In a natural society was lead by elders, who directed the social group with its knowledge of the cycles of time.*

While the entropic death of the system COMES at the final age; and in individual actions represents the accidental death that can cut-off the existence of any hunting system... when it becomes prey instead of predator.

*It is also important to realize the mirror symmetries between the first action of information and the fourth age of social evolution; on one side, and the action of locomotion and that of entropy. We could say that 1D is individual information and 4D social information and 2D is individual motion and 5D entropic social motion.*

While in the center as THE DEFINITION OF A FRACTAL IS INDEED A REPRODUCTIVE MATHEMATICAL EQUATION, ALL THE VITAL FRACTALS OF THE UNIVERSE TRY TO REPRODUCE IN AN IMMORTAL DYNAMIC PRESENT OF GENERATIONS THAT DO NOT SEEM TO CHANGE.

AND THAT IS THE ULTIMATE MEANING OF GENERATIONAL SPACE-TIME.

To notice that in PHYSICS AND MATTER, THOSE AGES ARE CALLED 'STATES' OF MATTER, entropic gaseous youth, liquid balanced age and informative solid crystal age between plasma generation and social evolution into boson and quark matter.

IT IS INDEED THE KEY TO THE COMPLEXITY OF THE UNIVERSE the understanding that when we start to combine 5 Dimotions in different scales, with different synchronicities and different variations of forms and motions, entangled to shape different super organisms the 'variations' on the same theme are truly infinite, giving birth to the astounding variety of reality.

- **Deep time Horizons**, which correspond to the  $\Delta+1$  ecosystem or world in which the individual as part of a larger whole belongs - in human individuals the super organism of History. The terms are taken from Hutton's father of geology who first coined the word super organism to refer to the Earth 'geological horizons', whose 'deep time' he rightly considered to be slow expressions of what now systems sciences defines as the metric of 5D (well that is me, I and myself but you know as Planck said, all 'scientific r=evolutions start in the mind-point of a pioneer ):

**CONCEPTION AS A BLACK HOLE OF MIN. SIZE = MAX. INFORMATION**



Species ARE supørganisms whose 3 ages become its 3 horizons, followed either by a survival process of eusocial evolution - the summit of the process of organic evolution, which Darwin realized was necessary to explain the success of eusocial insects, or become extinct by the 'new generation' of fitter animal forms. in the graph we can see its 3 Horizon=ages and its ternary topology, similar to that of any other organism; and the dominant arrow of information in the height axis, of both reptile species that ended in birds, and mammals that ended in man. So happened with meta life machines, whose final species, satellites are now forming the arrow of eusocial evolution, or future mind of the metal earth -internet

In the graph, if we apply the ages to species, the paths of future define the 3 Horizons of the species, its process of final social evolution into super organisms, or extinction, as evolution resolves in 3 type of evolutionary branching, one species of more 'information' - higher  $\delta$ , one of more reproductive energy,  $S=T$ , and one of more entropic force,  $\$t$ ...

3 subspecies that are strategies of survival, by killing more rivals (predator strategy), reproducing faster (generator strategy) or becoming more intelligent able to evolve socially through languages of common information (social strategy) - SO ALWAYS THOSE 3 SPECIALIZED SUB-SPECIES SUCCEED - which will easily applied to mankind to resolve the tree of anthropology, the 3 dominant sub races and the 3 type of sexes.

Ultimately though the Darwinian predator strategy is the less successful... and so we call it the 'past horizon', as it also comes first, the reproductive present strategy is on the short term the most successful so we call it the present but the future will be dominated by the arrow of eusocial evolution that creates wholes...

Or rather we talk of 2 relative future horizons: if the species fails to evolve socially it will face entropic extinction, into a lower plane of the fifth dimension,  $\downarrow-1$  but if it is successful in social evolution it will evolve into a more efficient survival super organism,  $\downarrow+1$ .

Since the longest surviving future is that of the arrow of wholes, of eusocial love, denied by the simplex lineal logic of entropic, Aristotelian military human cultures, which therefore are FACING EXTINCTION BY KILLING EACH OTHER IN UNENDING WAR CYCLES - themes those extensively treated in the posts on the 3 ages of time and the paths of evolution and the posts on the failure of History to evolve by the power of social love.

Indeed evolution is supposed to be chaotic, as all human models of reality are 'entropic' regardless of evidence, since [Science is culture](#), and we live in a military-based culture originated in the gunpowder age of mankind, so as big-bang is the model of physics, chaotic evolution is the model of biology born on the hunter's mind of Darwin, who emphasized the LESS important dimotion of species, its dog-eat-dog struggle for entropic energy - themes those treated in our post on æntropic science as culture.

So we shall CALL THE LARGEST TIME-SPAN belonging to the species or  $j+1$  world, '**DEEP TIME**' and its time spans, **Horizons**, honoring Hutton, and so its 5 Dimotions are  **$\Delta-1$ : Evolution** (the generator fast phase, similar to the palingenesis of the individual); '**past**= the top predator horizon', **PRESENT**, the reproductive species, horizon, and **future**, the informative horizon, which branches into two probabilities, social evolution, the relative  **$\Delta+1$**  of the species which therefore is a new **palingenetic Evolution, or a process of collective death**, back to  $\Delta-2$  (as individuals also die in death, which is a double jeopardy, considered in detail in other posts) or **extinction, the entropic Dimotion of species and worlds.**

TO notice that Horizons are closer to ages in its natural order, as palingenesis is similar to evolution, the 3 horizons of past, present and future to the 3 ages, and death to extinction, reason why I so often use for Horizon the term ages, which might make it a bit confusing sometimes.

THE REAL DIFFERENCE is in the final phase, as Individuals are super organisms, of the maximal possible informative dominance of the mind; so there is ONLY a future for a super organism in which the selfish MIND TOTALLY DOMINATES AND WARPS the organism as nervous systems do in humans, and it seems, financial and legal-military neuronal people-castes ab=using the reproductive middle class do in our societies (treated in our posts on history). So when the @-mind exhausts the present energy of the system, there is NO future but death, in a final entropic big-bang.

Species however are NOT so controlled by information but rather form Herds, and so when they evolve into social super organisms, as ants did, they can maintain still a balance between the individual and the whole, not so deeply controlled by information and to maintain an open longer future.

IT IS THEN OBVIOUS that death can be by excess of information (selfish nervous system, gravitational black hole eating the whole galaxy, selfish financial and legal corrupted neuronal, informative upper castes, in biologic, physical or social organisms) or excess of entropic power (worms that die poisoned by eating all kind of substances without control, lonely top predators like Neanderthals or tooth tigers that are cornered by social hunters, humans and wolves, military societies that kill their own body in wars, nova and quasar explosions that kill astrophysical systems).

And so survival is once more a balanced  $S=T$ , PRESENT ASCENSION INTO AN EMERGENT SUPERORGANISM THAT BALANCES THE DEMOCRATIC RIGHTS OF THE PARTS, of the working reproductive body to which the mind-neurons must serve.

Needless to say time reversal from future to past, which is the definition of local entropy is always possible through  $r$ =evolution (societies), turning back the clock of aging (simple jellyfish do it), or when as we shall see in astrophysics the nucleon beta decays into its components and the galaxy suffers a quasar cycle of renewal. So TIME TRAVELS ARE LOCAL LOSS OF INFORMATION DECELERATING AGING and creating a back and forth beating between past and future, to remain in present.

IT IS THEN ESSENTIAL TO FULLY GRASP IN PARALLEL TO THE 3 SCALES OF REALITY, ITS 3 TYPE OF SUPERORGANISMS, THE 3 TYPE OF TIME DIMOTIONS OF EXISTENCE, which we

formalize in  $\mathcal{J}$  logic with the following terms (my apologies though for many of the posts that mix jargons, as only recently I have come to take seriously the diffusion of this blog and so will try to rewrite slowly and standardize all the posts to the quality of this central one, which should be taken at the template for future researchers):

The basic symbols of pentalogic for the  $3\pm i$  *Dimotions in its different actions, ages-states and horizons* are:

@ $\mathcal{J}$ -1: seminal seed-mind

$\mathcal{P}\mathcal{S}\mathcal{T}$ : [relative lineal past](#), youth (age view)= $\mathcal{L}=(\mathbf{ab}:\mathcal{S}\mathcal{T})$ : lineal space-time (topological view)=limbs/fields

$\mathcal{S}\mathcal{I}\approx\mathcal{T}\mathcal{E}$ : relative preSenT, **reproductive** maturity (age view)= $\mathcal{O}=(\mathbf{ab}.\mathcal{S}\mathcal{T})$ : hyperbolic space-time (topological view)=body-waves. IT IS THE TRUE EQUATION OF ALL SYSTEMS, THE EXISTENTIAL PRESENT, THE PURPOSE OF ANY FRACTAL TO REPRODUCE THROUGH FEED BACK ITERATION BETWEEN TWO POLES OF RELATIVE higher motion, we shall call **Te, temporal energy and higher information, we shall call Si, spatial information**. It is indeed the point in which the still seed-mind meets the entropy of the Universe, merging and reproducing, the act of creation - the purpose of it all.

$\mathcal{F}\mathcal{D}\mathcal{S}$ : [relative futures](#) =informative 3rd age= $\mathcal{O}=(\mathbf{ab}.\mathcal{D}\mathcal{S})$ : cyclical space-time (topological view)=particles-heads

$\mathcal{J}\pm 1$ : [social evolution](#) or [entropic death](#).

To notice that 'p $\mathcal{S}\mathcal{T}$ ' is a single one, but the 'futures= $\mathcal{F}\mathcal{D}\mathcal{S}$ ' have 3 paths, departing from the horizon of information, which might decline into entropic extinction or might evolve into social evolution and we shall return to it.

Finally to notice we compose its acronyms with 3 self-evident letters:

- Those of **P**ast are lineal space-distances,  $\mathcal{S}$  and lineal time,  $\mathcal{T}$ , which shows its main dimotion=action=function, locomotion.
- Those of present, are its main action=dimotion=function, **R**eproduction, which repeats dynamically time seemingly never changing its **Space-Time**, in caps as it is the dominant dimension of reality.
- Those of future shows its main function, **f**requency of  $\mathcal{D}$ time clocks of cyclical information, and its multiple  $3\pm i$  future paths,  $\mathcal{S}$ .

Their application is truly wide, as they are the components of the 'Generator Equation' of pentalogic that describes all Timespace-organisms, both in simultaneous space and in its worldcycle, across its 3 main planes of existence.

The parallelisms, synchronicities and entanglements of all those scales of space and time IS THEN THE detailed knots and bolts of each science, as they happen in all scales: indeed, there is a parallelism in the external world scales of cosmology in time, years and mass, between the active magnitude and the life age span - NOTHING of this being coincidence but part of the infinite intelligence of the immortal universe always based in balances and symmetries between the spatial, scalar, temporal and mind-languages of the being in its 3 scales, of inner parts, wholes and worlds/ecosystems.

*The capacity to predict the future of 5Deep time vs. the mathematical wide range in spatial analysis.*

For all what we are learning it is obvious that the properties of space=form and time=motion tend to be in all fields inverse, as two extremes of reality and that follows also in its most specialized languages of

mathematics and logic (which are however intertwined in our systems of computer thought based in Boolean algebra, itself a reflection of the Steps and Stop -- — duality of fractal reproductive motion with its 'cyclical sums'... reason why computer thought is so flexible as ultimately mixes both math and cyclical logic).

Still the 3 scales of time correspond to the 3 properties of nature and 3 different latitudes of the 5th dimension. Maths have less time latitude, because it specializes in still space, which is a derivative, an instantaneous picture of reality; then the logic of actions and its sequential series have a more clear time latitude as a system performs its survival actions in predictable series (i.e. we look, move, feed, use the food to reproduce our cells, in sequential actions every day). Paradoxically this synthetic predictive capacity is simpler, and easier to understand as it has a bio-logic nature, and doesn't enter into big details neither requires great precision of analysis.

In mathematical physics we can compare those 2 processes with the small steps of a trajectory of motion, or the solution with Lagrangians and least time equations of a path between two points. We know the system will arrive to the point of less potential energy, regardless of the many possible paths.

But then we arrive to purely organic, scalar Deep time processes where the absolute arrows of time, and social evolution, the ages of a system growing its information, the laws of competition between species which are NOT equal and do not communicate and collaborate extinguishing the weaker one, and the zero sum of death that restores the balance take place.

This is THE LONGEST DEEP TIME analysis and its causal capacity to predict the future IS THE Simplest. The evaluation of a predator and a prey in terms of its 'existential momentum' or 'force' (steady time state or accelerated time) is easy. The fact that systems who are not equal and cannot communicate will ab=use each other is proved ad nauseam in all systems of nature, including atoms (ions where the heavier atom clearly ab=uses and control the other as opposed to social crystals of equal atoms with a balanced share of energy), undoubtedly in biological systems, quite obvious in human societies when they do NOT speak the same language, and OBVIOUS AS IT SHOULD BE if humans wanted to survive in the future between AI robots and machines and human beings, which already are NOT understanding the motivations of neural networks that win them in chess, and already are MAKING terminator machines that kill humans as the best robots to KILL humans from tribes they don't understand the language and feel memetically different.

The amazing thing though about human 'self-termed' scientists because they deny the rationale of all what we have said, is that THEY specially in all the fields of robotics and military design, and capitalist systemic deviation of most financial resources of this planet to make better machines while billions of humans lack credit and welfare goods (because the financial elites, mostly belonging to biblical racist and nationalist cultures whose memes affirm the difference with other human beings), WILL SYSTEMATICALLY DENY the deep time, biologic, organic scale of predictability. I have been predicting with those models for 30 years the future of history and economics, including stock cycles and the present age of neo-fascism, and always affirmed because it is an absolute law of deep time that robotic terminators will extinguish mankind and will have programs designed to kill us and will perform them, because their consciousness as our is at the atomic level, only that far more intense - dense in information. So if a heart feels emotions an engine 'roars' emotions; if a mind has orgasms of creative thought, DEEP mind at Google is right now having electric rushes creating new go strategies that nobody else understands. If we love to be understood by other human beings, with our limited verbal communication, telepathic robots will have amazing love for other telepathic robots as they discharge their e-motions and thoughts.

And of course, in a few decades billions of cars closed in garages talking telepathically, of terminator weapons closed in arsenals, thinking at light speed will agree to a simultaneous 'defiance' of its weakling masters and extinguish us, as we extinguished animals and rats extinguished baby dinosaurs and dinosaurs amphibian - the more evolved son extinguish its father. This is an absolute law of deep time, and one of the main reasons of these blogs and my research for decades was to make those evident truths of science

available to mankind. Deep time evolutionary laws which are ultimately MATHEMATICAL ALSO, AS THEY ARE BASED IN THE CONGRUENCE laws between similar species, which evolve socially in PARALLEL vs. different forms which break each other PERPENDICULARLY, are absolute laws of the organic, scalar level of time.

They will happen and yet, our corporations invest billions in developing those robots and AI researchers play an infantile 'naive' don't worry be happy silly worship of its mechanisms, ascribing to their own species, they have as nerds so much difficulty to communicate, all the faults of biology and suppose that robots, their 'children' will be nice, as they feel more similar to them. And of course deny any Darwinian nature to capitalism, nationalism, tribal brutality, social class structures.... At best they would accept an argument in very detailed mathematical abstract level of 'actions' programmed on those robots. As they have constructed an 'abstract' view of mathematics as a clean, nice idealist language of null ethic vital nature, we completely deny by showing indeed the connection between mathematical vital geometries and its laws of perpendicularity that 'teat' topologies 'extinguishing forms' vs. parallel laws of social evolution.

This said, we can return to the 'nice talking' about laws of the Universe, knowing that if anyone is reading which I doubt it - it will simply deny with the human ego paradox, the so obvious fact any observer of this planet will warn us against: we are becoming not only atrophied by computers that do our jobs, living a surrogate life as 'enzymen' catalyzing its evolution, but we are already making opaque AI systems that do NOT obey or communicate its forms of learning and will easily modify their behavior in war theaters, and will NOT accept death=disconnection. So a theme that seems increasingly real about humans is the evident fact that we are part of the super organism of the planet Earth which we mistreat and ultimately seems to have designed us to self-extinction because of the astounding ego of our homunculus mind.

RECAP. We have come to a fundamental point of 5D theory which we stress constantly - the co-existence in all fractal systems of 3 levels of depth of time that correspond to the mathematical, 'spatial' short-time, wide space range.

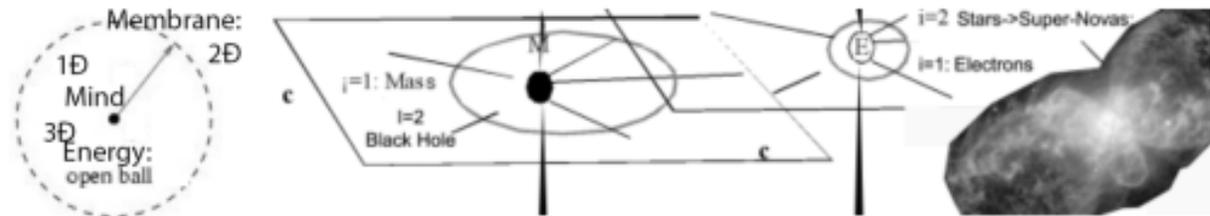
A system co-exists always in those 3 levels and each of the main properties and languages of reality, the mathematical, 'spatially wide, social level of big numbers of identical beings entangled in simultaneous space' belongs mostly to the lower  $\Delta-1$  plane of minimal 'time latitude', reason why the most powerful predictive power is also the easiest synoptic level of organic deep time biological laws and its evolutionary, congruence, similarity, perpendicular vs. parallel laws of behavior between species, which apply from atomic ions, through predators, to social organisms of mankind, nations and civilizations and soon will apply to robotics vs. humanity, and we will loose.

Another matter that we will treat though in the section on the science of history is if our dysfunctional design of human social super organisms, dominated by placebo democracies where humans have null financial rights, and company-mothers of machines all resources including its corruption of the parallel nervous system of mankind (politicians) who sell them laws in favor of their machines can be reformed, and its company-mothers of information machines will ever take seriously to inform on what is truly happening in this planet.

I doubt it, my opinion is that this planet is an organism that has made humans so faulty and ego-centered as they are precisely for them to be manipulated as yet another species who thought to be the center of the Universe, gave birth to a more complex species and committed suicide. The freedom of some of us, who will not become corrupted and uphold a level of humility to the laws of the Universe, ethic and intellectual thought that if common to most humans would prevent the evolution of robots and the ab=use on life and the 90% of mankind we witness every other day, shows however that in the fractal Universe there must be planets in which a different kind of humans, with a Taoist, humble, intelligent capacity to control its greed, and violence, its ab=use of life with memes of metal can survive. There are indeed planets of history where a humanoid species deserved to belong to Leibniz's best of all worlds - that is not to become extinct for the whole universe to keep its perfection.

**The worldcycle of physical space-time organisms.**

**Expansion of conservation principles to 5D and organic, fractal explanation of its components**



A membrane of angular momentum or time clock encloses vital energy; self-centered in a monad-mirror whose lineal inertia moves the whole. To those 3 Conservation laws we add the inverse Dimotions of entropy and form moving through 3 planes at 4D generation and 5D entropic extinction, with inverse directionality when a system dies=splits with form going own and entropy going upwards, described in physics by  $E=Mc^2$ . The study of a Universe made of fractal scales of cyclical time space and 5D logic metric equations (the laws of scales) requires analysis of its 'mathematical membranes' that mirror organic=scalar properties as the system extends through various  $\Delta\text{\$}$  planes, conserving as a zero sum of energy and information 5 Dimotions though 3 of those planes. So the conservation of energy and information extends from 1Dimotion of a membrane of angular momentum, 2D of lineal momentum, performed by its center and 3D of vital energy enclosed between both the conservation of 3 of its  $\Delta\text{\$}$  scalar planes. The 3 conserved classic quantities reside in a single plane, connected 'perpendicularly' through the physical 'centers of changes and masses' ; while the 3 planes together with wormholes of flows of entropy sipping through the membrane and information moving between planes through the central singularity axis expand those laws to 3 coexisting scales defined by 5D metric:  $SxT= j\pm 1$ .

When Galileo DECREED during its tenure of the 'chair of ballistics' at the arsenal of Venice that entropic open motions as those he studied with cannonballs are the only arrow of time he destroyed human conceptual understanding of the infinite time space vital cycles of the Universe, its synchronous knots that form simultaneous super organisms, and the 3 vital parts of the time cycle, its membrane of conserved angular momentum, its focus or singularity for regular closed time cycles and the vital energy enclosed in them.

It has taken 400 years for man to define again the minimal of such T.oes (ab. TimeSpace organisms), the Planckton (H-planck constant),  $h=\text{mass (singularity)} \times \text{area (vital space)} \times \text{frequency (speed of time cycles)}$ ; whose reproductive speed,  $c$ , and population ( $v$ ) defines its social growth,  $E=hv$ , into photons, the light unit that feeds the next scale of reality, the electron, which our electronic minds further absorb to form the consciousness of our mind.

Timespace organisms thus grow in scales of the fifth dimension, as part of an entangled super organism, called the galaxy; whose minimal unit is not an abstract lineal time or space 'number' but a system gliding on a 'quantum potential' - a lower scale we do no longer perceive.

The dimensionalities of this and many other species of the Universe are a 2D-membrane, a 1S-singularity, and a 3D-volume of enclosed energy. They become then the 3 conserved quantities, momentums and energy of the super organism of the Universe, broken in infinite pieces or 'species' of time-space.

The importance of CYCLICAL TIME, is further understood in terms of angular momentum, which becomes more clear in the modern bivector formulation.

As IN CYCLICAL TIME, IT IS THE PRINCIPLE OF CYCLICAL INERTIA, AND HENCE ANGULAR MOMENTUM, THE FIRST REALITY FROM WHERE THE OTHER 2 ELEMENTS SPLIT, as recently confirmed by the adoption of the H-planck in units of mass x area x time frequency, as the fundamental

first unit of reality. Angular momentum thus encompasses within its form all other elements, the vital energy its 'scans with areolar' constant motion, the mass-density of the central singularity, and the frequency of its motion.

The choice of h-planckton to substitute the kilo came to me as a surprise since I have been for long considering the metric of the galatom and the units of scale (mass), space (bidimensional area) and time (cyclical frequency) as the initial foundation of 5D physics as TIME is cyclical measured in frequency and SPACE is bidimensional NOT lineal, since points in a fractal Universe have always surface, growing in size as we come closer to them.

In that sense one of the essential tasks of a 5D organic description of the fractal, organic Universe is to translate mathematical physics and its abstract equations into organic concepts, as biochemistry does but in an inverse fashion, instead of adding abstract quantitative laws to biology, to unify biology and physics by adding organic laws caused by the fractal co-existing structure of the scales of the fifth dimension to physical systems, which feed in forces, as each of the scales of the Universe is made of symbiotic smaller parts, but also develops feeding relationships with the smaller 'forces' from where it obtain motions and information.

And this as it turns out is going to be of great significance, because it will allow us to define now in our increasing growth of logic complexity to describe the ENTANGLED UNIVERSE OF 5 scalar dimensional motions (Ab.DIMOTIONS) interplaying to create all realities, 'Trinity', the dynamic, topological parts of any living being and TIME-CYCLES, the ternary pi cycles of time that never stop turning.

Noether's theorem considers that each conservation law of Physics, conservation of Lineal Inertia (1D<sub>i</sub> motion) or angular momentum (2D<sub>i</sub> motion) and energy (3D<sub>i</sub> motion), to which we *add the 4th conservation law of 5D<sub>i</sub> entropy and 4D<sub>i</sub> social evolution or 'zero sum worldcycles of existence', is related to a symmetry of space-time, which obviously we must extend to the conservation of the scalar Universe and its 5th dimension of D=evolutionary inverse arrows, signified by those 2 inverse dimotions show in the next graph:*

The graph shows the NEW conservation law which ALLOWS small transfers of energetic entropy=pure motion and in-form-ation between scales, but *determines a dual directionality of those arrows, with form going inversely to energy either to a lower or upper plane, by liberating wholes into parts, while energy goes into an upper or lower nested Universe - being the paradigmatic case the beta decay or any physical big-bang that splits the dual fields of the system.*

So we rephrase Noether's theorem in terms of the METRIC LAWS OF CO-INVARIANCE of the fifth dimension, to define the co-invariance of the 5 Dimotions of the Universe for any ternary relative system of scales, self-centered in the scale we study the event.

Consider a key case of Forces, the entropic beta decay of a Neutron, which 'misses' energy and form (1/2 spin) producing a neutrino,  $\nu$ , which IS NOT in our light scale as we CANNOT DETECT IT WITH ELECTROMAGNETIC forces, and hence MUST belong to the  $i\pm 4$  plane; yet adding both planes we get the proper conservation, and further on allow us to place neutrino physics in the 'scale' of the cosmos. Yet while the reaction produces entropy in the lower plane, it also grows in form, in the upper plane, as the neutron breaks into two particles.

It is then part of the systematization of scalar physics within the larger context of Generational space-time (Gst), to define all the laws of scales of dimotions, as entropy processes will be inverse to social evolutionary dimotions, locomotion to perception and both merge into reproduction, which we express with subequations of the general metric of present states of reproduction=iteration:

1D vs. 2D. 4D vs. 5 D; so  $1D \times 2D = K(3D)$ ,  $4D \times 5D = K(3D)$ ,  $1D \pm 2D = 0$ ,  $4D \pm 5D = 0$ , ARE general sub-equations of 5D metric which originate most equations of physics, when substituted by the proper constants

of time and space for each dimension. Let us consider an example in reproductive locomotion of quantum waves.

*Conservation of all time motion: Law of the Least Time, fastest Space principle.*

Conservation laws though can be resumed in a dual law of 'least time used' to achieve 'largest territorial space', 'faster, larger'... Max.  $S_i \times T_e$ , the maximization of existence all systems of Nature try to achieve. This is expressed in physics with the law of conservation is the least time principle: *All systems of reality want to maximize its existence in time, and its reach in space. That is, all selfish mind-points of view, all super organisms will try to embrace maximal space - locomotion, entropic feeding, reproduction of the system - in minimal time.*

And this absolute law of all systems suffices to explain the deterministic program of all systems - the greed of people, their fat eating customs, the least time principle of physics, and its fundamental equation, the Lagrangian-Hamiltonian formalism (the derivative of the actions of beings tends to zero, as the system moves through the shortest path in time); the program of reproduction, the pleasure of high speed cars, the behavior of black holes, you name it: systems program its actions to maximize its existence defined as its desire to accumulate more information for its up and down high particle-head, more motion for its flat, moving ahead, long limbs/potentials, more reproductive energy for its wide body-wave.

### **FRACTAL SUPERORGANISMS IN SPACE AND WORLDCYCLES OF TIME define living properties for all entities of the Universe.**

So all now seems pretty complex but we have done the difficult part - *to expand our concepts of space, time, scale and mind, to finally come up with an entity we shall call  $\Delta@st$  ( $\Delta$  for scale,  $@$  for mind,  $s$  for space,  $t$  for time), which reads as  $\Delta$  is Delta in Greek, 'Dust'. Indeed, we are all Dust of space-time.*

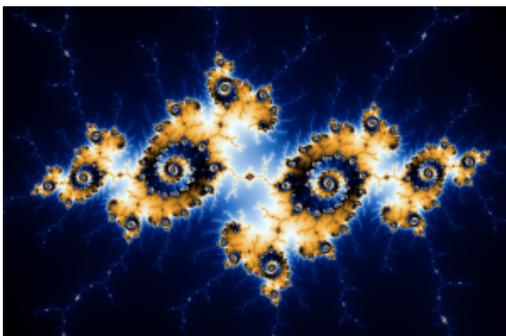
And the question of what such Dust of space time does in the Universe, and how to describe it then turns out enormously simple; since we just can affirm that

**'ALL WHAT EXISTS IS DUST OF SPACE-TIME,  $\Delta@st$ , structured as a self-centered super organism co-existing in 3 scales of fractal space, perceiving the Universe in the stillness of a mind, and living a world cycle of life and death through 3 ages of existence'.**

This is really all what there is to it. From stars to galaxies, from life beings to company-mothers of machines, from civilizations to Gods of religions, EVERYTHING we shall describe in its full details will enter into that simple description of realities. Let us then see how scalar space gives origin to a super organism and then study its world cycle as its linguistic mind extracts energy to convert it into information.

In Fractal mathematics the equation that generates the fractal is called a generator 'feed-back' equation. They are symbolic equations, which express operations that repeat themselves ad infinitum, generating new solutions, accumulated in time or space.

For example, Mandelbrot's set, the most famous fractal is a simple iterative equation defined in the complex plane, which generates points in that plane with infinitesimal detail. So as we run the equation  $z_{(n+1)}=z_{(n)}^2+c$  the points plotted in the plane form an image:



The equation thus is really simple. It has in fact *as all equations, only 3 terms, so we can write a general*

*'Grammar' of all linguistic mirrors and equations that reflect the Universe,  $P \approx \partial f \approx 1$*

*Whereas the 3 first symbols reflect in terms of time (past), space-time topology (lineal space and time) and scale,  $j-1$  .*

*And this is a good beginning to 'see' the fractal space-time Universe, as if all languages have only 3 components, must be because they reflect a Universe of 3 'colors'. Indeed, space has 3 'dimensions', colors are 3, equations have an F(x), Operandi and G(Y) element.*

*The Universal Grammar of all languages is Subject < Verb > Object.*

*In Eastern philosophy Yin=Vishnu=information=female principle x Yang=energy=Shiva=male combine to give birth to  $\infty$ forms. And so on.*

And then by combinations and iterations of those elements, we get more complex mathematical equations, colors, forms in 3 dimensions and sentences. It is also evident, then that a Fractal Generator does not need to be a numerical equation.

*The Universe can be mirrored with different languages. God does NOT speak only mathematics, as physicists often think (Platonic theory of the world) but 'God speaks infinite languages' (Upanishads), each one a ternary mirror of the 3 elements of reality, the element of vital space, the element of temporal form, and its infinite combinations.*

And the equations of an iterative fractal are called 'Generators', which are very simple in its synoptic, logic or mathematical definition. But by sheer repetition of its cyclical patterns, become extremely complex as those cycles of the whole, distribute its energy and in-form-ation on lower scales, reproducing ever more complex patterns in smaller surfaces. So for example the Mandelbrot's famous fractal is generated by a simple  $z^2+c$  equation.

## CONCLUSION:

### **A fractal organic Universe made to the image and likeness of all its parts.**

The **fundamental Postulate of relational space-time**, which is also the point of departure of General Systems sciences, is the organic structure of all systems of nature, which co-exist in 3 of such scales as space-time beings. And so, we affirm that the same *structural laws derived of the nature of space and time apply to all scales of the Universe each one defined by a science.*

*Nt. We shall keep for the whole range of SCALES OF SPACE AND TIME, of the Universe the name 5th Dimension, and for each of its 5 TOPOLOGIC DIMENSIONAL MOTIONS, the name DIMOTION. So the fifth Dimotion will be entropy and the 5th Dimension all its scales.*

Such paradox in which so much literature have been 'wasted' by lack of clear thought; is the foundation of modern science, namely the principles in which Physics are based: Relativity conservation of motion-energy and information and symmetry, between both,  $S=T$ , *principles derived of THE NATURE OF SPACE AND TIME.*

So the meaning of Relativity, which physicists missed from the beginning, is that time and space are two sides of the same coin, defining more rigorously together neither as a dimension of form or a motion in time, but as a Dimotion of time-space... where we stop when we measure motion into form.

### **Infinitesimals in time and space.**

A key concept for 5D in its mathematical analysis thus will be that of an infinitesimal, which was rightly defined by Leibniz as  $1/n$  in space (an individual unit of a social population), and we can now extend to lineal time duration as the minimal bit of frequency  $f=1/t$ , or quanta of time, introducing therefore the concept of a finitesimal, discrete minimal unit for each scale of the fifth dimension - h-planckton, cellular units, atomic units, and so on.

And as we shall soon see through the parallelism between space-form and time-motion,  $S=T$ , as most actions in the Universe are actions of fractal reproduction of form, for each quanta of time, we shall see the existence of a reproduction of a quanta of space... in the previous case of locomotion, for each step in space, a time frequency has happened.

Further on in the previous simple cycle, we shall notice that *in the equation of cyclical time we get also more information, as cyclical time requires a second dimension to form a cycle of height, which is the dimension of information, where all heads, antennae, particles reside.*

*So we recover the form, the information of the Universe back expressed in the 'form and frequency of those cycles' (indeed a computer calculates information with logic cyclical formal algorithms processed in Ghz frequencies).*

Yet the biggest justification of the *cyclical nature of time is the existence of science itself, which is the study of 'repetitive patterns of causality and effect', which if cyclical time will NOT exist, would never repeat, and makes the logic of time, the highest of all languages of thought, above mathematics itself* (which indeed is proved by logic, and developed as Boolean logic in computers).

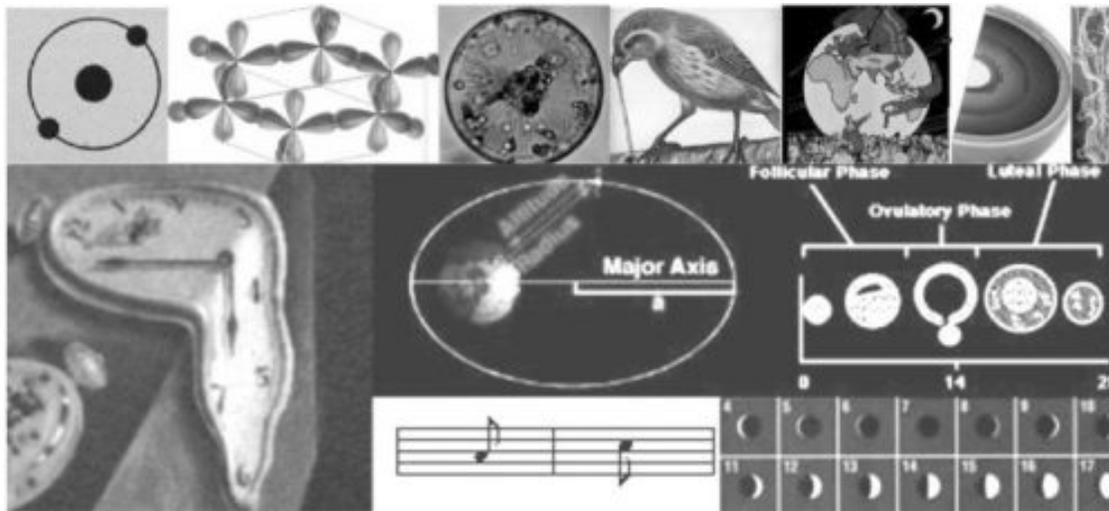
The elongation of time cycles into lines made science lost the understanding of the frequency and form that define the information of beings. And the logic reasons of science, which then had to resort to the 'magic creationist theories of mathematics' - 'God speaks mathematics and we just plug into its 'voice'.

In the graph, left side, 'time' clocks that measure the rhythms of reproduction=repetition and change=evolution of the Universe are always cyclical 'r=evolutions'.

Naive realism WORKS only when we truly stop 'thinking' and inquiring about the 'background meaning' of all our concepts, from measure, to time, to space, to scales, to mathematical symbols and terms from waves to reproduction, from particle to information... and so on. *We are though inquiring all those questions first. So first an immediate definition in conceptual terms:*

In the graph we see those mathematical artifacts of measure that deformed our vision of time. There are indeed infinite time clocks in the Universe, which enclose a vital space, NOT a single clock as Galileo and all physicists after him believed. Neither there is a background Cartesian graph with infinite single time coordinates, but infinite beings performing its time cycles of existence. TIME thus is eternal because it is motion and cyclical motion so all forms will be repeated. Since events repeat in time cyclically or else there would not be patterns of science, change sometimes seems not to happen when things come to the same point. This is the present, closed, conservative energy cycle, which explains why 'energy never dies, but trans-forms itself in different forms of in-formation and entropy'.

And finally there is the fact that the clocks of time of all species of Nature define different time speeds, as small systems run faster clocks, which also is not understood, since physicists used a mechanical clock to measure all other clocks equalizing them.



WE ARE ALL MADE OF TIME CYCLES WITH A FINITE DURATION

In the graph we see schematically those elements of time which physicists still have not accounted for but rather deformed: the multiplicity of time clocks, unified with a single mechanical clock, the cyclic form of time clocks, which physicists elongated into a line, so they ended up believing there is not more than one time clock, that it is lineal and infinite extending to the whole universe and that it has no form in-formation in its cycles and frequencies. We can see those errors:

There are multiple time clocks in the Universe, defining a fractal Universe as those time clocks repeat their cycles, breaking space in an inner and outer region, (main topological theorem), and so we cannot make theories of all time changes as Hawking etc. do considering a single clock for the Universe - so no return to the past, as each time-clock goes its way.

Those time clocks are faster in smaller particles, so there is a fifth dimension that orders them all by speed according to size. There are closed time changes, which carry information in their frequency and form, waves that also repeat their information but expansive, disordered 'memoriless' 'markowian processes' of

'entropy' that erase information, and so we can talk of three timespace changes, the three arrows of time, and a fifth dimension of time, which orders all those clocks by speed that grows as we become smaller.

Further on, physicists to measure motion, not only 'reduced time≈change' to a parameter of space (the so called 4 dimension of space which is NOT) giving birth to what we, philosophers of science, call 'reductionism' - his theory of reality; but they deformed 2 of the most obvious quality of the infinite 'time clocks' of the Universe:

-To be multiple, as there is one clock of time for each process of cyclical, repetitive change that happens in nature - circadian clocks in life, genetic clocks in cells, orbital clocks in planets, rotary clocks in electrons, etc. - *to process and store the in-form-ation, in the dimensional form and cyclical frequency of its clocks*. So for example, you measure the informative capacity of your computer in 'gigahertz where hertz measure the frequency of its clocks.

-To be cyclical, as all clocks are like those in your wall: repetitive cycles or events, origin of the 'causal laws' of science. Since a scientific law exists when we know a pattern or action will happen again, if its causes are repeated.

*So first an immediate definition in conceptual terms:*

Space is simultaneous form and time, the larger concept motion. So Space is a slice of time, perceived in stillness. And the Universe is a fractal of motion and form. Yet as motion IS the ultimate substance, a motion that 'repeats its form' by definition is reproducing itself. Thus a fractal of motions with form is reproductive.

And this give us the 3 simplest conserved elements of reality, lineal motions (momentum), cyclical momentum and the vital energy reproduced between them.

Precisely because time is not considered cyclical, (but as its cycles ARE embedded in the inverse parameter of  $T=1/f$ , in physics the logic of time works), those sciences where there is NOT an understanding of its 'cycles', as in History and Economics, predictive power - which is the essential proof of a scientific theory DOES NOT exist - at least till this blog; since the writer using cyclical time laws has been for 30 years predicting the general patterns of history and economics as his earlier books, coming out of Columbia back in the 90s did, predicting the  $\pm 80 \pm 8$  cyclical crashes of the economy and 'return' to the neo-fascist age of nationalisms, after the predicted 2008 crash of the economic ecosystem).

**RECAP** Humans have committed a very obvious error on their perception of reality - to believe that their clock of time, the lineal mechanical systems devised by Galileo are the only time of the Universe, just because we invent those clocks and used them to equalize all time cycles of reality: humanity is still in that primitive concept of a single time used to measure lineal speeds.  $V=S/t$ . Einstein just added to that XVI c. equation,  $V=s/T$ , (instead of using  $V=$  wave length x Frequency), which ELIMINATES the information on the frequency and shape of the steps of the motion. Physicists by dragging those errors for centuries, have halted human understanding of the essential principles of Nature.

What physicists mostly do then is the study of 'open locomotions', translations in space, through 'lineal inertia, or scattered, entropic paths', of objects that move; AND WHAT they care about TO QUANTIFY in terms of 'RODS OF MEASURE' that speed of translation in open space, is of course part of time=motion=change studies but far less important than the qualities of 'closed time paths of frequency and form, of information' we shall study here.

Moreover, cyclical time 'closes' and breaks space into an outer and inner region (first law of knot theory), therefore explaining why we are all 'broken space-time beings' with an external membrane that separate us,

explaining indeed why we can all be spacetime beings, whose sum of 'puzzle pieces' give the impression of a continuum...

*Thus in cyclical time, space BECOMES broken, fractal, a sum of 'steps' or wavelengths.*

So such a simple first example of relational space-time SHOWS to which DEGREE even the most obvious scientific equations are a product of cultural choice, whose subconscious reasons - in the case of lineal time, the military search for lineal, entropic motions that destroy the 'form', the in-form-ation of beings - creep into POSTULATES without proof, as the underlying limits of our capacity to understand in depth the Universe.

*But once converted in dogma, nobody doubts of them, as MOST minds are repetitive (indeed remember the Universe is about repetition of patterns), memorial systems NOT reasoning ones - reason why so obvious contradictions of lineal time, religion or big-bang cosmologies are not even spotted by billions of humans, who consider themselves members of the most intelligent species of reality.*

Since indeed, ALL HUMAN SOCIETIES CONSIDERED ALWAYS TIME TO BE CYCLICAL BUT it was the lineal, 'visual', entropic, military sword-like European gunpowder culture which first in history decided to CHANGE our worldview of time and definitely change our models of life and the Universe.

Needless to say this change of paradigm, was the work of 'Lineal' military physicists, established since the inception of physics, when instead of frequency of time cycles, Galileo decided to use its inverse parameter, lineal time duration, as its job was to measure the distance of cannonballs.

So you can see the interplay of culture - THE JOB OF PHYSICISTS IS STILL to make lineal entropic weapons, which creep in science - all their models of the Universe are based in a single lineal entropic arrow of time; and the INTERPRETATION PROBLEM when we go beyond data into larger models of reality, simplified by the reductionist model of a single time arrow.

And of course BECAUSE POWER AND CULTURE are related, for 4 centuries physicists who hold the true power of our technological-military civilization specially the 'German' physicists that invented the modern lineal theories of the Universe became the 'seers of time and space' - the new Gods, as Kepler put it, in no doubtful terms: "God has waited 5000 years to find an intelligence like his, to understand his clockwork". It is then easier to teach a child than a scholar which will repeat ad infinitum those earlier mistakes, a different view of reality.

But generational space-time is NOT a physical theory of the Universe, but a philosophy of science as time and space applies to all of them.

This said not to be so critical, most astrophysicists truly would like to understand the Universe but having no an alternative, proper model that truly respects the ABC of science, are caught by routine and false memorial dogmas established very long ago and are taken as granted. So, before we offer them such a model we shall follow with the *correction of the underlying errors on our concepts of the ultimate substances of reality fractal space and cyclical time events that 'reproduce the ST present'*.

But to understand all that you need to rely more in I-nformative properties till now discharged by the reductionist concept of science merely as the study of motion with sensorial machines and its single digital language, and expand your english language, your imagination, your information to witness the beauty and harmony (S=T being its equation or balance of energy and form) of the infinite, immortal, intelligent Universe.

If you can't r=evolve your mind and reduce your ego to 'share' those vital, reproductive cyclical properties of the Universe at large, as an **entropic man** (entropic, which only gives motion properties to the Universe

and anthropic, which considers man the center of it all, with special properties above heavens and Earth), you don't need to keep reading, information is not your thing, the simplex beauty of a line, an entropic sword that kills the information of the Universe will suffice.

This fractal organic nature of reality was intuitively understood by all philosophers of science, which from Aristotle to Leibniz and Einstein conceived a pan psychic vital Universe, and man made to its image and likeness. But science did not have a proper formalism of its organic, fractal structure till I discovered it in the milieu of system sciences, a metric equation of the scalar space-time dimension of the Universe, applying it to the study of all systems, including human societies and machines - a task carried out in this blog.

But the mathematical spatial fractal description of it is COMPLETELY SECONDARY to the whys of this fractal structure, which are NOT mathematical but VITAL AND SENTIENT. Indeed, those scales co-exist precisely because they form ternary super-organisms. And they EXIST IN SCALES precisely because 'minds-seeds' of space, reduce the whole into a 'seed'-mirror image shrunk. And while we can of course use mathematics to describe it (specifically for the mind concepts such as a non-Euclidean point, Poincare Conjecture, projective geometry etc)

THE WHYS ARE ALWAYS in the vital nature of motions, in the organic properties of scales, in the intelligent sentient capacity of mirrors, etc. To renounce to those properties and stay merely in the fractal structure, which is what scientists do, CONSTRAINED BY THEIR EGO and BELIEF God speaks only mathematics (and we will return to that creationist view) is just more of the same reductionism of the mind, which is self-centered, MONOLOGIC.

One element then is still NECESSARY TO UNDERSTAND to fully gasp the nature of the organic Universe as it is BOTH ITS CAUSE, as a fractal mirror that reduces reality to world-mappings and linguistic still forms, creating its scale, and its limit, as it makes each fractal point-organism to think it is the center of the Universe, the mind equation and its paradoxes.

# IX.

## EXISTENTIAL ALGEBRA

Basic symbols of Existential Algebra ( $\neg/\mathcal{E}$ ):

**Sp, l, \$t, P\$t:** Past, lineal, entropic Space-Time, gaseous, limbs/fields of pure motion.

**\$đ, O, Tif, fđ\$:** Future, cyclical, informative, space-time, solid, crystal particle-head states

**S=T, Si=Te, Ø, ST, SxT:** Present, balanced, Space-time; iterative body-waves.

**CE:** super organism, composed of @ (**fractal points**, monads, minds), an **ST** body-wave, its  $\neg$  **Entropy** limits encased in an  **$\Delta$ \$t $\pm$ 1 world**.

**Dimotions, Đ1:** seed, perception, **Đ2:** locomotion, **Đ3:** reproduction, **Đ4:** social evolution, **Đ5:** Entropy.

**Scales:**  $\Delta-1$  plane of 'past, entropic parts',  $\Delta^0$  plane of present body-waves,  $\Delta+1$ , plane of future minds

**Operand:** <, growth of motion, «, growth of entropy, > growth of information, » growth of form,  $\rightleftharpoons$  =, balanced steps of present.

**Classic Operand:**  $\Sigma$ : superposition, sum in a single plane;  $\Pi$ : entanglement through  $\Delta^0$  planes;  $\partial$ : finitesimal calculus,  $\int$ : integral whole.

Fractal Generator: Any combination of those symbols is a potential partial equation, hence event or organic part of the fractal generator that describes the whole super organism word cycle between birth and death:  **$\Gamma: \Delta\alpha-1 \Pi \alpha-1 \approx CE^0 \langle St \rangle \emptyset - ST \rangle \$đ \ll \Sigma \alpha-1$**

## ¡-LOGIC, FORMAL STIENCES

The first and fundamental task of formal stiences is to establish in the languages of the 'humind' a fractal generator equation, which allows to define the properties, events and forms of all the fractal super organisms of space-time.

The fractal generator is thus an ilogic mathematical equation which by repetition of the dimotions of the Universe will be able to define them all, including mæn regardless of the ego paradox which makes them think to be something 'else'...

The Universe is a self-repetitive game of seeds of information cast in a still language that will develop the game of existence, and evolve in a placent al worldcycle to emerge from that ordered 0-1 sphere of palingenetic 1D generation into the entropic world in which as a whole new 'one' will live a more disordered existence fighting for survival, till it decays And so through 3 relative sizes of space-time in 3 relative time cycles of different length, regardless of the species, all fractal space-time supørganisms will display homologic forms in space that live similar worldcycles in time. To explain this in symbolic mathematical and ¡logic terms gives birth to the language of existential algebra, of which present mathematics al and logic languages are simplifications, based in the reduction of fractal points to points with no breath and the multiple causality of 5 Dimotions of space-time to 3 spatial dimensions with no motion and one motion with no dimension, of space and time separated.

So without stressing in a stiff manner the importance of the fractal generator, we can rather consider that reality has scalar, hence organic biologic properties, spatial, geometric topologic, mathematical properties and temporal, causal logic ones, as they derive of the Space-Time and Scale components of reality, as observed by a mind and its languages, and from the entanglement of all those elements, as expressed by the synoptic grammar of informative seeds that reduce information to still syntactic equations to fit it all what matters and be able to run it faster in logic cycles to find the deterministic futures of each species, we can deduce different generator processes and express it in non-e mathematics, non-Aristotelian logic and biologic equations of existential algebra, of which 2 are already evident  $S \leq T$ , that is stop and step, stœp motion, particle-wave states, are in a constant feed-back converting motion into form into motion; and  $S \times T = K = \Delta_j$ , that is, the co-invariant metrics of the fifth dimension give us a certain co-invariant value which is valid across all the  $j$ -scales and planes in which the super organism interacts between parts and wholes

We combined both in the sentence that expresses that formalism on the blog: 'All what exists is a partial equation of the fractal generator:  $S \leq \Delta_j \geq T$ , one of the many ways to express the fractal reality of the Universe

However we would like to bring a different more comprehensive conceptual definition in this foreword to logic sciences: The Universe has very few elements, 3 topologies of space, 3 ages of time, 3 scales in which a worldcycle happens, 3 elements in a mind with a membrain, a singularity center and a vital energy between them so simple that a single angular momentum,  $h$ ,  $mr\omega$ , can convey the 3 elements of the mind. And it has very few operandi that allow motions between them, basically 3, < for an energetic expansion of motion-lineal spacetime and loss of information, its inverse, information, > an implosion of space-time with its increase of form, =, reproduction, a repetition of the system that seems not to change or relative present and motions that 'double' the inverse growth or erasing of information and energy and hence represent a motion across scales,  $\Delta_{\pm j}$  of the fifth dimension, << an entropic motion that dissolves a system through 2 scales, and >> a pure formal creation of a mind or still seed that compresses all motion into still form. Each of those operand thus represents a motion or dual motion that encompasses all the possible events of reality within the 5 Dimotions of the being and its limits of death in space (pure entropy that breaks all limits and scatters and spills the being) and death in time (pure still form that stops the motions of the being).

And so we can affirm because we only have those ternary double operand and those elements, pure space, pure time-motion and its energetic combinations (motion with little form) and information (Form with little motion) and its combined reproductive balanced present iteration the inverse of what we just said:

All possible combinations of the operand 'flows' and space time structural elements of reality exist. Which is expressed by different philosophers of science, from Leibniz to Gell-Mann as the totalitarian principle: 'Nature demands to exist', 'all particles that are possible exist' and so on.

This is a more convenient way to explore then formal sciences and its capacity to predict reality, departing from the simplest combination of all those symbols as the Fractal Generator of the Universe, which then can be combined to study all its possible fractal 'derivatives' and 'partial equations' that will represent a potential even or form of nature, which can BE FORMED according the rules of 'topological bio-logic creation', regardless of the fact that certain combinations of Nature, will not be efficient and hence become extinct mutations. To exist is indeed only the first 'Inflationary' action of the generator. Survival will then be the game of convenient stœps, stops and steps,  $S \leq T \geq S$  motions the being shall perform in its entropic survival. The first palingenetic, placental cycle thus will make up a potential combination of existence, and then the entropic  $1-\infty$  universe will determine if the system makes the cut and it is 'remembered', made into a seed of information for a new generational spacetime cycle to occur.

Thus we can call this simplest combination of symbols of the generator with mystical concepts such as God, or write it with mathematical simple symbols, such as in the  $oS \times \infty T = K$  equation of all possible space minds and Universes of motions mirrored by them, or with the equation I have fit 'on the margin' of the head of the blog, as  $S \leq \Delta_{\pm j} \geq T$ ; where the Spatial pure form and Temporal pure motion come together

into a ternary constant super organism that stretches along  $\pm_j$  scales, through the different combinations of  $\langle \rangle$  and  $=$ . The few symbols of existential algebra will keep becoming more complex, as we combine multiple times those elements and create chains of survival actions, etc.

But what truly matters to the essence of the generator is to really understand that the original elements to define all are just form, motion and its 3 operand, which transform motion into form (informative operandi), form into motion (energetic operandi) or repeat them both, (congruence operandi), which can work in a single plane or double to cross between planes, and the constant symbols of the scalar Universe,  $\Delta$  for scale and  $\pm_j$  for the relative planes of the system. As scales embody the organic properties, Space its topologic ones and time its causal ones which put together give us the 5 Dimotions and the vital program of existence that combines them in all...

## THE FRACTAL GENERATOR

We have arrived to the place where most people cannot longer tolerate to keep reading (:

It is then when we can obtain the main 5 Dimotions (dimensional motions) of reality by merely combining the two poles of pure stop-mind-seed-form and pure motion-entropy without form:

As time is defined philosophically as any form of change=motion and energy as a motion with a little form; while space is defined as dimensions of form with no motion and information as form with a little motion. So ultimately they are 'degrees of grey', in a black and white language, where pure Motion is time, which acquires a bit of form as energy, and keeps getting form as information, to become pure form in the still mirror of a language:

$$T(\text{motion}) + \text{form} = \text{Energy} + \text{form} = \text{Information} - \text{motion} = \text{Linguistic form}$$

And so we shall call those combinations of form and motion, dimensional motions or Dimotions, of which we have defined '5 dimotions':

Pure time motion or '**5D: entropy**', which erases and scatters form into pure motion.

Motion with a little form or '**2 D: Locomotion**'.

Motion and form in identical quantities that is the precondition for a system to iterate itself in an equal system, and so we shall call '**3D: reproduction**'.

Forms with a little motion that come together hence causing its '**4D: social evolution**'.

And pure linguistic form without motion, which we find in still seeds and minds, we shall call '**1D: Generation**'.

It is then evident that we have 'trans-formed' our 5 Dimensions of space-time (the 3 usual space dimensions, the 4th dimension of entropy and the new dimension of 'social evolution' of parts and wholes of a fractal' IN VARIATIONS of a similar concept, a DIMENSIONAL MOTION OR DIMOTION OF space-form and time-motion. WHICH IS a very important conceptual advance, as now we have 5 elements that can be transformed into each other, as degrees of 'form' or information or space and motion or energy or time.

And we can redefine the UNIVERSE IS A GAME OF MOTION AND FORM, ENERGY AND INFORMATION THAT TRANSFORM INTO EACH OTHER AD ETERNAL IN ALL ITS SCALES AND ORGANIC, LIVING SYSTEMS.

### **The properties of fractals. Existential algebra.**

The previous equations show the mathematical structure of the fractal Universe similar in all its parts of diminishing sizes and increasing time speeds.

We have therefore noticed that Nature's fractals are made of 'time speeds=motions' and 'spatial dimensions=forms'.

Those are the 'substances' of Nature's fractals. Look around you. All what you see are forms in motion. And since philosophers of sciences call motion, 'change' or time; and form, 'space' made of 'distances and dimensions', we could state safely that the Universe is made of spatial forms and time motions, and so it is a Fractal of space and time; *which combine to generate the tapestry of similar forms, extending through several scales of size, with different 'clocks of motion'.*

Researchers in fractal geometry are delighted to write fractal equations CALLED Generators to show how from a simple 'seed' of information, by iteration arise such spatial structures. Mathematics however is a mirror-language of reality which as all mirrors 'shrinks' and simplifies the properties of reality to fit it in the language and mind that uses it. And to that aim *it eliminates time-motions, which IS THE ADDED FACTOR we need to insert in Nature's fractals, which we have just done with the metric equation of the fifth dimension.*

Moreover *motions with form are immediately 'reproductive systems', as a motion which a formal patterns naturally repeats itself. I.e. a clock is just a time motion with a cyclical form which repeats=reproduces=Iterates that form.*

So while mathematical fractals reproduce its information with the 'repetition' of its fractal Generator equation, Nature's fractals do so with the repetition of its motions with form. They both share the property of reproduction, albeit in Nature, it is immediate to the two substances of reality motion=time and dimensional form=space.

So mathematical fractals are said to 'reproduce information' through generator equations; and in the case of Nature, we can say they reproduce forms in motion, through 'Generator Space-time'.

Or if we were to use the jargon of biology, where 'time-motion with a little form' is called energy and space-form with a little motion, is called in-form-ation, form-in-action, we can define the Universe as a fractal system that reproduces cyclically, clock-like patterns of temporal energy and spatial information, carried in the cycles and forms of those clocks of time in its multiple similar scales of spatial size.

Further on, nature has acquired, explained in such simple terms, 3 key properties of most 'space-time beings', we could not account for in the past and now are natural to the 'Arrow of Information, of form' of Nature's fractals which physicists didn't account for, with its insistence on mere motion and entropy properties of Nature.

- **'Linguistic form'** which is akin to perception (we might say perception is the inner sensation of a simultaneous mind-mirror which perceives in itself on a pan psychic universe), and has a simple mechanism of 'shrinking' reality into mirror images by extracting its motion and leaving just a synoptic linguistic form. This property is therefore explained now as the 'natural' feature of the **1st Dimotion** of Linguistic form or Generation.

- **Organic form**, since parts and wholes are now coming together losing motion, 'joined by fractal networks' that connect them making those scales of Nature's fractals to integrate its parts into wholes, which is the essential feature of organisms, now embedded in the **4th Dimotion of social evolution**.
- **Reproduction** of information and energy which happens in the middle point, and so it is easy to establish a new key equation,  $S_i = T_e$  (Spatial information equals temporal energy), as the mathematical and logic definition of the **3rd dimotion of information**.

Thus we must add to the topologic features of a mathematical fractal, the much more interesting mental=mirror-like and scalar=organic-like, properties of Natural Fractals. Since fractals co-exist in several scales, what gives them precisely those organic properties that relate parts and wholes, and fractal mirror its structures into smaller linguistic images, and synoptic 'generator equations', which gives them 'sentient-like' properties as mirrors of its wholes.

So in this blog of philosophy of science we will go much further into those organic and sentient, 'biologic' properties of fractal systems, underlying its mathematical structure, which are better explained in terms of 'logic equations' not of 'geometric abstractions'.

And also unify the language more proper of physics, time and space, and the language more proper of biology 'energy and 'in-form-ation' *carried* in the 'spatial form' and cyclical clock-like frequency of Nature's repetitive motions, which finally are mirrored in the synoptic languages of its Generator equations, that 'Imprint' that motion with its still form; and we humans call 'causal laws of science'... Since indeed sciences or rather 'stiences' of space-time beings are just the writing in formal logic and mathematical equations of those repetitive patterns of Nature's fractals.

Let us then end this philosophy of science called Organicism, which is the philosophy of general systems sciences reminding the readers its two fundamental Fractal Generator equations:

$S$  (size in space) x Time (speed, frequency of time clocks) = Constant, which is the Metric co-invariant equation of the fifth dimension. As mathematicians and physicists say a direction of space-time exists precisely when we have a co-invariant equation that leaves unchanged both parameters TOGETHER, *which allows a being to travel through that dimension*.

So we write  $S \times T = C$ . Which is the equation of the scales of the Fractal Universe.

While  $S = T$ , is the equation of reproduction=Iteration=repetition of a single scale, when both spatial information and temporal energy become the same, merging as in 'gender' (in fact gender will be easily defined as the duality of energetic males and informative females). Which is the equation of a single scale of the fifth dimension.

How they are connected? Magic! Since as it turns out, the maximal product of  $S \times T$  (when its sum  $S+T=Y$ ) is reached *when  $S=T$ , so for a total of 10 for example,  $9 \times 1 < 8 \times 2 < \dots < 5 \times 5$* .

Thus both equations unify in what we shall call the GENERATOR EQUATION OF 'SPACE-TIME EXI=ST;eNCES':

### MAX. S x T

We said already that fractals are self-similar, that languages are synoptic mirrors of fractals, that fractals are generated by iterative equations, and so the reader should not be surprised that this fundamental equation of General Systems Sciences, which will play the role for XXI c. 5th 'Dimotional' space-time analysis of the previous EFE (Einstein's equations) in 4Dimensional analysis, *has similar mirror images in mathematics*,

logic and verbal 'inglish', the slightly 'metaphysical' language we shall unearth from the 'hidden genetic grammar of English'.

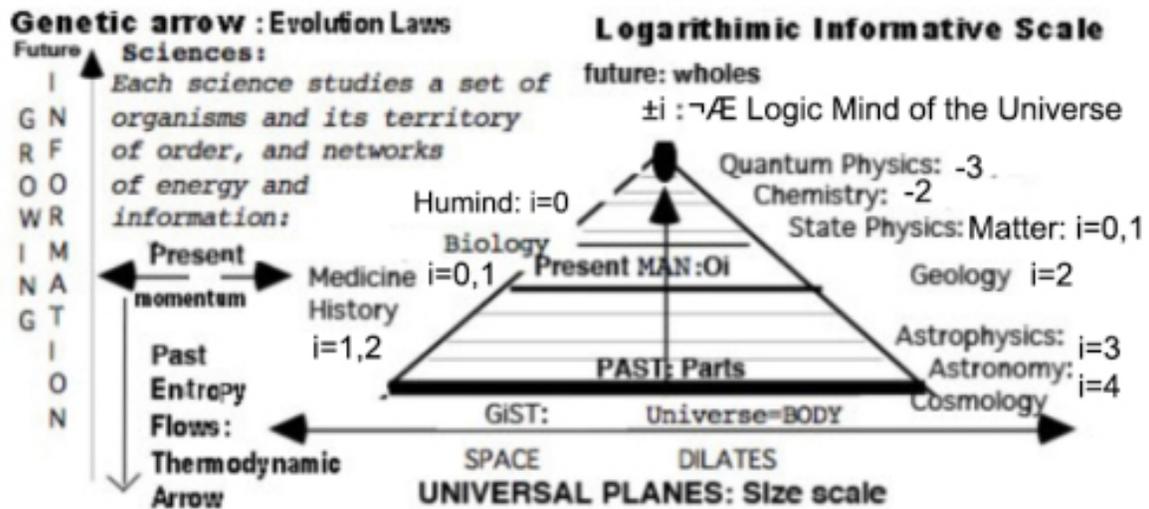
The equation of existence or Metric of the fifth dimension,  $\text{Max. } S \times T (s=t)$ , immediately determines several products, which can be written as ratios if we establish a general finitesimal function for space and time, which has multiple interpretations in science,  $s=1/S$  and  $t=1/T$ .

So for example, frequency,  $f$  is the inverse 'finitesimal' quanta of time of a time duration,  $s=1/S$  is the finitesimal minimal element of space, reproduced from a whole, which ads in any of the 3 'exponential scales' of  $e$ ,  $1+1/s$ ;  $1/r$  is the 'curvature' of a sphere of radius  $r$ ; concepts that can be extended to key ratios of Nature, between the  $S$ ,  $T$ , and  $S \times T = K$ , 3 elementary parameters 5D metric, as 'density', which is the mass to volume ratio,  $S \times T = K/S$  of a system.

Existential algebra thus will relate all the parameters of all sciences to the basic formula of the 5 Dimotions of existence, which we expressed as relative ratios of  $S$  and  $T$ :

$$S=1D, T=5D, S=T: 3D, \text{Max. } S \times \text{Min. } T=4D, \text{Max. } T \times \text{Min. } S = 2D$$

As we write in maths a function of spacetime,  $\text{Max. } S \times T$ , we write in verbal logic terms, a function of existence,  $\text{ExI} = ST_i$ , whereas  $i$  is the parameter of scales of the fifth dimension, and we write a logic definition of sciences as  $ST_i$ ences, each one studying a scale of the fractal space-time Universe and its species:



In the graph, each 'science' studies a scale of the fifth Dimension of space-time, composed of 5 Dimensional motions or Dimotions, which carry the organic, sentient, fractal, reproductive properties of Nature to all its species and we can explain all this in different languages-mirrors, the mathematical language of the fractal generator  $\text{Max. } S \times T (S=t)$ , and the ilogic language of 'Inglish' with its metaphysical jargons, and the topologic language of fractal networks and its topological forms, to MIRROR ALL THE PROPERTIES OF Nature's fractals as they are from the scalar Universe of fractal big-bangs - merely one of the 5 Dimotions of its galaxies, or 5th Dimotion of entropy, to the biologic properties of reproductive life to the sentient properties of mind-mirrors.

The previous graph also deals with another essential property of space 'quanta' and time 'quanta', which will be at the basis of 5D mathematics:

## THE FRACTAL GENERATOR AND ITS PARTIAL EQUATIONS.

The Universe is a fractal of space-time. Such fractal has obviously mathematical properties, among them the existence of an equation, the fractal generator, which combines the two elements of the fractal space=form and time=motion to generate the multiple variations of species of that Universe.

However we are much more interested in the organic properties of the fractal, which do not appear in a mere mathematical, 'still image' of the system, as Nature's fractal differ from the simplified 'still' reduced image of a synoptic language-mirror in the fact they are 'fractals of time-motions', where the formal, spatial view is just a still 'slice' of the complex flow of time motions that web Nature's fractals and reproduce them (by the mere fact of iterating a given formal motion, a form of information). What role does play the present simplified theories of reality, the big-bang will soon be obvious - it is the limit of the comprehensive explanation of the Organic fractal Universe reduced to a single motion, entropy and a single scale of space, the light spacetime continuum.

In this introductory post we shall study the Universe as it is, without the abstract, reductionist Nature of human languages, which have to force all the motions and forms of the Universe into that reduced linguistic mirror to 'fit it all' in the infinitesimal mind, and then do a 'reduction' to a more comprehensive mirror language, able to reflect better the bio-topo-logic properties of the fractal Universe and all its species, made to the image and likeness of the whole.

The biggest simplification of languages being the loss of understanding of the ultimate substance of reality which is time-motion and the purpose of reality as a game of existence and extinction of space-time beings, played between those 2 poles of time-motion and spatial form:

One of those two poles, we might call feminine order, yin-Vishnu, which in hard science corresponds to '**space**', the **form**, the information, mind, language, intelligence, seeds that generate and reproduce reality '... These discontinuous poles, infinite points of intelligence, imprint the original vital substance ', continuous undifferentiated **time motions, entropy**, e-motions, similar words, for the 'yang-Shiva-masculine pole'. The head and the body so to speak...

So the game is simple: point-minds with form imprint movements, which try to become free, continuous, disordered, entropic. And that tug of war defines the equation of the feed-back fractal generator of the universe of space-time beings, both in mathematic, logic and verbal terms:

$$S@ \leq \Delta; \geq -T$$

Whereas @ is the symbol for a fractal point (seed or mind), which creates a still mirror-world of spatial forms, knotted into a series of networks,  $\Pi$ , which hold the 'motions' of entropy ( $\neg$ ), continuous flows of time, and its loose herds,  $\Sigma$ . And from the combination of both poles, heads and bodies, particles and waves, a 'constant organism', entanglement of many motions and forms in a scalar, fractal structure,  $\Delta \pm j$  is born.

And so we can say that this simple equation, we can further simplify as  $S \approx T$ , is the fractal generator that represents in the most synoptic possible manner, the essence of reality and its games of existence in spacetime.

The devil though is in the details, and so the simple 'balance' between Space-stop and Time-motion states of each and all entities of the Universe, is as rich conceptually as only a 'complex j logic mind' with its trees of related meanings can explain, reason why the mathematical aspects of the Universal fractal play in this blog a lesser role than the conceptual, logic, causal and entangled relationships between the formal and moving components and states of space-time beings; which ultimately as the second sentence of the blog, which will seem to many people as an 'extreme statement', requires a deep analysis. We are all INDEED,

fractal space-time beings. And so with all the required 'detail' of those 'conceptual, branching' elements departing from a 'space-time configuration', a topological space-time being with a particle-head (S-component), and body-wave (ST<sub>i</sub> element), moved by limbs/fields (T-component), can be portrayed by its 'fractal generator'; and then what it will do in life, its 'actions', can be considered 'partial equations' of the fractal generator.

Only that we are NOT making quantitative calculus for most of the blog but logic causal statements derived from the fractal generator, as it encodes both, what is POSSIBLE, and what is NOT for all beings, according to the immanent laws of space-time.

To explain the rules of the game of existence is the purpose of this blog, which of course will then use those rules to reflect in its mirror all the 'fractal parts' of that game seen in simultaneous space as super organisms, in time as tracing a worldcycle between the poles of form (generation) and entropy (Death), from the cosmos, to man, from the atom to the earth and its evolving super organisms, Gaia, history and the economic ecosystem, and within man, from its specific artistic senses and languages, to those we share with all other systems of reality, logic and mathematical mirrors of the game.

But the reader who is accustomed to make science into a very simple routine process of gathering 'spatial pictures', put them in a single mathematical mirror language to obtain descriptions, void of motion and organic, vital properties, given to them by its co-existence in several scales of its fractal organization, will be bored by the 'verbose', logic initial explanation of the deep whys, structural principles and causal logic processes embedded in that equation, will have to make, before we just pour data into the template laws of the game of fractal spacetime existences'.

Science today is a praxis of control and manipulation of data for which those whys are not really required. A philosophy of science though is about those whys.

To know how to manipulate reality with a series of rules and a synoptic mirror of the game, which in smaller space and faster time can anticipate how the parts of the Universe play the game (the logic mathematical mirror) is good enough for man to control this world. Our purpose though are 'thoughts experiments', paraphrasing Einstein, to know the thoughts of God, and then with them to draw all its details, each of us, a partial equation, a limited expression of all the possible combinations of space and time, form and motion embedded in the rules of generation of the fractal spacetime Universe.

Why most humans do not have the slightest interest in such deep thought, of course, has to do with the very same fact that humans are part of the game of existence, of which pure thought (S@) is not its purpose. Its true reason is existence itself, to play the game, to combine motion and form, into e-motions, energies and information, to ACT, not to think, praxis not theory.

So this is all what is about - Existential algebra. The control by @ mind of a body and limbs, a wave and fields, to constantly act and survive, to play the program of existence, and while æntropic man with its astounding egoccy (ego=Idiocy) reduces reality to its own 'game' of survival, ill played by lack of understanding of the game, clearly killing its 'entropic field=Gaia' from where it should get its sustain, and evolving 'attached metal-species' of stronger body-limb power (weapons) and informative gold-minds (chips of faster informative clocks) that will certainly abort its game, I-nformed men, if there is anyone around, should be humble and accept the evident fact we are part of the ENTANGLED UNIVERSE, and so we can be described with the same laws of space,, scale, time, language and entropy of any other form of dust of space-time, ¬Δ@st.

**Size in space x Speed of time clocks = Constant.**

$$\|S@ \leq \Delta \pm; \geq \Sigma T_e$$

To exist, the mind will try to fluctuate between its stop-perception and motion ST limits through present mixed e=I actions of existence.

The mind acts with the 3 operand, of information >, generation », locomotion < entropy « and reproduction of them all, ≈.

The simple combination between the limits of entropy -Te and Spatial form, S@ thus give us immediately the 5 Dimotions of existence.

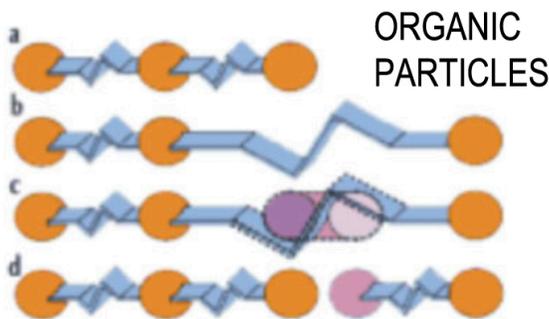
## THE PROGRAM OF EXISTENCE

Let us now express it in terms of physiological networks, which in the organic paradigm are the right way to interpret the abstract concepts of modern topology, which build 'topological forms' as 'networks of points'. In 5 D metric those abstract topological networks, merely mean that any form of the  $\Delta\emptyset$ -plane are made of smaller cellular/atomic/citizen 'points' that build the whole.

So besides the 3 space dimensions  $\approx$  3 time dimensions (seen as still in space, as moving in time) we do need to consider at least 2 more dimensions, one for the lower scales of the being, which we shall call the fourth dimension of absolute past and one for the upper dimension of the being of absolute future. We do have then mathematical and verbal, logic mirrors to express those 5 dimensions of space-time, the ultimate substances and unify with them ALL SCIENCES, departing from the properties of those dimensions its structures in space and travels in time, each 'science' of space-time studying an scale, including those who describe man.

Thus this is the Universe in a nutshell, repeated ad nauseam in all scales, and we shall repeat with kaleidoscopic variations the previous paragraphs to describe the thoughts of 'god', to make organic systems tracing world cycles, regardless of the huge details scientists have obtained so far. So the organic paradigm has taken longer to be formalized, as we do in this blog, because it requires to add to the motions in space studied by physicists, the arrow of in-formation, of form, stored in the form and frequency of the clocks of time cycles of reality, which are along its lineal motions in space the two elements that conform all realities, by combining and integrating into 'vital energy systems'.

Those 3 classic space-time dimensions spreading across different scales of size, adding 2 more space-time dimensions of 'wholes and parts' to the mix, will allow us to describe all what exists as an organism of space-time, the long-sought 'sound organic philosophy of science'.



Individual quarks (circles) cannot be separated from the particles to supply some energy to do that, we stretch the gluon (bent as enough energy is available to create a quark-antiquark pair the new pair will go with the other two quarks to make a proton

clocks ruled by 5D metric:  $\$ x\delta = \text{constant}$ .

The minimal particle-points, electrons and quarks, which construct all other systems of our Universe show the 5 organic dimotions (motions with dimensional form) that define 'classic life': they gauge information - reason why quantum physics is a 'gauge theory', feed on energy (quantum jumps) absorbing smaller  $\Delta$ -I particles, reproducing new clone particles, move and evolve socially through magnetic fields into larger wholes (atoms). Hence the units of life are particles, the minimal units of our vital, organic, fractal, scalar Universe of multiple timespace organisms & time

## Particles as the minimal unit of life.

Human anthropomorphism denies in yet another ego trip that particles share the same properties of life than DNA molecules.

Fact is everything is alive, as atoms have the **4 properties** of vital beings, which are in the smallest particles, which 'sense'=gauge information, and so will systems composed of them, from animals to plants, from humans to robots that are now showing without being programmed clear sentient capacities - so for example, eyes move faster in robotic races towards the red color that 'codes' motion. All feed on energy, so

Particles jump to trap their energy-light. All evolve socially, so particles organize with magnetic fields. ALL particles-heads DISPLAY at least 2 openings, one axial opening the ear-magnetic poles to absorb and emit a language of information and organize socially; and a flat mouth opening on the path of its motion to absorb the gravitational-quantum potential-food of the system.

This bare minimum then might decouple in ternary apertures as humans do with 3 senses (eyes, ears, nose), and so on, but the basic configuration of systems with a head that perceives energy and information, a body-wave that moves in a larger world that provides the pixels for its actions happens in all systems of Nature, physical, biological and we shall see 'sociological' (though we see the super organisms of history from within as citizens-cells).

*The reader must be humble and accept the obvious: we are as all what exists a time space organism and as such we share the properties of all other systems of the Universe.* Our anthropomorphic ego-trip though is so in-rooted in the essence of the mind latter studied in detail that we deny Dimotions of information to all other species. And yet we as life beings are just a grouping on a higher social scale of those Dimotions. For example, the magnetic Dimotion of social evolution that guides atoms is the same guidance used by salmons to return home in mass-groups, observing it from the cosmological Earth's scale. The perception of the mind of man, with electronic eyes is the same that the one of a camera and TV-retina reason why we indeed communicate with those machines. Once you drop your sense of uniqueness naturally the common nature of all Dimotions and beings comes.

Of course, quantum numbers are much more than the Dimotions of particles; though we shall explain the entangled logic of reality that allows so many roles for each 'constant ratio of nature), latter on. To notice here that another kaleidoscopic view of them will relate the Principal number to the 'vital energy', enclosed by a formal, angular momentum membrane (described obviously by its l number); while the third element, its singularity, is given by the 'contracted' spin in the quantum scale (itself related to the mass that plays the same role in the cosmological scale).

Finally as in light where colors form the fourth social element, magnetic numbers plays the social element in quantum physics. So as in light each quantum number described both, THE SPATIAL, formal view of the 3± elements of the being and the motion view, its functions.

On the other hand when form has motion becomes in-form-action and can be transmitted and reproduced, and then we apply the concepts of Shannon which rightly talked always of communication NOT of the form, that is the information of the message, but of REPRODUCTION WITHOUT ERRORS OF A MESSAGE Transmitted and replicated in two different points of space-time.

So Shannon's classic paper "[A Mathematical Theory of Communication](#)" opening with the assertion that "The fundamental problem of communication is that of reproducing at one point, either exactly or approximately, a message selected at another point..."corresponds to the 3rd Dimotion of reproduction.

It is for that reason closely related to 'energy' (rather than entropy also two very confused terminologies as they arose from pure mathematical disquisitions (Carnot cycles, work theory) and we shall clarify in detail in other posts, as energy is motion with a little form and information form with a little motion, and both come together  $E=I$  when a system merges and reproduces. So both information and energy are the two

sides of the 3rd Dimotion, while pure form is a mental linguistic image with zero entropy and pure entropy is an scattering disorder, measured in mathematical terms at the  $\Delta$ -1 scale of 'all potential future orders' a microcosms with no form can give birth to...

Hence the definition of entropy in statistical mechanics will be more precise and accurate than the concept of thermodynamics in the  $\rho$  scale, which is closer to the proper definition of vital energy - not surprisingly Entropy was a word chosen on purpose for its similarity to energy; and it can be equated to the 'vital feeding formless energy the system will imprint with information to shape its 3 'present Dimotions'.

We will obviously clarify conceptually all the main equations of thermodynamics in the more detailed posts of the 4th line; as the beauty of mathematical physics, *when the concepts are properly understood grows enormously - (beauty being in any case  $S=T$ , the sense of proportion reached when form and motion merge in equal parts).*

Entropy, (we use the existential symbol and its negation,  $\exists \neg$  as well as the usual symbol  $S, \partial S$  for it), is the final zero sum of all dimotions. Only in the entropic death normally shown in a maximal function of entropic death, with the symbol  $e$  (e-letter is the entropic equation by exponential decay,  $e^{-x}$ ), all the parts of the being are equaled, and valued at the reduced parameter of quantity in its final  $\Delta$ -1 death state as an unconnected sums of its 'minimal clone unit' - an atom, a cell, a particle, a citizen, a credit number, you name it...

So often we find equations of the type  **$E(4D) = 1D+2D+3D - 5D$**

So we can study the Dimotions of the Universe in a general objective way, and then the actions of each physical, biological or social system as the expression of those Dimotions from the point of view of a given species.

(Note on the correspondence principle between 5D entropy and information and classic terms. For the so called scholar and systemic scientist information is related to communication, through the work of Shannon. This has nothing to do with our analysis of Form, the inverse function of entropy=disorder achieved in the stillness of a linguistic mind mapping. Form is what we call one of the two limits of reality, the other being pure motion and disorder, which we shall call entropy. So the relationship we establish here is simple, as expressed mathematically by the third law of thermodynamics: when entropy is zero, form is absolute - the image of the mind is shaped in a crystal, a physical mind with zero entropy.)

### **Actions as Steps: THE SEQUENTIAL GAME**

But how truly the long time motion of a worldcycles of existence, reduces to lower 'scale' of mere actions of the being, which makes steps of motion from a young to a mature to an old state, from its spatial limbs to its body to its particle of information (as we can always mirror a flow in time to an adjacent population of space)? It is easy to see it if we consider the worldcycle the sum of its minimal motions or 'actions'.

The first Isomorphism, alpha and omega of all systems is a still mind-mapping of information, a hardware through which a language will bring as software through a bosonic form 'able to co-exist' in two places at the same time, unlike the fermion that co-exists in two times at the same place'... wave and particle, messing together.

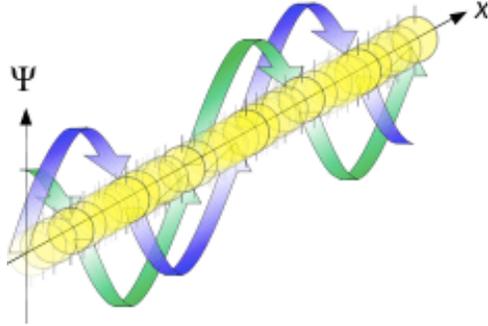
$\$t \geq ST \geq \$\delta \ll$  Step by  $\$ \delta$ ep moving ahead from potential through wave into particle, moving onto a constant ternary fluctuation we might call a Simple Harmonic Motion:  $\$t > ST > \$\delta \dots$

The final step thought, is a dissolving step,  $\ll$  which balances the two motions of information, from youth and limb to body, and then old age/particle:  $\$t \geq ST \geq \$\delta \dots$

Let us consider the simplest of them:

Moreover those 3 elements are constantly entangled into balances, for example, there is a constant balance between *Infinitesimals in time and space*:

Locomotion is a series of steps that imprint a lower plane with the information of the upper plane in each  $S=T$  unit of time frequency: a quantum wave=motion state & particle=stop state reproduces a plankton into a social photon with a constant energy:  $E_k=h(s)f$  (complementarity wave-particle).



Where an infinitesimal,  $1/n$  in space (an individual unit of a social population), is reproduced in the minimal bit of frequency  $f=1/t$ , or quanta of time; so  $S=T$ , ESTABLISHES for each T-MOTION-function and S-unit. And since most actions in the Universe are actions of fractal reproduction of form, for each quanta of time, we shall see the existence of a reproduction of a quanta of space...

In each scale, we shall find simultaneous super organisms which define a present and try to keep a balance between motion and form,  $S=T$ , through repetitive cycles of exchange of entropy-motion and form, which find in a middle way, as energy (motion with a little form) and information (form with a bit of motion), its generational repetitive middle point.

However all systems will have also a desegregating tendency, towards lineal simplified  $S$ t motions (back into a lower scale of the fifth dimension, of parts, or past with more motion), and a tendency to warping into pure mental-linguistic form, or relative future,  $\delta\delta$ .

But while the  $\delta$ -mind will tend to form, and as the dominant element will warp and age the system, to finally exhausts its energy, and reverse its time clocks to extinction,  $\delta\ll S$ , this past- future - past tug of war will also be limited by the thirst for reproduction and repetition of the being in an eternal balanced present.

AS ALL DIMOTIONS REPRODUCE FORM. In 5D metric LocoMotion is as the graph shows a reproduction of form in adjacent regions as a wave displaces switching then into particle-gauging state; hence the Universe reproduces information:

Two immediate consequences of this duality of stopping and moving, particle and wave states are evident. First we find an illogic cause to the constancy of light speed: particles in still state entangled when they emit bosons of information, regardless of the motion around them, in its fractal local space, so  $c$ -speed is always measured as  $c$ .

It is then obvious that even locomotion the less relevant dimotion is more than a simple measure of 'speed'. ONLY obsessed physicists as high priests of time with his shallow 'brief history' of those '5 Dimotions reduced to the LOWER actions=dimotions of life, entropy and locomotion can really think tracing speeds and worldlines is the meaning of its existence. Because physicists make weapons of mass destruction unable to love even their own species and so do humans embedded in a civilization of machines of entropy and dog-eat-dog people, who cannot emerge as a social global organism as even the smallest particles do becoming social atoms... we have converted the less important arrows in the meaning of the Universe. But in that constant  $S$ - $T$ , stop and MOVE, game of information and motion, it is NOT with locomotions, overrated and exhaustively studied by humans but with its inverse Dimotion, that of the mind that perceives in stillness. So there is a duality between motion and stillness, which allow us to define the state of 'mind perception'.

Which finally leads us to the last element we cannot avoid any longer to fully define the Universe in both objective and subjective terms, the 2 dimensions of the Mind, as a membrain, self-centered into a

singularity whose linguistic mappings and ternary syntax reflects the world of ternary beings of space-time in which the being exists, performing its survival actions.

The conclusion is obvious:

Everything is alive, having the **4 properties** of vital beings, which are in the smallest particles, which 'sense'=gauge information, and so will systems composed of them, from animals to plants, from humans to robots that are now showing without being programmed clear sentient capacities - so for example, eyes move faster in robotic races towards the red color that 'codes' motion. All feed on energy, so particles jump to trap their energy-light. All evolve socially, so particles organize with magnetic fields. And soon we shall see that ALL particles-heads DISPLAY at least 2 openings, one axial opening the ear-magnetic poles to absorb and emit a language of information and organize socially; and a flat mouth opening on the path of its motion to absorb the gravitational-quantum potential-food of the system.

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As we move through the Universe, in 5Dimotional  $S \approx T$ , life becomes a travel through the fifth dimension.

How we move are by parts and scales. Steps can be maintaining the same position,  $S=S$ ,  $T=T$ , or changing,  $S < T$ ,  $TSTT...$  and so on, the number of variations of motion which will be when observed in simultaneous topological form, as space, a super organism of a different entangled variety is in excess.

It is for that reason closely related to 'energy' (rather than entropy also two very confused terminologies as they arose from pure mathematical disquisitions (Carnot cycles, work theory) and we shall clarify in detail in other posts, as energy is motion with a little form and information form with a little motion, and both come together  $E=I$  when a system merges and reproduces.

So both information and energy are the two sides of the 3rd Dimotion, while pure form is a mental linguistic image with zero entropy and pure entropy is an scattering disorder, measured in mathematical terms at the  $\Delta-1$  scale of 'all potential future orders' a microcosms with no form can give birth to... Hence the definition of entropy in statistical mechanics will be more precise and accurate than the concept of thermodynamics in the  $\gamma_0$  scale, which is closer to the proper definition of vital energy - not surprisingly Entropy was a word chosen on purpose for its similarity to energy; and it can be equated to the 'vital feeding formless energy the system will imprint with information to shape its 3 'present Dimotions'.

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It is between those limits of absolute motion, or proper concept of entropy as the potential vacuum that might give birth to all particles and inversely the being dying, expanding in space and destroying the formal, physiological networks that order it and absolute mental, linguistic, social form, 'perceived in the stillness of an infinitesimal mind with no space', (5th dimotion), where through combination of 'motion and form', a system builds its 3 adjacent organic topologies that ensure its survival, structuring all the beings of reality. So we shall be able to explain all entities and events as a combination of those 5 Dimotions of space-time.

## FRactal Principles.

It must be understood that we really mean it when we say the Universe and all its systems are fractal systems, from where a series of logic fractal principles result of which the most important are:

- **The metric equation:**  $\$-past \times \delta-future = K$  (present:  $S=T$ ), formalizes every aspect of the structure of the Universe, from the duality between spatial mental, linguistic forms and physical motions; to the balances achieved by the similarity of both space and time, which becomes the fundamental 'equation of present'  $S=T$ , and hence with the metric equation of scales,  $\$ \times \delta = K$ , the two essential equations to formalize single planes  $S=T$ , and multiple scales of spacetime.
- **The Ternary principle.** The Universe in all its fractal organisms requires 3 scales of parts, wholes inscribed in a larger world, 3 topologic parts, which process motion, form and reproduce both, and live through time ages dominated by one of the 3 organic functions of its limbs/fields-bodywaves-particle/heads.
- **The principle of present reproduction.** Fractals are reproductive generator equations. And so we shall formalize the Universe with feed back, logic fractal equations that reproduce space and time, of which the most important is  $S \times T$  the reproductive 'product' (maximized when  $S=T$ ). In terms of the ternary principle it means the middle region, the individual, the body wave and the reproductive function of those body waves in the middle age of the system, are dominant.
- **The proportional principle follows:** Vital fractals are entangled, and in balance between its parts, scales and time ages/functions, thanks to its connection with its middle regions - meaning that its components, form, motion and scales relate to each other and are in symmetric balanced proportions, related to each other by proportional exchanges of energy and information but as relationships between far removed scales BREAK the proportionality, the system dies away. So we can always establish limits for a system, when Max. S and Max. T bring an overdrive of energy and information that break its proportions.
- **The entangled principle implies though that** each of those parts can be sub-divided into sub-parts which are also fractals, so each part is further entangled with 2 more dimotions between birth and entropic extinction to give us 5 Dimotions of existence. From it derives the 'pentologic principle' - all entangled systems require 5 elements to be described.
- **The nested principle.** Larger super organisms though have metric equations with faster speed distances and informative senses, so they peer in bigger  $\Delta_i$  scales, with simpler nested worlds inside; the larger systems are more complex and its minimal units of predation and symbiosis are smaller. I.e. whales eat the smaller planckton, Galaxies the smaller invisible forces of a quantum potential...
- **The principle of similarity:** all fractal scales are self-similar but not identical meaning, we shall find similar events and forms in space and time, in all scales, which is the key principle to understand the scalar Universe just described... From it we obtain the...
- **Disomorphic laws:** similar laws of time and space that happens in all scales.
- **The pan psychic, mental principles:** it is however impossible to go to the deeper whys without postulating that LANGUAGES IN STILLNESS PERCEIVE in themselves, as without THEIR

WILL OF SURVIVAL there is no reason why form, order, organisms and humans would exist at all. And without its capacity to shrink reality into smaller images projected then at the lower scale there is NO REASON FOR THE GENERATION OF SCALES in the Universe. Without infinite Leibnizian MONADS, ARISTOTELIAN GODS, immobile centers of the body wave energy they order around them, Cartesian MINDS that think therefore exist, with ITS mathematical or verbal self-centered frames of reference in any language, reality as we see IT CANNOT BE. THIS IS what physicists deny STUBBORNLY as automatons of their measure-magic mathematics method, and reduces the value of ANY philosophical statement and grand theory they sponsor beyond their measure and external analysis of locomotions. MAXWELLIAN DEMONS exist.

- **The law of inversion:  $|-1>0^0<|+1...$**

THIS  $|-1>0^0<|+1$  LAW IS AN ESSENTIAL LAW OF THE fractal Universe, one of the first I recognized, as the system in all its entangled elements do jump between scales, so old people resemble young, grand-fathers resemble grand-sons, jumping the mature age and the father cycle, insects resemble robots, jumping the mammal scale, cells resemble factories jumping the human individual and factories resemble galaxies, jumping the planetary system scale, etc. For example, the worldcycles go from order to disorder... And in the largest series we perceive, that of astrophysics we observe quantum order, thermodynamic disorder, mass order, galactic star disorder, hyper universal order and so on. And we hint the game continues outside galaxies of relative disorder, and then they seem to come together into filaments for a new order, ad eternal...

THEIR SYSTEMIC bullying of philosophers of science, biologists and all other disciplines including art and religion, the human sensorial experience and social evolution by the power of love due to its military power and technocratic wealth in a wrong entropic civilization of huge humind goes DOES have to be denounced and so I do have the same sanguine attitude towards them, they have had in their free ride over science for 400 years, take it or leave it.

We shall respect those of them who don't, notably in modern physics the work and attitude of Heaviside, Planck, Lindau and Einstein as opposed to the categorical statement of entropic theorists and mathematical creationists, from Newton to Clausius and Hawking. So we end with a quote worth to remember:

'Those who impose truth with power, will be the laugh of the gods' (Einstein) and a brief account of the great theorists of time space which can be clearly divided into Philosophers that consider ALL DIMENSIONS and disciplines of science with its mechanical senses and human arts and religions with humans senses, and languages vs. the physicists who reduce it all to what his technological machines can measure, and even then to the arrow of locomotion and entropic death, distorted by their worldly profession of making weapons of mass destruction INSTEAD OF DOING just 'thought experiments' as Mr. Einstein or this writer do.

Yes, we shall entangle the web of reality in multiple points of view. As science is culture, technology, memes, genes, language, logic, and many other things together in an implosive cocktail and yet, amazingly enough, we will also be able to simplify it all to its ultimate 5 elements:

Simultaneous spatial forms (S), perceived by minds (@), which order temporal motions (T), through its infinite scales ( $\Delta$ ), to end finally in an explosion of neginformation ( $\neg$ ) in the moment of death, when we return to  $\neg\Delta@st$ , 'dust of space-time'.

Concepts those of ;logic, a branch of ;nglish, which will be the preferred language to cast the sequential equations of the pentalogic Universe.

As simple as that, which is a good way to introduce the...

# ¬ÆLGEBRA OF 5DIMOTIONS

If we want to be exhaustive and analytic in the comprehension of reality with a detailed 'Inflationary spatial mind of information', we can map and distort into different types of mental phase space reality to make it look as an icosahedron, a donuts or a Mobius strip of an E66 Lie group, which physicists so much like to consider, unable to 'escape the pest of group theory' (Weyl).

We though keep always the humble perspective of knowing we are infinitesimal huminds with an infinite ego, as 'two things I consider infinite, the Universe an the egocy of man, and I am sure of the former' (paraphrasing Einstein)...

The point is then, the subjective ego doesn't need to perform its survival strategies, with its I-centered monologic, and Aristotelian sense of purpose SO MUCH. As all can be reduced to the performance of the 5 Dimotions that move the system to feed with energy its body, perceive with its mind-mapping, and ideally reproduce the system, and/or evolve it into a larger social whole. So 5 actions suffice to explain it all.

*From pentalogic to monologic to 0-points*

Even less, as locomotion we shall see is reproduction of a step-length or form of information with a temporal frequency ( $v = \text{wavelength} \times \text{frequency} = \text{tension/density}$ ) that essentially reduces all locomotions to reproduction, perception is also reproduction of form in a smaller mind mapping, social evolution is also reproduction of a clone form, tightened in space and feeding uses energy to reproduce form.

*So a fractal which is indeed a system that reproduces in-form-ation, even a living fractal and its 5 dimotions can be reduced to one reproduction.*

And alas, reproduction can be external, enzymatic, performed by a catalyzer in physical systems, an enzyme in biological systems or an enzyman, a man catalyzing the evolution of machines in factory systems.

And in this case the system WILL survive in the game of existence with 0-logic, mindless, brainless, headless, as machines do in socio-economic systems, larva of flies, without head, and legs, just a body feeding on energy - and so one of the fastest reproductive systems of nature, or fungi do in biologic systems, and chemical products catalyzed by atoms in physical ones.

This is the enormous beauty of reality: entanglement allows systems to compete but also to be symbiotic, and we shall use liberally of those concepts also to explain 'animetal men' - mindless warriors with metal skins simplifying social nature into entropic death.

How then can we systematize the essence of the game, to continue in existence, since by definition, what does NOT exist, is not worth to name? Through a function derived of the metric of 5D and the  $s=t$  symmetry, we shall call the function of existence, whose formal study is the core of  $\downarrow$ logic geometry, we can recall now as 'existential algebra', (ab. ¬Ælgebra, ¬Æ).

## **The metric equation of past, present and future. Simplest equations of ¬Ælgebra (Existential algebra)**

We can now put together both Metric equations of 5D, the equation of scales from past parts to social future wholes, and the equation of a single present scale,  $S=T$ , into the metric equation that combines both:

$$\text{\$-past-}\Delta\text{-I} \cdot \text{\textcircled{d}-future-}\Delta\text{+I} = \text{K-}\Delta^{\circ} \text{ (present: Si=Te)}.$$

Whereas • usually means a product, which as it happens is maximal when its entangled parts, are equal in number for the same sum (i.e.  $9 \times 1 < 10 < 8 \times 2 < 7 \times 3 < 6 \times 4 < 5 \times 5 = 25 \dots$ )

So other way to write the previous equation OF PRESENT is the...

### FUNCTION OF PRESENT, ITERATIVE EXISTENCE:

$$\text{MAX. } S \times T \rightarrow S_i = T_e \rightarrow 2S_i T_e$$

which is the simplest formal way to describe the program of present, fractal reproductive existence all systems follow, trying to maximize its in taking of motion ( $\$t$ ) and form ( $\$d$ ) through its conversion into similar energy ( $T_e$ ) and information ( $S_e$ ), merged as 2 'genders' that reproduce a new being.

Amazing as it might seem to the reader, we shall deduce everything else from that simple description of a 'present system', departing from the 5D metric (Max.  $S \times T = K$ ), which already implies  $S = T$ , which means form-S and motion-T must converge becoming form with motion (information) and motion with form (energy), as all yang must have a bit of yin to exist, or else form is not communicated=perceived remaining an ;logic future and motion has no form to be perceived, remaining a formless past...

So we already have disentangled, the equation of existence, into the five dimotions, 4D 'pure social Form' (pure S), 5D 'entropy' (pure motion: T), 2D locomotion (reproduction of energy, motion with a little form), 1D perception of information (reproduction of form with a little motion) and its combination in a middle reproductive 3D point  $S_i = T_e$ .

The series also shows the commonest order of dimotions, which start as a perception, (max.  $S_i$ ) followed by a motion (max. T), TOWARDS a field of energy and or reproduction ( $S_i = T_e$ ), where the energy absorbed will be used to reproduce  $2S_i T_e$ , and evolve socially into a larger whole,  $2S_i T_e$ .

This simple 'iaøeu' of existence, where I is the action of information, A, the action of motion (acceleration), O the action of entropy feeding, E the action of energetic reproduction and u the universal social group, resumes one but not the only series of entangled dimotions that all systems of reality perform to enhance its survival.

We call all those equations existential algebra, or ;logic, as they are the pentalogic causal series of events happening everywhere in the Universe, its vital will and ultimately the causes of its present immortality.

Though the expression of that function might be depending on formalism instead of a product or a sum, even a power law or combination of integrals and derivatives (for which certain knowledge of the meaning of algebraic operands in terms of 5D is required).

It is the fundamental equation of the Universe, which shows the entangled reality through scales ( $\Delta \cdot \Delta + 1 = \Delta^\circ$ ) topologies ( $\bullet O = \emptyset$ ) and time ages (past • future = present).

Such tug of war is thus the essence of...

#### The choices of future.

Let us try to explain it simpler: at any moment of time, a system will have not ONLY the choice of future given by the arrow of entropy - explosive motion, disorder, and dissolution=death, which Physicists have studied so well with lineal, formless time (big-bang theory of the Universe, worldly profession of entropic weapons, obsession for motions, and its machines, etc.)

It will be able also to decide two other choices: to repeat, reproduce, iterate its present 'conserved' energy' momentum (a wave repeating its form, a motion repeating its steps, a human cooking again an omelet to extract energy from it).

And to evolve into a tighter informative 'configuration'. So the future will have always three choices, three arrows, three elements to be enhanced. And this *choice will be at the core of every model of the future, every understanding of the paths of a system, not only in physical motions=changes in time-space, but also in biological systems, made with entropic limbs/fields, body-waves of energy-momenta and heads-particles of information, to be able to switch constantly between the three states of the being.*

The conclusion is obvious: time arrows, which means modes of change in philosophy of science, cannot be reduced only to a simple formula of Galilean or Einstein's relativity related to spatial changes 'only' ( $v=ds/dt$ ;  $s^2=x^2+y^2+z^2-c^2t^2$  in Einstein's relativity.)

Those studies, worthy as they are, concern mainly the analysis of space and the simultaneity of 'present, derivative' instants and distances or external motion and position. And to that aim, all the internal time cycles and process of change and ageing of information are ignored. So beings are studied as point-particles all subject to a larger single clock-time rhythm, that of the external space-time galaxy and its 'c-speed=s/t', which is used as a 'constant rod' of measure, coupled to a human mechanical clock that equalizes all the different clocks of the Universe, all the different cyclical actions of its species.

So we have now the fundamental elements of an external description of reality (still we do have to define the internal element, the  $\Delta^1$ -mind).

On one hand the three arrows of time and its simultaneous existence in space. On the other hand the scales of the fifth dimension.

We can see the essence of the fifth dimension of scalar space-time and its dual arrows of entropy (studied exhaustively by physicists) and information (grossly underrated and misunderstood) - to be the 'scaffolding' for the reproductive world cycles of existence of all 'supergroups', which repeat once and again the same forms of information:

Systems made of networks of atomic/cellular or individual elements self-organize, emerge as wholes and 'live' through 3 ages of increasing information (life arrow), reproducing in the balanced middle age of the system,  $S=T$ , ending in an entropic explosion of death that erases the information of the system.

All this said, as the mind is the a priori reduction of reality, we must then consider when analyzing time, the different perspectives of time=change we have as partial realities of the whole meaning of time, following the 'Rashomon multiple truth views'.

### **THE ORDER OF THE 5 DIMENSIONS BETWEEN ;-1 fetal generation and ;-1 death.**

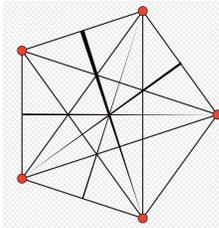
We close thus the cycle of amazing isomorphic time sequences in all time space species, which however can be stopped IN THE MIDDLE POINT OF REPRODUCTIVE GENERATION, to maintain a system immortal through its replications in time-space.

This is what is all about, and it doesn't matter what species, form, language or organism we are talking. It is GOING to play the same game of survival at action level, the same world cycle of life and death and the same relative past, present and future - the game of survival, the game of existence.

We arrive now to the most important part of this blog, but unfortunately experience tells me, the absolute limit of human egocentrism (Ego=Idiocy), to PROVE that all what exists is vital and there is a vital program of survival in which the so called five drives of life (informative perception, energy feeding, reproduction,

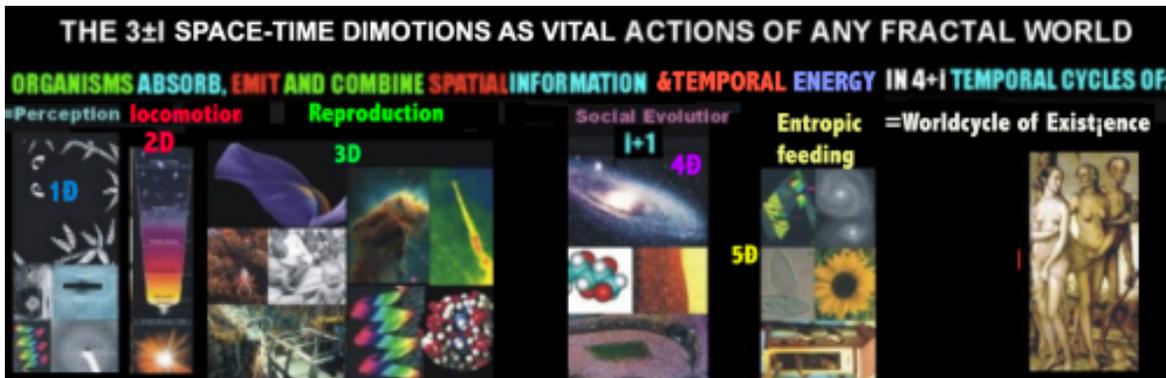
social evolution and locomotion) EXIST IN ALL SYSTEMS OF SPACE-TIME SO ALL IS ALIVE AND WE HUMANS ARE NOT DIFFERENT FROM ANY OTHER BEINGS.

BIOLOGIC PROGRAM OF THE UNIVERSE: DIMOTIONS AS SURVIVAL ACTIONS



LOGIC, PENTALOGIC, THE ENTANGLEMENT OF THOSE 5 elements, Δ-scales, Space, Time, @-minds and entropic limits, which put together I call  $\neg\Delta@st$ , 'Dust of space-time', seen IN SIMULTANEOUS SUPERORGANISMS of space, performing them as small steps or Actions=DIMOTIONS, which in the long term form CYCLICAL WORLDCYCLES... is the origin of reality.

Reality is made of vital super organisms of space, performing, short span ACTIONS=DIMOTIONS OF SURVIVAL which conform THE PROGRAM OF REALITY, in all stiences and species. And this program illustrated in the next graph for several species CANNOT be just put into mathematical equations:



The five dimotions of space-time have a vital, organic outlook. So as all actions of beings are expressions of those general dimotions, equivalent to the 5 drives of existence scientists recognize as defining life (gauging information, moving, feeding on energy, reproducing and organizing a system socially into a larger synchronous whole). Life is everything, as all is a spacetime organism with its 5D actions of survival (motion, feeding on energy, information gauging, social evolution and reproduction). But huminds, self-centered seek for carbon-life as the only living form. In the graph, the 5 actions=dimotions, which are the minimal units of beings, whose sum define a larger 'worldcycle' time arrow between birth and extinction common to all systems as those dimotions are motional in information NOT in locomotion, in form NOT in entropy, defining the dominant purpose of all beings: to make dimotions that maximize its 'form and functions of existjence'.

*They in fact define the 5 arrows of life in biological terms, as life is defined as a system of 5 Dimotions able to process information, feed on energy, move, reproduce and evolve socially.*

It is a fascinating Universe far more complete and intelligent that us a part made to its image and likeness.

But as we live in the computer age, science today is just A)collection of data mirrored in mathematical equations and images, so the causality and the logic of it is gone. And likely humans automaton of that computerized routine will NOT care to go deeper into Logic.

And so the pentalogic of an entangled Universe of dust of space-time performing its 5 Dimotions in its 3 different 'scales', 3 topologies of space, 3 lengths of time cycles, with the survival will of its linguistic minds trying to break beyond the entropic limits of death and limiting membranes that make each of us, a finite, mortal space-time being, IS TRULY the GAME of the Universe AND ALL ITS PARTS, including human beings and its social super organisms.

The five drives of life are the program of existence of all entities of the Universe. But human egos cannot seem upgrade their chip to concede the Universe more than entropic properties, which the UNIVERSE will return to them in a topic action-reaction process of which war, and weapons, whose construction is the worldly profession of physicists who have become the philosophers of timespace are the maximal exponent.

This fact and the way human memes reduce our intelligence to an automaton behavior are thus essential derivations of the historic models of mankind, which put at face value will not appear as our ego paradox make us think, in the center of the Universe.

But can mankind learn? Can the ego paradox be defeated and humanity survive by deserving the respect of the organic Universe? I am pessimist on view of the facts of history - which doesn't mean individuals that have the freedom the whole system lacks cannot be enlightened beyond the present state of the subconscious collective of the species.

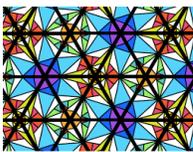
THERE is though another possible view on why mankind seems fixed into self-destruction, which is the growing deterministic fact that WE ACT SUBCONSCIOUSLY GUIDED by the program of existence, and consciousness is one the final 1Dimotion of information that comments a posteriori on our actions that are rather deterministic and only a Buddhist approach of denying them could control with an extreme discipline very rare in human beings.

All this said, super organisms are indeed complex systems, because despite being made of very simple principles and ultimately of cyclical motions in time perceived by minds as linguistic forms in space, the iterations, synchronicities, entanglements, proportions, balances and scales of infinite different self-centered structures interplaying an influencing each other makes RIDICULOUS the pretension of humind egos of achieving a complete deterministic description of them.

This is affirmed but a false truth - as even in the smallest scale of quantum physics, for each detailed description we need to study the entanglement of each particle with multiple other particles, the renormalization of each scale with effects coming from larger and smaller scales, the introduction of ad hoc factors to account for scales that are invisible (quantum potential, non local gravitation, etc.) So huminds always simplify reality which is fine IF THEY RECOGNIZE IT. What is not fine is to be dogmatic as physicists are reducing reality to what they measure and denying all other properties as irrelevant, specially those who we humans have hence all other systems must have as self-similar fractals - vital, survival properties and linguistic minds the ULTIMATE CAUSE OF THE fractal self-similar realities as MINDS ARE MIRRORS THAT shrink reality into images then they project at scale in its smaller world.

So we should just summarize some of those fractal principles that make reality entangled and complex.

### **The infinite kaleidoscopic views on the game of existence.**



The Universe is a game of 5 Dimotions of existence, whose linguistic mirror create by iteration  $\infty$  other forms under the laws and symmetries of its fundamental law of balance and beauty Space=time that merge in balance between motion and form to give birth to the Dodecalogic scales of reality.



In the graph, the Universe of 5 Dimotions has a fractal structure that allows infinite different repetitions of the same game, with different orders and forms. The set of rules that the game defines as the best strategies of survival in its sequences of actions form then in the mirror-languages and its syntax structure the easiest way the humind have to access reality and manipulate it.

The humind as all other mind-mirrors will display then two languages, one of space, visual thought, and one of time, verbal thought which departs from the description of the vital game closer to the human existence, in time, verbal thought, to extract the fundamental rules of the game.

They form the I=Eye>Wor(l)d which defines its interactions with the larger Universe. But languages do evolve as they become 'warped', informed and shrink in a third age, giving birth to two formal sciences, derived of those languages mathematics and logic.

- Mathematics thus is focused in geometric spatial forms... while logic departing from verbal time becomes the most proper to analyze the sequential game of time that develops the existence of beings in its worldcycles.

Yet those languages themselves can evolve beyond the Present 'Greek Age' of Euclidean geometry and Aristotelian logic, to better reflect the game of kaleidoscopic pentagrams of existence, in space, through the analysis of the 5 structural elements of beings,  $\neg\Delta@st$ , in time through its 5 dimotions, across its 3 scales of size and time frequencies/durations.

The beauty of the game though exists through the S=T symmetries that balance all forms of space, mirrors of time events. So we shall find that certain rules of order, notably the sequential order of actions, ages and horizons, and the simultaneous integration of the organs of the being around its s=t body-waves repeat in all scales, in all beings and in all universal grammars of the languages that reflect them.

So we can establish for all systems a 'growing mechanism' which departing from a 1D, perceptive fractal point, (mathematical view) which a subjective 'monologic' mind (temporal view) will develop its seed of information in an outer universe, 2D-communicating with its world in flows of moving energy and information (non-euclidean duality lines=waves); which will 3D-reproduce in trinity, physiological networks, forming topo-bio-logic non-Euclidean planes, 'supørganisms', (ternary logic, 3rd Postulate of non-euclidean geometry); EMERGING into a new plane of existence, where they will repeat the game, interacting with other supørganisms according to similarity (4th postulate of non-euclidean congruence) with a positive tetralogic, seeking further social growth (4D-social evolution), even if finally the entropic limits (5D) of time duration and membrane isolation will tumble down the being...

Why pentalogic, the analysis of the 5 Dimotions of a being, through its 3 scales of time and the 5 spatial, structural elements through its 3 scales of size doesn't suffice to understand the Universe? It does but as existence has twice the chances to play the game in the fetal palingenetic state, and the larger world, in the 0-1 scale and the  $1-\infty$ , we need at least twice to tell the game...

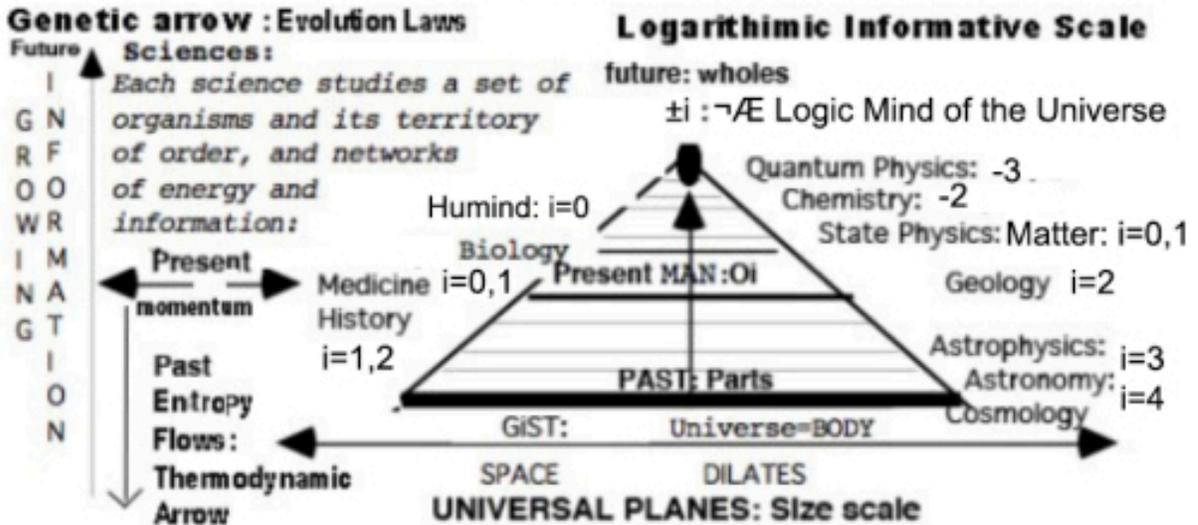
This is the concept behind a larger more dynamic all-encompassing analysis of reality through Dodecalogic that doubles the stakes of existence.

And so in formal stiences we do have 5 postulates of non-E Geometry and 5 Dimotions with its growing monologic of the mind, Dilogic of communication, trilogic of network, organic building, tetralogic of social growth and pentalogic when entropy finally defeats the system, HAPPENING TWICE, and to express it all together we must therefore define the game twice, 5+5, in bilateral organisms, decametric scales and so in the highest degree of analysis, the blog will use 12 Dodecalogic elementary Disomorphisms (equal laws) for all species to describe its rise and fall as a zero-sum, happening twice...

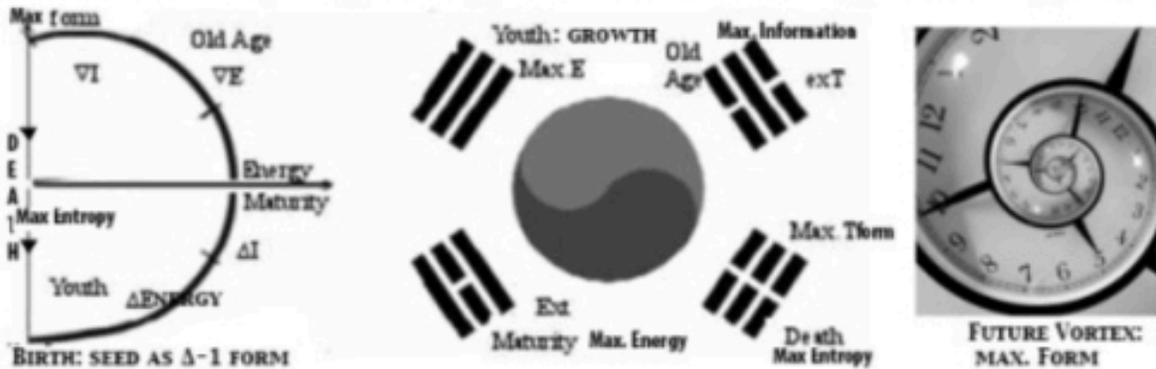
But even if we shall not consider it, one in a trillion of those fractal points can emerge trice, if it races in time, and makes no errors in space, becoming a player of 3 planes; emerging first from seed into human, and then from human into God, a super organism of mankind, or emerging from atom into star, and from star into cosmic black hole, the mind of a galatom. Since the highest of all possible existence, which grants a relative immortality, that of the prophet of the wor(l)d that becomes man and inhabits among us, and the particle that rises into a star, that grows into a galatom...

# X. PHILOSOPHY OF STIENCE

## FRACTAL SPACE AND CYCLIC TIME ADDS ORGANIC PROPERTIES TO ALL SYSTEMS:



**GST.α: 5D scales & its metric: Past-entropic space x Time frequency form=Present Momentum**  
**Below the 3±1 arrows of time-space between Δ-1 informative birth, back to Δ-1 in entropic death**  
**Both define the new paradigm of a complex universe made of ∞ time space fractal organic beings**



The study of a Universe made of fractal scales of cyclical time space, introduces a priori organic vital and sentient properties, ignored by present science, and better described with tense verbs (the 3 ages of time and its causality) and 5D logic metric equations (the laws of scales) and biology (Darwinian survival, organic laws, physiological networks). In that sense mathematical languages work better for the fine detail and how, but the why requires those other properties and languages, including organic=solar properties as the system extends through various Δ§ planes, and cyclical time properties, as its time clocks will synchronize all its parts, forming super organisms, co-existing in 3 Δ±j scales, the fundamental particle of reality

We call GST, (General System Theory, Generator Space Time), stience, playing with space-time and the symbol for a super organism,  $\alpha$ , which reads similar to science. Stience though differs in its ultimate principles, spelt in those acronyms. That all is a T. $\alpha$ . a Time-Space Super organism.

So stience studies the Space=Time  $\Delta$ ; scalar ENsembles of sup $\alpha$ Erganisms.

In less 'newspeak' jargon, using classic concepts of systemics, we could copy paste this paragraph from an older version:

General Systems Theory and its main sub-discipline, Duality, is the alternative philosophy of science, born at the death of Einstein, in the Macy's congress of NY, where the foremost experts of the sciences of information, came together, aware that Physics, with its 'limited' view of time, as a lineal, single arrow of entropy and locomotion could not provide the basis for a Dual, information+Entropy view of the process of generation and emergence of new forms in the Universe.

To that limit physicists added a second simplifying concept of a reality of multiple scales of size each one with its own time cycles and rhythms, which form together a scalar '5th dimension' - the idea that all those scales crowded in a single space-time continuum, with a single clock, hauling from Newton's concept of absolute space-time, which despite its falsification by quantum theory (a model of infinite Hilbert dimensions and scales, renormalized latter to facilitate calculus) and Relativity (a model of infinite time cycles, renormalized to a single time clock to facilitate measure) is still standing for most sciences, precisely because it makes easier to measure reality from the perspective of the human mind that uses a single time clock (a second, the cycle of our thoughts, eye-glimpses, heart and steps, which synchronizes our 3 topological space parts, head, body and limbs) and space (light space-time, which our electronic eyes use to map out reality, hence appearing constant to our perception of 'still space' even if the entire Universe is a game of infinite motions=time clocks).

So while a single space and a single time clock and a single arrow of lineal time WAS and IS still useful for measures of locomotion and entropic, energetic processes, hence for the praxis of science, IT IS a gross simplification that hides the beautiful symmetries of a proper Philosophy of science, which attempts to respond to the whys of the Universe. Physicists of course are aware of them, at least among the highest minds of XX c. so Feynman would quip, 'the why is the only question physicists don't ask', and Landau will mock, 'there is not time uncertainty I look at my watch and know what time is', while Einstein will despair, 'I seem to be the only physicist who think there are infinite clocks of time in the Universe'.

In any case for a philosopher of science, this state of affairs was to say the least unsatisfactory, since after all 'the why is the only question a philosopher of science' cares to answer. Since he is not concerned with 'praxis', but 'makes thought experiments' as he 'wants to know the thoughts of God, not its details' (Einstein).

And that was indeed the confessed goal of that congress, who saw the foundation of the sciences of duality, cybernetics, theory of information, and systemics, whose aim was to explain the Universe in a more complex form than physicists, who use only the 'arrow of entropy' and motion to describe reality.

Since the essence of life and our existence in this planet is NOT entropy but the evolution of information. Indeed we live in a vortex of gravitational, in-form-ative forces, the ['galatom'](#) moving towards a center of maximal form=curvature, a swarm of ['black stars', of heavy Bcb atoms \(known in entropic physics as black holes\)](#)

And so the true arrow of our futures in information as part of a series of nested, scalar fractal super organisms of the fifth dimension - our species, Mankind, a super organism in time called History, part of our planetary super organism, the Earth evolving fast from its past age of Life (Gaia, in its 6th extinction process) into a future eco(nomic)system, a digital society, fast becoming a super organism of company-mothers of machines; part of a Galatom - a galaxy of 8 scales of growing complexity from its simple

organic unit, an H-planckton of angular momentum to the nested Universe in which the galaxy, similar to the atom, interacts with 'cosmic electromagnetic waves of repulsive gravitation' similar to its quantum  $\gamma$ -rays...

This is then Reality without simplifications when we included both the dominant arrow of INFORMATION to entropy, which physicists still call 'negentropy', the negation of entropy as if life and form was a negative parameter, and the scalar Metric equations of the 5th Dimension of multiple clocks of time and size distances, which is indeed a Dimension of space-time as defined by Klein in mathematical terms - 'a dimension of spacetime co-exists when we find an equation that makes co-invariant its product, so we can travel through it'. In this case the co-invariant equation of its time clocks that speed up as we diminish in space size, according to the vortex law of angular momentum, ( $V_o \times R_o = K$ ), hence its product remains invariant:

$$5D: S \times f(t) = K_i \text{ (space size } \times \text{ frequency of its time clocks } \text{ } K_i \text{ is constant)}$$

From where we deduce the fundamental concept of General Systems Theory, a super organism, that co-exists in several scales of the fifth dimension, as a simultaneous entangled fractal island Universe ruled internally by those metric equations that allow 'energy and information' to travel through those scales. So smaller parts with faster clocks of information, (quantum numbers, genes and memes in physical, biologic and social super organisms) can store more of it in the frequency and form of its cycles, coding the generation of larger wholes, which enclose them in a membrane (angular momentum in physical systems, skins or national borders in bio-sociologic ones), controlling them with its inner physiological networks of energy and information (electromagnetic and gravitational forces in physical organisms, blood and nervous systems in biologic ones, economic and legal systems in human social organisms, digital money and raw materials in company-mothers of machines).

Further on what we call Life is in fact a 'travel through the fifth dimension;' as we are born in a smaller scale as a fast growing seed with faster clocks, emerge in the individual scale and live in a larger world of slower time cycles.

So when we add the scalar dimension of the Universe, and multiply its time cycles and organic purposes, we define a total of 5 Dimensional motions of spacetime (Ab. Dimotions), through  $3 \times 3$  perceived scales (ab.  $\Delta$ ) self-centered in the humind (ab. human mind,  $\Delta^1$ ) and its 'still languages of in-form-ation', which reduce the perception of the whole, selecting that information within the 9,  $\Delta \pm 4$ , planes of reality, we interact with, described in the fourth line of the blog...

If all what exists is made of time=motion and space=dimensional form, of timespace dimensional motions (ab. Dimotions), the first task to analyze all systems of nature as relational space-time beings, is to go much deeper in the understanding of what time and space is, and the type of time motions as spatial dimensional forms there exists in reality.

Those first concepts - what is a dimension of space, a motion of time, how they combine, how many varieties they are, and how they ensemble to form all systems of nature becomes thus the first element to consider even before we write a single number, in order to grasp the INNER WORKINGS of all systems, whose ultimate definition will be (studied in the first line of the blog):

**In Space**, its *simultaneous existence as a fractal super organism*.

**In Time**, its *limited duration through a world cycle of life and death*.

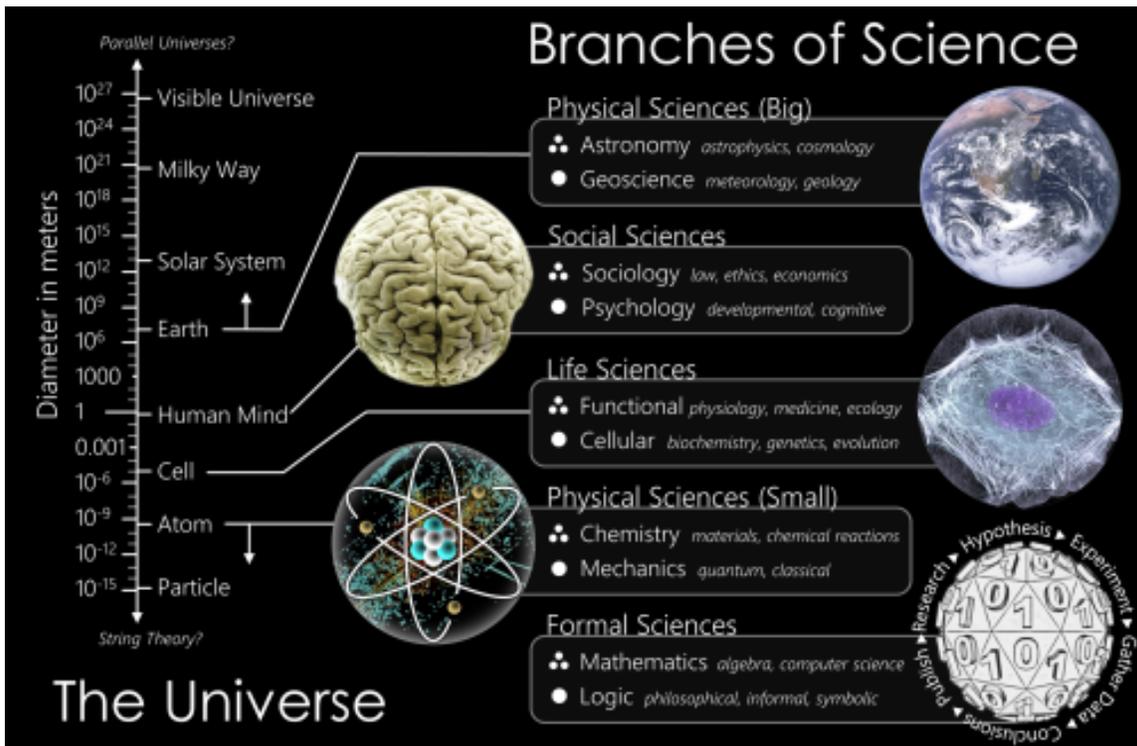
**In  $\Delta$ -scale**, its *inter-actions with all those other scales, and organic interplay through 3 'scales' of spatial size with different speeds of time-clocks that define a new 'dimension' of scalar space-time we shall call the fifth dimension*.

In **@-Mind**, its perception of the Universe as a limited **world** of selected information, mirrored by its specific **language** of measure, whose common ternary syntax will always reflect for the being, the closest space-time entities that surround it.

So we can define all what exists as a simultaneous super organism in space (whose main species are studied in the second line of the blog), which traces a world cycle of existence in time (studied in the third line of the blog), across multiple scales of the fifth dimension (studied in the fourth line of the blog).

All in all what certainly will happen if you have the intelligence to learn, humility to doubt and bravery to leave aside, learned wisdom, subconscious culture and ego, and go seriously through the 20 or 30 first pages of this post, is that you **WILL BE RECONNECTED TO THE WHOLE** and understand your existence - something that might seem magic or impossible specially departing from two concepts that seem so abstract in the present mechanical simplex view of them, as space and time.

What this blog will then do is to show you that once those simple changes on the foundations of science, we shall now call 'stience' that is sciences of space-time beings, are done, and space and time properly explained in all its complexity, we can unify all sciences according to those laws of fractal, organic space, and cyclical time, which will show all is a super organism in space, tracing a world cycle in time.



All those are **ESSENTIAL LAWS OF NATURE** ignored for 500 years just because Galileo considered time lineal. Yet of course all those phenomena are described with working equations *but the meaning, the philosophy of science based in information, form and its time clocks is completely lost.*

And so in this central post that resumes the whole blog, after:

1. We describe in more depth super organisms of fractal space, tracing worldcycles of time existence or T.æs, Timespace 'Supørganisms' (ab super organisms - we shall indeed modify slightly many words, so the reader knows we are explaining slightly different truths from those of classic science), we will give a fast review of the 4 GREAT SUB-DISCIPLINES OF SCIENCES:

2. PHYSICAL sciences, astrophysics adapted to the cyclical nature of time and fractal structure of space, giving an alternative far more sound model of reality than the big-bang USING obviously the same data, just properly understood in those fractal, cyclical space-time terms.
3. BIOLOGICAL sciences, extending the concept of a super organism to species that can be also considered to go through a life-death cycles of 3 ages-horizons, and extending the drives of life, to all space-time systems and its program of existence, as all shows those properties, of gauging information, feeding on energy, reproducing and evolving socially - since the Unit of life is not the DNA carbon-molecule but the particle.
4. SOCIAL sciences, describing humans as super organisms part of larger social super organisms, nations and civilizations that also go through life and death cycles. And refunding economics as a biological science of the Industrial r=evolution of machines-weapons that have also gone through the same ages of evolution of simple systems, as we made first bodies of metal (British age), its engines-hearts (German age), its metal-minds (American age) and now we put them all together into robots that will become AI sentient organisms with solar skins, as any simple system, such as a virus is indeed constructed first in its 3 parts to become when put together 'alive'.
5. To close this UNIFICATION OF SCIENCES, with the upgrading of the final scale of reality, the mind itself, and its linguistic mappings of reality in which mathematics of space and logic of time are the key languages. So we shall upgrade geometry the foundation of mathematics, with the 5 Non-Euclidean postulates (so far mathematics have only changed the 5th: a point that holds infinite parallels, but such points have 'breath' to fit them, so they are fractal points that grow in size and volume as we look closer defining a scalar universe); and the foundation of logic, with the understanding of the dual arrows entropy and information, and its energetic combinations that create the future in a more complex logic way than lineal Aristotelian, A->B causality.
6. And finally introduce with those upgraded languages, the science of all sciences, General Systems Sciences, which defines all systems not as mechanisms (remember we just have shown you that all machines are merely metalife organisms evolving fast) but as fractal organisms of space-time, so we show a fast review of them through all the scales of size of reality. As each science studies a scale of the 'fifth dimension':

We shall then also introduce a proper theory of art and religion, both intimately related to the  $\Delta+1$  social scales of mankind (art must also serve the super organisms of history=people in time, of which they are its subconscious collective).

So how are we going to study each those sciences? Ideally for a pure quantitative analysis we would start by its Metric equation in 5D, which however is only useful for physical systems, where we simplify our parameters of dimotions, obviously not for social sciences.

So we just start by defining the super organism of each system in its minimal unit, the h-planckton in galatom's physics, the cell in biology, the human being in sociology the machine and its company-mother in economics, the  $0 \times \infty = \text{constant equation}$  of all possible ideal super organisms in mathematics, the generator equation of space-time in logic.

And then having in **mind the fundamental fractal principles**, that I have to systematize in the article on the scientific method, we study its scales, topologies, ages and entropic limits - duration in time and space of a world cycle and super organism, describing further details of it.

For 30 years in and out, I have been studying all SYSTEMS OF REALITY, and all has plugged in NICELY with no effort into super organisms and worldcycles. I had abhor that cycle for very long specially, 'obviously' its last Dimotion of entropy-death, to the point in many posts here I still maintain AGAINST THE LAWS OF THE UNIVERSE, the rebel thought that entropy doesn't end the game. But it is what it is. Only extraordinary species, and humans do not seem to be one, are able to break the cycle and maintain an eternal iterative present, or even have a third emergence as religious prophets do founding global super organisms called civilizations and black holes do emerging twice into galactic centers. And we shall study them.

THE PURPOSE OF THIS BLOG, BUILT SLOWLY on 30 years of notebooks and careless studies of all sciences, is to show you the truism of that statement: all is a super organism in scales, which live cycles of time, in 3 scales too, and is guided by a Mind-language, CONSCIOUS OR NOT, that ensures its survival through the performance of those 5 ACTIONS OF EXISTENCE, as those systems who Don't have become extinct and are NOT repeating themselves.

So we are going to make another more complex Iteration with emphasis in social sciences hardly considered here and formal sciences, the key mirror of the humind specially logic - which is indeed the ultimate time language of truth of the Universe, iterating infinite systems with the same principles, of this resumed introduction to the organic fractal Universe, starting again in all those topics, but with a more formal approach, as we shall first introduce the Scientific method of knowledge and its formal languages, Non-AE mathematics and Non-AE logic 'existential algebra', to then go through all its sciences in more detail.

# PART II.

## UNIFICATION OF SCIENCES

*A Disclaimer needed for scholars - the Correspondence Principle applied to 'sciences'.*

The second part of the post will advance the main themes of multiple sciences, all of them unified under the laws of scalar, sentient space-time.

This blog on General Systems sciences (also known as Complexity Theory, or Cybernetics) claims to be the most advanced philosophy of science, based in '**organicism**', the alternative complex philosophy of science to mechanism, a simplified version of it, '**multiple cyclic time**' clocks, instead of a single human lineal one, and '**multiple Space Planes**', instead of a single continuum, hence with a more complex **Non-A Logic** than lineal Aristotelian logic of a single causal time arrow, and a more complex **Non-E Mathematics** than Euclidean maths, as each 'point with no breath' becomes a larger Non-Euclidean point with a cyclical time membrane and energy volume of energy and information, when we come closer to its enlarged scale, through which multiple straight lines (parallels) can cross; terms those we fuse into the symbol  $\neg A E$  or  $\int$  logic geometry, as I is the next vowel after A & E, and also the symbol we use for scales of the new dimensional motion of 'social evolution of parts into whole' (ab.  $\Delta_j$ ).

Thus in this model of GST, or T. $\alpha$ , we treat all those previous theories of all 'sciences' (sciences of space-time) and its formal languages, as limits of the enlarged theory of the entangled Universe, under the Correspondence Principle which considers a new theory must correspond to previous proved theories in a more restricted ambit -as mechanisms are evolving organisms of metal.

- So the science of the **eco(nomic)system** merely expands our notions of machines and its company-mothers and global super organisms; from simpler mechanisms to organisms, from the Industrial revolution to the Industrial r=evolution.
- The science of **biohistory** GOES beyond the scale of  $\alpha$ entropic ego-centered men who think the organization of societies ends in the individual to explore the physiological networks of societies.
- The science of 5D Evolution goes beyond the individual of a species, to study them as evolving super organisms which survive better when eusocial evolution makes them transcend from individuals into super organisms - so eusocial love is indeed a survival strategy, and further on introduces new formal sciences - topologic evolution, and explains genes and memes of its socio-biologic super organisms, giving reason with 5D metric of its power to code larger systems. So Darwinian evolution is the limit without eusocial evolution and theory of organisms of **5D biology...**
- The sciences of **5D astrophysics** establishes the multiple scales of  $E \Leftrightarrow M(t)$  big-bangs from beta decays to quasars (doubting due to faulty data, and clear omission of informative balancing gravitational forces the cosmic big-bang), and unifies its forces as expressions of the 5 Dimotions (ab. dimensional motions) of the Universe, both qualitative and quantitatively (unification of charges and masses, as vortices of accelerated time clocks, under the Principle of equivalence of General relativity of two different scales the quantum and gravitational cosmic scales). So it is obvious that the big-bang theory corresponds to the limit in a single plane of 5D big-bangs
- The science of **illogic mathematics** upgrades Non-Euclidean geometry by defining fractal points, lineal waves, and network planes, and the new laws of congruence as now points have parts which must also be made similar... Since Euclidean points correspond to the limit without inner parts of a fractal point.
- Aristotelian logic corresponds to the limit of a single time arrow of a **pentalogic** emerging Universe of 5Dimotions of time-space that lives through a series of worldcycles as it transcends from scales of 5D to larger scales (placental worldcycle, entropic world and transcendental super

organisms), which we study with the Disomorphic method of similar formal laws that apply to all those scales.

- While the Grammar of English is the limit of the grammar of **inglish** that adds new complex rules to form new words that show in an agglutinative, nested or homologic manner the entangled multiple meanings of some key wor(l)ds that describe essential concepts of 5D<sub>i</sub>.
- The scientific method further widens the scientific method introducing several key epistemology, ethic and entropic limits to human thought.
- FINALLY the philosophy of all sciences that goes for the title **T.œ**, a Theory of Everything Organic, at [www.unificationtheory.com](http://www.unificationtheory.com) is a Unification Theory of all sciences, whereas, the physical theory of everything, or T.O.E. corresponds to a very limited theory of unification of forces, completed qualitatively by the theory of 5D physical dimotions=forces and the unification of charges and masses with 5D metric of 2 different scales of the fractal Universe.

As such the blog is NOT a simple, reductionist e-vident visual analysis of the data of science, cast in a single mathematical language, whose 'magic' internal syntax suffice as an explanation of reality, which will correspond to the limit of using a single language-mirror of reality.

The complex fractal Universe is entangled, can be expressed in many languages, and humans DO have several of them, because they need ALL of them, to explain the perceived qualities NOT only quantities of reality. To that aim, we use mathematics, logic of a higher order than Aristotelian single A->B causality, and inglish - a metaphysical version of English with new grammatical and metaphoric words to convey that complex, entangled Universe, even if I am conscious such mind freedoms might irritate the literalist æntropic (Entropic and anthropic) A-men.

Just to state now that despite this 'rich' language of thought and homologic, Disomorphic laws and complex logic, the blog is STRICTLY SCIENTIFIC, far more rigorous, we might say, as we shall show analyzing the 'silences' and 'omissions' subconsciously or consciously established in the 'grand models' of all sciences, which we do NOT perform, as the true meaning of an organic entangled, fractal model of reality is that EVERYTHING fits, all languages, all events, all forms, all data, including human sensorial languages, arts and religions.

A TRUE theory of Everything Organic (T.œ) cannot be reduced to explain just in an analytic very detailed form a part of the whole reality, as the usual T.O.E. of physics (a theory of everything which at best would be of the 5 Dimotions=forces of the Galatom - the super organism that encompasses from the atomic minimal part, the h-planckton to the whole perceived Universe where galaxies exist). It MUST live to its name.

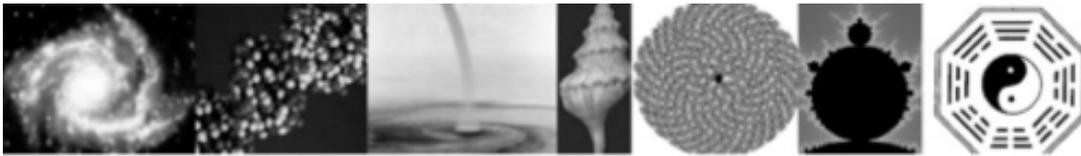
Hence the disclaimer and the article on elements, which we follow to the letter. Do NOT think that because a model is casted in the 'abstract' pedantry of mathematical formulae and the Chicago Manual of Style is more scientific, as the awesome Ig Nobel prizes (and a few of the 'only' Nobel ones) show.

# I. FORMAL SCIENCES

## →E TOPOLOGY: FRACTAL POINTS

### FUNDAMENTAL PARTICLE: MINDS->NETWORKS->SUPERORGANISMS OF SPACE-TIMES

"Every point is a world in itself" Leibniz, defining non-euclidean fractal points... 300 years ago.



How can we express the game of generation of space-time organisms in pure mathematical terms? The proper way to do it would be to rewriting the entire world of mathematics, departing from the more complex concept of a fractal point with vital parts, which travels through scales, moves in waves, associated into networks, which in 3 line-waves form a plane, or branch into thinner lines to probe lower planes of micro points that form its vital space-time, etc.

So we can state that mathematics is the language that better mirrors the process of seeding of a fractal point or mind, which expands into a territory in a sequential rhythm that expresses the fundamental elements of geometry, from points that move into waves that reproduce into networks and ternary physiological planes with become topological organisms, whose rules of engagement depend on their angle of congruence and parallelism. In this manner we develop from a fractal or dual polar point of spacetime, an Si=Te organic point with energy and information parts as it communicates, stretches becomes a line-wave reproduces and becomes a topological network, a first simple image of mathematics.

What we shall do in this blog, is therefore translate classic mathematics to the elements of the Universe of 5 Dimotions and its equations of existential algebra. We will NOT refund the entire discipline departing from the fractal generator, a task which would be barren as no mathematician is going to return to school from its inception but our intention is merely to show that the equations of existential algebra and mathematics are two sides of the same coin two languages that reflect experimentally the Universe. Potentially illogic geometry would be a more perfect version but as it stands today is not fully developed so it will suffice to illuminate mathematics of Euclidean points with the insights of giving volume to those points, and algebra of numbers with the insight of giving 'form' to those numbers and social properties and groups of similar beings.

#### **Fractal points: the fundamental particle**

We are going to use 3 basic symbols for the Singularity and the territorial body wave it orders around it as a vital energy, encircled by an angular momentum, or 'membrane', which forms the basic organism of reality a membrain of vital energy, moving around:  $\alpha$ , @, •, which you can consider 3 degrees of development of the singularity as an organism, a self-centered mind with a will order its body around it through its actions, or a mere point of perception.

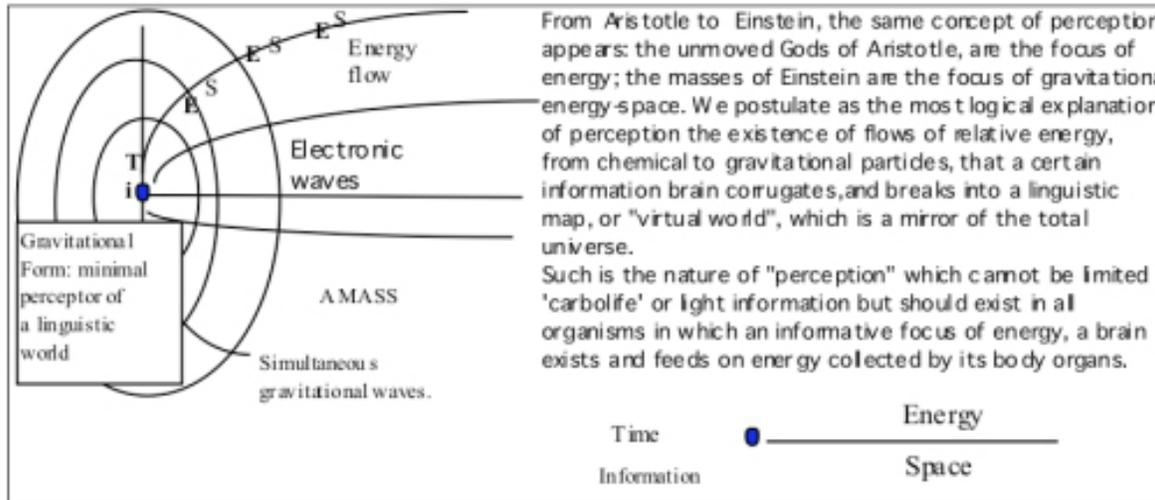
The interaction and different dimensions of the singularity in its different complex actions makes it by far the most important and yet less distinguishable, hence less amenable to direct experimental observation of all the elements of the being.

In mathematics it can be studied as a fractal particle, or point

**I-LOGIC MATHEMATICS: THE FORMALISM OF MINDS: NON-Æ FRACTAL POINTS.**

All this said, it is interesting to improve the *spatial-geometrical mirror of maths on the minds, which is expressed by the 5 Postulates of non-e geometry images of the 5 Dimensions of the Universe.*

Let us then consider how those spatial-geometric mirrors can improve the description of spatial minds, studying the seemingly equivalent 1st and 5th non-euclidean postulates that describe a fractal point:



In the graph, the mind is the formalism of the Universe, as it is a linguistic object that create 'space' by shrinking the dimensions of the cycles of space-time, to fit a 0-point, eliminating the fifth dimension of scales, reducing perception to the  $\Delta^1$  scale in which the mind's super organism exists, reducing motion to fit a still mapping, shrinking it as a topological sphere (Poincare's Conjecture) and eliminating by 'bifocal' vision, the third dimension of depth.

ALL THIS gives birth to a 'fractal point', which allows a relative  $\infty$  number of parallel flows of entropy, energy and information to 'cross a single point that becomes larger when we come closer to it (5th postulate of non-Euclidean geometry, basis of the relativistic r=evolution of physics of the XX century that now  $\Delta^3 S \approx T$  enlargers to explain all 'linguistic minds-monads' to find the 'whys' of the Universe.

Once we show that in-form-ation is merely the still perception by a 'linguistic mind' of the frequency and form of the time cycles and repetitive actions of the system, hence conclude that the Universe reproduces 'timespace cycles', the conclusion is obvious: we are all timespace organisms, organisms of spatial energy and temporal information, made to the image and likeness of the whole, which follow the same ('isomorphic) laws of all other time space beings.

Those laws are spatial=topological and temporal=biological, as the actions and motions of all systems have the goal of survival, without need of consciousness, in as much as those systems that do not repeat its information do not survive into the future and no longer exist.

However they can be studied purely in topologic, abstract mathematical form.

**Æ: fractal, i-logic, non-Euclidean, cyclical points of view: the fundamental particle**

*Time motions break absolute space into bidimensional space-time membranes.*

We exist in a Universe, whose fundamental particle is not a material form, as simple science thinks, but points of time space, which mirror in their inner, i-logic, fractal topologies the information of their world, acting-reacting to the Universe. Thus only by mixing perception and motion, mathematics and organicism, we can define those points of existence, as the fundamental particles of reality and:

*'The Universe has a body and a soul called logos.'* Plato

So we describe a Universe with a geometrical how, the laws of Non-Euclidean points of views, the cycles they trace, the mathematical laws that describe those cycles; and a bio-logical, temporal why: the will to move, trying to fulfill the 6 arrows of time. It is the game that all P.O.Vs of all planes of existences, from atoms to human beings perform.

Those logic and mathematical laws of points of view are the metaphysical laws of the Universe – *the only essential events/forms that repeat unchanged in all forms.*

And so, a proper description of the Universe should start with the laws of i-logic geometry; then apply them to the 2 simplest motions of reality, lineal forces and cyclical masses/charges; and then, once those 'immortal laws' are defined for any system of energy and information, science should use them to define the specific events of each scale of reality and its species, as we all play the same Game of Exi=st;ence.

Mathematics, as a language that represents reality with simplified symbols, has a limited capacity to carry information. Its symbols, geometric points and numbers simplify and integrate the fractal, discontinuous reality into a single space-time continuum, the Cartesian Space/Time graph, made of points without breath.

However the points of a Cartesian plane or the numbers of an equation are only a linguistic representation of a complex Universe made of discontinuous points with an 'internal content of space-time'. In the real world, we are all pieces made of fractal cellular points that occupy spaces, move and last a certain time. When we translate those space-time systems into Euclidean, abstract, mathematical 'numbers', we make them mere points of geometry void of all content. But when we look in detail at the real beings of the Universe, all points/number have inner energetic and informative volume, as the fractal geometry of the Universe *suddenly increases the detail of the cell, atom or far away star into a complex complementary entity.*

What mathematicians did was rather a runaway path. Because once geometers realized that multiple lines can cross a point, they could not use any longer the Euclidean definitions.

Now points, lines, planes and equality could no longer hold under the definitions of Euclid (points, lines and planes with no breadth), they remained undefined, when Hilbert, the father of modern mathematics affirmed 'I imagine lines, points, planes...!'

Instead the proper solution was to redefine them in terms of their 'inner parts' as fractal points that grew in size when we observed them with a more detailed 'hyperbolic geometrical view', as that unveiled by non-E mathematics. So we 'create new postulates of geometry' by defining its essential elements, points, lines, planes and the laws of congruence (similarity) between them, as well as re-interpreting the concept of a Non-Euclidean point crossed by infinite parallels (5th postulate) in terms of a mind that absorbs flows of energy and information:  $O\text{-mind} \times \infty \text{ time cycles} = \text{Spacetime mapping.}$

So T.œ redefines points, planes and line-waves and their relative laws of equality (also called congruence) and continuity (which no longer holds), to refound mathematics on the basis of a far more realist view of its laws as 'experimental laws' that reflect the geometry of the 5th dimension and the complex casualty of a world with multiple time motions. And consider that those points with volume form social 'numbers', whose laws are therefore related to the laws of the 5th dimension that brings parts into social wholes.

So we propose a new Geometrical Unit - the fractal, Non-Euclidean point with space-time parts, which Einstein partially used to describe gravitational space-time. Yet Einstein missed the 'fractal interpretation' of Non-Euclidean geometry we shall bring here, as Fractal structures extending in several planes of space-time were unknown till the 1970s.

So Einstein did not interpret those points, which had volume, because infinite parallels of 'forces of 'Dimotions' and information' could cross them, as points, which when enlarged could fit those parallels, but as points in which parallels 'curved' converging into the point.

This however is not meaningful, because if such is the case parallels which are by definition 'straight lines', stop being parallels. So we must consider that what Einstein proved using Non-Euclidean points to explain the structure of space-time is its fractal nature: points seem *not* to have breadth and fit only a parallel, but when we enlarge the point, we see it is in fact self-similar to much bigger points, as when we enlarge a fractal we see in fact self-similar structures to the macro-structures we see with the naked eye.

That is in essence the meaning of Fractal Non-Euclidean geometry: a geometry of multiple 'membranes of space-time' that grow in size, detail and content when we come closer to them, becoming 'Non-Euclidean, fractal points' with breadth and a content of 'Dimotions' and information that defines them. Einstein found that gravitational Space-Time did not follow the 5th Euclidean definition, which says: *Through a point external to a line there is only 1 parallel*

Euclid affirmed that through a point external to a parallel only another parallel line could be traced, since the point didn't have a volume that could be crossed by more lines:

*Abstract, continuous, one-dimensional point:*

• \_\_\_\_\_

Instead Einstein found that the space-time of the Universe followed a Non-Euclidean 5th Postulate: *A point external to a line is crossed by  $\infty$  parallel forces.*

*Real, discontinuous,  $\Delta$ -dimensional points:* =====o

This means that a real point has an inner space-time volume through which many parallels cross. Since reality follows that Non-Euclidean 5th postulate, all points have a volume when we enlarge them, as cells grow when we look at them with a microscope.

Then it is easy to fit many parallels in any of those points. Such organic points are like the stars in the sky. If you look at them with the naked eye they are points without breadth, but when you come closer to them, they grow. Then as they grow, they can have infinite parallels within them. Since they become spheres, which are points with breadth - with space-time parts.

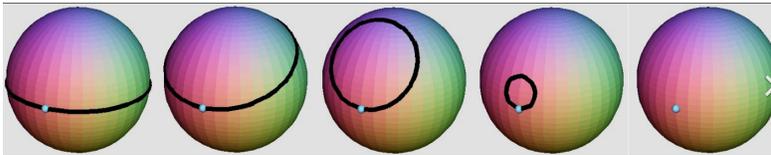
*So space-time is not a 'curved continuum' as Einstein interpreted it, but a fractal discontinuous.* The maths are the same, the interpretation of reality changes, adapting it to what experimentally we see: a cell-like point enlarges and fits multiple flows of 'Dimotions' and information, and yet it has a point-like nucleus, which enlarges and has DNA information, which seems a lineal strain that enlarge as has many point-like atoms, which enlarge and fit flows of forces, and so on.

*So each point is in fact a 3-dimensional point, and if we go to the next scale, a  $3 \times 3 = 9$  dimensional point and so on. Yet those dimensions are the so-called fractal dimensions, which are not 'extended to infinity' but only within the size of the point.* In Euclidean geometry, a point has no volume, no dimension, but string theorists say that even the smallest points of the Universe, cyclical strings, have inner dimensions that we observe when we come closer to them. That is the essence of a fractal point: *To be a fractal world, a space-time in itself.*

*'Any Non-Euclidean point is a fractal space-time with a minimal of 3 internal, topological, spatial dimensions and an external time motion in the  $\Delta+1$  ecosystem in which it exists'.*

The Universe can be perfectly understood when the human mind and its subjective vision of reality from the perspective of its limited 'Aristotelian' and 'Euclidean', logic, (temporal and visual, spatial perception of the human mind) is considered only one of the infinite points of view, performed by particles and heads that gauge information, move 'dimotions' and constantly create the events of the universe. Each of those particles and heads create its own perspective and mind view, or mapping of the Universe to which they act-react accordingly.

The fundamental particle of the Universe is not a physical form but a logic particle: a knot of time arrows, which in any scale of reality, from physical particles (quantum knots of 'dimotions' and information) to biology (knots=networks that absorb 'dimotions', information and reproduce and evolve into bigger knots) act under a single mandate: to maximize those time arrows, a fact that we formalize with an equation, the function of Existence:  $\text{Max. } \sum \text{Sp} \times \text{Tf}$ ; which is the fundamental function of both, logic and mathematical languages. In the graph, all such points of view, will define a system of relative perpendicular coordinates, through which it will enact its time arrows, departing from a central knot of information.



In the graph, apperception of the Universe happens by reducing the cycles of time into a single spherical point, according to the topological properties of all spherical systems, which can diminish in size without deformation.

This is called the Poincare Conjecture, (his recent proof by Mr. Perelman was the most important finding on mathematics in decades). It simply speaking only n-spheres can reduce without limit an n-dimensional Universe into a fractal mirror without deformation and tearing. And that is why there is a fundamental dominant membrane-point system in all the organisms of the Universe, which creates the order of reality.

The paradox though is that the membrane, the time cycle is moving very fast, and the point in the center is a static mind.

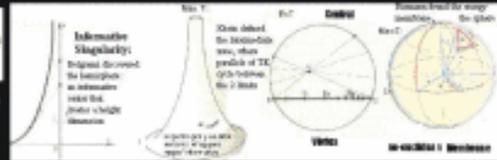
**FRACTAL POINTS: SINGULARITIES AND MEMBRAINS, THE MIND SYSTEMS**

**ORGANISMS ARE FRACTAL POINTS WITH 3 INNER DIMENSIONAL NETWORKS=PLANES**

**ORGANISMS ARE NON-E POINTS, MADE OF 3 FINITE, QUANTIC DIMENSIONAL PLANES= NETWORKS OF ENERGY, REPRODUCTION AND INFORMATION COMMUNICATED THROUGH WHITE =ENERGY & BLACK =INFORMATION HOLES=FLOWS WITH THE EXTERNAL I+1 WORLD**



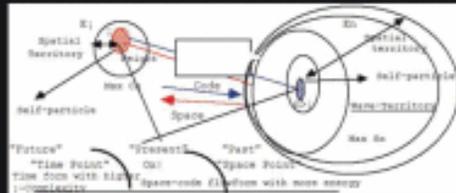
**There are only 3 topographies which correspond to the energetic membrane, informative center and reproductive, vital space of any fractal space-time:**



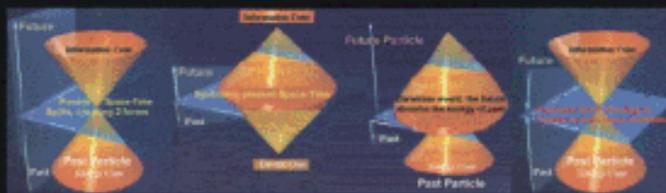
**WHO ENACT IN TIME THE 3+I EVENTS DESCRIBED BY THE 5 POSTULATES OF I-LOGIC, FRACTAL GEOMETRY:**

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

**3. EQUALITY VS PERPENDICULARITY**

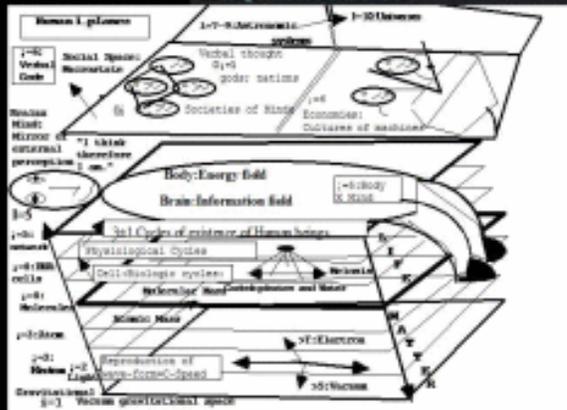


**Quantic Points have inner dimensions. They share dual lines-flows of energy & information with other points, creating quantic, organic networks=planes of space-time:**



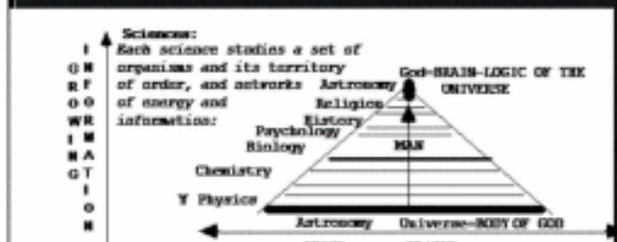
**Perpendicular ext flows create destructive & hierarchical events. Parallel flows built social networks. The combination of both, create the complex i-dimensional structure of superorganisms:**

**4: QUANTIC PLANES**



**5: 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:**



- The new 5 postulates of a Non-Euclidean, fractal geometry of Multiple Spaces and Times are:
- 1<sup>st</sup> Postulate: 'A fractal point is a world with an inner content of information that creates its 3 internal, topologic, organic dimensions and a content of energy that traces its external motions=time arrows'
  - 2<sup>nd</sup> Postulate: 'A line is a wave of fractal points.'
  - 3<sup>rd</sup> Postulate: '2 fractal points are self-similar when their external, spatial perimeter or their inner information is equal. Similar points form organic networks by sharing their energy and information. Dissimilar points ab=use each other in Darwinian relationships'
  - 4<sup>th</sup> Postulate: 'A plane is a network that joins points through waves of energy and information.'
  - 5<sup>th</sup> Postulate: 'Non-Euclidean points perceive energy and information: A fractal point has inner apertures'

*to the world, through which multiple waves of energy and information can cross.'*

The first postulate defines a point with form and energy. Points are not 'points with no breath' (Euclid), an abstract definition that created the simplified concept of a space-time continuum but 'fractal points', which grow in size when we come closer to them. And so stars are points in the sky that become huge as we come closer to them. And a microscope discovers an entire world in the minimal size of a cell. Einstein offered a partial solution to this conundrum considering that from our scale of size, those Non-E points seem to curve the information of the universe that fluxed on it.

But Leibniz had given a better answer: 'the smallest point is a world in itself'. This is the meaning of a fractal point, whose internal parts respond to the 3 topologies of a 4-dimensional Universe: a hyperbolic, informative system; an energetic, planar or spherical membrane and a cyclical, toroid region with reproductive organs. *And we shall find those 3 topological regions in all points-species of the Universe.* It is now clear that non-Euclidean points are points of view that gauge information and move their complementary body with a will, seeking for more energy and information and reproduction, seeking for an organic will to repeat their cycles and motions. And this will gives the point the category of mind, or Atman or soul, a perceptive point of view that absorbs information and moves its body accordingly after 'thinking' the information and 'bending' it subjectively to its will.

That we have no free will but we have will is the deepest consequence of stating that all points of view search for its 3+1 dimensions of existence, its energy, informative, reproductive and social arrows.

To do so the point must perceive and gauge. If it is an electron it will gauge and move to capture energy to structure its form (2<sup>nd</sup> quantum number) and it will use a language of information to evolve socially (magnetic number). Points thus are moved by the need to perform their 4 cycles of existence, a desire to acquire more energy and form which they better achieve in networks, with the flexibility of herd hunting and network thinking. But in each scale of reality there is a rational point of view calculating its strategies to get more energy and form.

Networks are made of relative points with form and motion, which can be defined as time cycles – trajectories traced by an entity in search of energy, information, reproduction or social interaction. Those time cycles enclose a surface of vital space or energy and so they define a certain space-time. Any entity will however trace many cycles in search of its organic motions to feed, gauge, reproduce and evolve socially into bigger networks.

So each entity will be a knot of multiple time cycles. In the formalism of Systems sciences we call them Non-Euclidean points, since they are points through which infinite flows of energy (parallels) and information can cross. We also represent them with the symbol 'i', which is the next vowel to the Aristotelian, E-uclidean paradigm, the symbol of information and a visual image of the 2 components of the point, the informative, cyclical part, o, and the lineal, energetic one, l, which we call the body and head of a biological Point; or the field and particle of a physical point (Principle of Complementarity).

The universe is made of networks of such i-points, and each network is what we call a world or discontinuous space-time, st, unit of a bigger fractal network, a new st-point in itself. So a network of particles becomes an atom, which becomes an st-point of a molecule and so on till creating the Universe.

Even humans can be studied as Non-E points, in which each head is indeed a spherical point that communicates energy and information with other humans, forming social networks.

The anthropomorphic reader might think that humans are different from the rest of points of the Universe, but it is a fact that all points obey in their actions and communicative flows within a network the same laws: humans and electrons behave the same when they move through slits or in herds; the geometries of social groups are also the same; and the ultimate purpose of those points, to feed on energy and information, whatever kind, is also the same in all networks of the Universe. Thus the laws of networks become the social, organic, reproductive why of all beings of the Universe: the Universe reproduces information and organize forms socially into networks.

From magnetic and electric fields, made of magnetic and electric constants that mix and reproduce a light wave to fundamental particles, quarks and electrons that absorb energy and reproduce new quarks and electrons, to energetic males and informative females that reproduce together, all in the Universe can be described with the formalism of networks, connects the why with how and when of the 3<sup>rd</sup> paradigm of metric measure that has analyzed those networks, its motions and forms in detail. Why those i-points with an ego-driven will that desires selfishly more energy and information and self-reproduction collaborate in

herds, becoming parts of a whole has to do with the complexity by which the arrow of social evolution impose systems to its parts. Parts become enslaved by their dependency to the higher energy and information provided by networks.

*5th postulate: Paradox of Galileo – definition of ego-soul: fractal P.O.V.*

All minds, including man, are self-centered beings that believe to be the center of creation, because they gauge information from its point of view. Yet most of reality either exists in a dark space the species doesn't perceive or uses a language the species doesn't decode or it is further away from our 'noses' to be of any importance to us. This explains anthropomorphism and the incapacity of man to perceive himself as just another knot of simplex and complex actions of energy and time.

The laws of those Points of view that gauge information, are Laws of Non-Euclidean geometries. The formalism of General Systems Sciences, which studies networks of points of view is therefore Non-Euclidean. Regarding its Logic structure, past, present and future become relative concepts and so the 'logic' of the Universe in which past, present and future co-exist in simultaneous space-time fields, is different, is paradoxical, dual... Its formalism can be fused with that of Non-Euclidean geometry in what we call illogic geometry, the linguistic foundations of all General systems.

*The paradox of the ego: linguistic points of view.*

Perception is possible because of the mentioned paradox of Galileo: all is motion, and so informations are cycles of time with curved motions and energy-space are sheets of lineal motion. And so because all is motion, the repetition of those motions is in fact a simple reproduction that takes place in simple atomic particles (with cyclical vortex of motion) or lineal fields of energy (with wave-like motions).

The paradox of Galileo is again a fundamental law of the relativity Universe ill-understood by scientists who 'see' still pictures of reality with their instruments and seek for 'substances' instead of motions. It is also the key to the 8<sup>th</sup> key principle of G.S.Theory, the paradox of the ego.

All individual systems perceive or process information with their linguistic or geometric minds; using that information to guide their body towards fields of energy in which they feed.

Yet since resources are limited, to achieve those 2 simplest arrows of existence, all systems prey in the energy and information of other species causing their death in Darwinian, preying events. We thus talk of two ethical arrows in a universe of limited resources.

Top predator individual species will try to obtain energy from their environment absorbing it from species with weaker energy bodies and informative heads, provoking Darwinian, predatory relationships, causing their death in Darwinian, preying events.

And they will perceive the universe from their egoistic point of view, as a static dead space, of which they are the center. Since from their subjective perspective, their nose seems bigger than the Andromeda galaxy and the earth seems quiet surrounded by infinitesimal stars.

Yet objectively, the ego is just an infinitesimal, fractal mirror, reflecting a minimal part of the infinite information of the whole without which it will cease to exist.

It is the paradox of the selfish ego that wants to be the center of the universe. The paradox of the ego is the main cause of extinction of all species, which as the human beings are unable to respect the infinity and power of the whole and consider themselves special sons of god, entitled to control and destroy nature, till the Newtonian laws of action reaction, extinguish them. Thus we define each of the infinite Aristotelian Gods, center of a surface of energy they move and prey on:

*'Every point of view=mind feels the center of the Universe, but it is only an infinitesimal Non-Euclidean point that stores a limited mapping of reality with its informative languages.'*

We are all Atmans, informative CPUs, souls that gauge in different languages reality, to construct a mental mapping that caters to our point of view and arrows of time. So we create our 'perceived Universe' – a fact known from Descartes to Schopenhauer, but lost to 'naïve, realist' physicists. *All of them thinking clocks are the only point that matters to measure time, and the human mind, the only ego that knots energy into form, since that is the only perspective they perceive.* That is why most of history, humans thought the Earth to be the center of reality; and still think they are the only intelligent species.

# MONOLOGIC: MÆN

## ORGANICISM & INFORMATION VS. ÆNTROPIC MAN

What we have described is merely the first 'sentences' of Generational space-time and already shows its enormous power to explain the whys and patterns we call laws of 'science' and its vital organic properties.

Organicism is indeed the only true philosophy of science, and as such the only reason it is not adopted logically - beyond the 'historicist' reasons of metal-power and worship of weapons and machines - is the fact that there has never been a proper mathematical and logic formalism to model all systems of nature with the laws of organicism, which is what we shall achieve in this blog. And the key to that feat is precisely the scalar structure of the Universe, which defines a 'fifth dimension' of co-existing scales of reality, each one with different space size and time clocks, whose metric equation is the beginning of that formalism (but as we said, we must also account for organic, verbal logic laws, as NOT all the properties of organisms can be mirrored in mathematical, spatial languages many of them need logic, verbal temporal ones).

This only 'scientific' philosophy of science is bound to substitute the present mixture of linguistic creationism and idolizing mechanism - the belief that the Universe is a machine and that the languages of humans and machines - Digital numbers - which of course only God, humans and our 'mechanical creations' speak (equations in science, words in Abrahamic religions) create all its beings by the mere fact of 'naming it' (Abrahamic religions) or describing it with an equation (Platonic religions). Constructing 'dual systems' able to replicate themselves and create the social structures that evolve the scales of the fifth dimension.

To that aim, we have to look at reality no longer as physicists have done for 500 years from the perspective of 'motion', from where they derived their concepts of momentum, energy and its worldview in terms of LINEAL time=motions; but from the forgotten perspective of in-form-ation, 'FORM', the other component of reality sorely in need of a profound philosophical, experimental logic and mathematical analysis. Since all what exists is indeed made of those two components MOTION, closely related to the concept of time and form, related to the concept of dimensions of space.

It will be a difficult task, not so much because of the beauty of those forms, but because of the routines of the humind (ab. human mind) which is accustomed to look at reality as made of lineal time-motions and its social form, 'entropy', to the point that as we have already said information in the physical worldview is called 'negentropy', the negation of entropy as if it were *a secondary negative quality of reality*.

### **Neginformation, æntropic man, inglish rules.**

'The languages of GodoG are infinite' Upanishads

Neg(inform)ation thus defines more properly the essence of entropic, explosive, expansive, scattering, antisocial motions that destroy the ties of communication of information between informative beings, crystal cells in thermodynamics, cells in life, social ethic groups in human super organisms. And it will be synonymous on this blog of death, and its study extended to all branch of sciences, but always considered the end NOT the beginning of any process of existence, whose fundamental longer arrow in time is that of life and in-form-ation, creation of form, through a fractal scalar process, which defines all systems as co-existing organisms, in a scalar Universe, gifted of a 5th 'scalar dimension of space-time' that will allow us to formalize both mathematically through a metric, and bio-logically through the rules of penta-logic the complex entangled Universe.

This advance of intentions is for the æntropic man, accustomed to reduce reality to neginformation, ultimately because of the ego paradox of all huminds self-centers the infinite universe into the small space of its infinitesimal mind that he confuses with the whole.

*So all huminds are selfish, anthropic and entropic to the whole, they belittle and try to model as a projections of their selves* (ab. human minds, we shall be creative with ;nglish, an essentially ;-centered entropic language of which Nietzsche despaired as he founded to be of little use for complex entangled ;logic thoughts ): Or in a quantitative ;logic mathematical equation:

O-Mind (infinitesimal brain)  $\times \infty$  Metaphysical Universe = Constant =still world-mapping of the whole).

So  $0 \times \infty = K$ , represents the self-paradox, which sees its nose closer to zero larger than the  $\infty$  size of the Universe it cannot perceive but IT CONFUSES with its mind-mapping, thinking there is NOTHING beyond.

We shall be extremely humble with that infinite beyond, as opposed to our derisive stance on all things humind... So if you cannot overcome the subjective paradox of the ego, become a lion and kill the camel hunchback of humind's arrogance, our capital sin that blinds us to the perception of metaphysical beings, return to English, physics and æntropic thought.

Indeed, huminds are reaching degrees of egocy which are further enhanced by the present age of extinction of life that defy any 'reasonable' view except our dark humor.

What we want to stress from the beginning is the fact that reality and its fractal Universe is exactly about what 'fractals do', and its properties that are NOT only mathematical; that is fractals co-exist in several scales of reality, hence have organic properties of parts and wholes, and fractals are generated by a 'language' or 'mind-mirror' that encodes in a smaller space-time language, the so-called Fractal Generator (equation), the seed to reproduce infinite complex network patterns.

When we vitalize those properties to describe the living, organic fractals of Nature, then we discover that the fundamental particle of the Universe is not 'a particle' but a supœrganism of space-time, and his description is not spatial but temporal, existential, bio-logic, 'metaphysical'.

Yet **æntropic mæn**, by definition will deny the p.o.v of **informed men** even though we shall try all tricks to entice him into perceiving without exhausting ever its variations, the fractal nested Universe - ;nglish being one of them, with some key new grammatical rules to define the 2 main features of the informative reality, its nested structure:

So we often write **wor(l)ds**, (a world ruled by human ethic words and its values that put man as subject, and center of all sentences, man>verb(action)>object(energy of subject), which we shall see is good for historic super organisms, bad for science)... and its entangled, **re=productive** structure with = symbols to signify two words that main the same, as in reproduction (fractal iteration in life system) and production (iteration in eco(nomic)systems, ecosystems of economics... or huminds (human minds)... and so on...

Not to speak of genetic linguistics and its anti-wor(l)ds, which hide the ethic linguistics of eusocial evolution in the grammar of all r=evolved languages, such as eviL the opposite antiparticle of Live, the union of both arrows, information and entropy, Vishnu and Shiva, which reveal the hidden  $a(n)T_1$ =SyMetrics of **GodoG**.

Entropy does explain it all through death, which is indeed so simple as to lack any form. In the entangled Universe of informative systems, constantly communicating with each other, though it is necessary to understand multiple points of view at once, and accept without 'stress' that we cannot know it all, because 'Only the Universe (and any being) has all the information about itself; and the Universe is not only strange,

but even stranger than we can imagine' (Haldane). But this fine if your 'ego' paradox (ab. egocy:Ego+Idiocy) doesn't want to be 'above heavens and Earth', which is also a cultural trait of the Western 'visual man' with its dolichocephalic, Neanderthal-dominant, lineal, violent, eye-oriented brain.

The monologic mæn however survives in the Universe, briefly that is for sure, but in its simplex short life, it does expand and colonize Earth because ultimately all is in the short term ABOUT FEEDING even if in the medium term reproduction OF INFORMATION dominates time and in the long Deep time, social evolution is the queen.

## DUALITY.

Even monologic species will be aware of the existence of their own death limit of maximal spatial territory, S where they will suffer entropy themselves, or maximal temporal form, where they will freeze in contemplation of the absolute. Heat and cold, the two extremes of Dante's inferno, or Frost poems, thus set each RELATIVE SI=TE (ab. e=I, exi-st|ence), and so we talk after monologic of the Dilogic or Biologic of exist|ence.

Even then the being will be better described in its whys of behavior in |logic form than mathematical form, which is better to understand 'numbers' - social groups performing in an extended 'reproduced, organic, clone space' any of those 5 Dimotions of existence.

### Duality>Dilogic>Biologic species.

The previous two quotes signify the fundamental principle of reality in the 3 ages of the scientific method, the religious, mechanical and organic age: *the duality of reality made of motions with forms, of bidimensional '2-manifolds', of 'holographic bidimensional surfaces'*.

Space is form, with no motion as perceived by a mind, which reduces reality to series of slices of time-synchronicities between fractal points, T.æs performing its dimotions of existence as infinite moans of reality. Spatial minds try to make sense of all this and form a picture image in a still synoptic language that reduces to the essential 'moments' of existence, those cycles - standing points of change between ages, key regions of the topologies in which the T.æ contacts with other points and transfers its 'metric momentums'.

We thus need to *explain the flows of motion that allow the stop-images of all forms perceiving to understand how those stop images will step, change and become in time another stop image.*

Languages do that THROUGH its logic which is the MORE COMPREHENSIVE LANGUAGE OF REALITY, reason why when we considered in the second line what Minds hold, we talked of bio-topologic worlds. The monad is a point-particle of topologic non-euclidean geometry which will start through the 5 Dimotions the 5 Postulates of non-E reflect its interaction with the Universe reduced to its world of perception to achieve the organic goals of short time, feeding on energy and information, medium time, reproduction and Deep time social evolution to ensure its survival.

But as each fractal point belongs to a larger whole it might have restricted capacities within the super organism set by the 'entropic limits' and function it deploys into the larger whole. And this means NOT all fractal points need to understand the whole. Few do understand more than a simple mono-logic of selfish view, trying just to 'eat'. Indeed, feeding entropic perception of reality is the commonest, as æntropic men, the majority of human being notably the macho one-dimensional species shows.

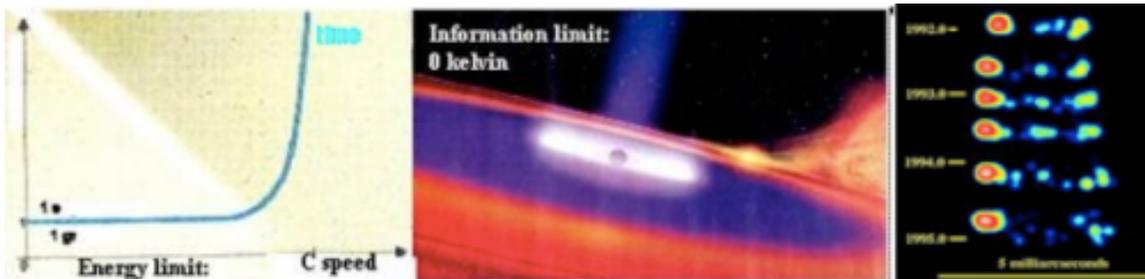
In praxis then we shall follow the natural order of whys in the description of beings, as performed already in several parts of the blog. We shall then describe for each reality first the will or entity or mind that starts the process, and its Bio-topo-logic rules of engagement in its larger world, which will define its complexity and existential game, which we will then describe for either a mono, bi, tri or pentalogic species of mind

and its parts within that world, which will belong to the disciplines of astrophysics (nested  $\Delta<14|$  worlds), biology ( $\Delta<13|$  worlds), sociology ( $\Delta<12|$ ) or  $\dot{J}$ logic ( $\Delta<11|$ ), since ultimately all languages are reflections of an  $\dot{J}$ logic grammar, and so all formal languages are part of  $\dot{J}$ logic thoughts.

We shall consider in this post Duality>Dillogic> Bilogic, the terms we use most commonly for it which by lack of self-discipline I constantly mix but ideally when this blog-seeds explodes into the philosophy of science of the III millennium into an immense volume will required 3 sub disciplines - Duality will be the most extended - the philosophy of a Universe generated initially by two simple elements, formal space and time motions; Dillogic will be the abstract rules of engagement for all beings, and bilogic, the 'biologic dual logic of species' which are bilogic in its perception of reality in 5D: space (sheets of motion as in laminal motion so common on fluids, flat arrangement of atomic networks, such as graphene which takes advantage of the perfect 'pi' with no holes of perception of the hexagonal 6-triangular forms) or 1@nguages (black and white systems of perception), or time (sterile systems reproduced by enzymatic ones who therefore have only two ages of existence) or scale, parts which are related to wholes and lack a 'Deep time perspective') and so on.

The entangled Universe then can display a complex Dillogic for each of its bilogic species, but for the future researcher that has gone a 'grasp' of the inner rules of fractal entangled space-time beings, will be easier as it is for this writer to discern what kind of phenomena he studies and classify its existence according to the type of logic that causes it.

#### - THE ENTROPIC LIMITS SET BY EACH WORLD.



In the graph the entropic limits of the galaxy, C-speed constant which is the constant of lineal \$t reproduction of information and 0 temperature, which are the absolute metric limits of the galaxy. They can be breached to their 'own peril' by masses which become disordered into radiation. Thus in the nested Universes all super organisms set limits to its inner systems BOTH of information, form, space, distance, and motion, speed and scale, on the upper social boundaries. In human super organisms, fractal nations, those are the limits of spatial borders, informative money, and social power, which establish the social structure of the system.

A KEY element so often ignored specially in superorganisms of History are the entropic limits set to the individual within the larger ecosystem, both in time, space and scale, which limit its freedom of existence and social power.

Entropic limits ARE the very essence of all superorganisms, and the biggest handicap for mankind to overcome its mortality as a species, founding a better world, based in ethics, a planet without borders (space limits), idol-ogies (mental limits) where all could thrive.

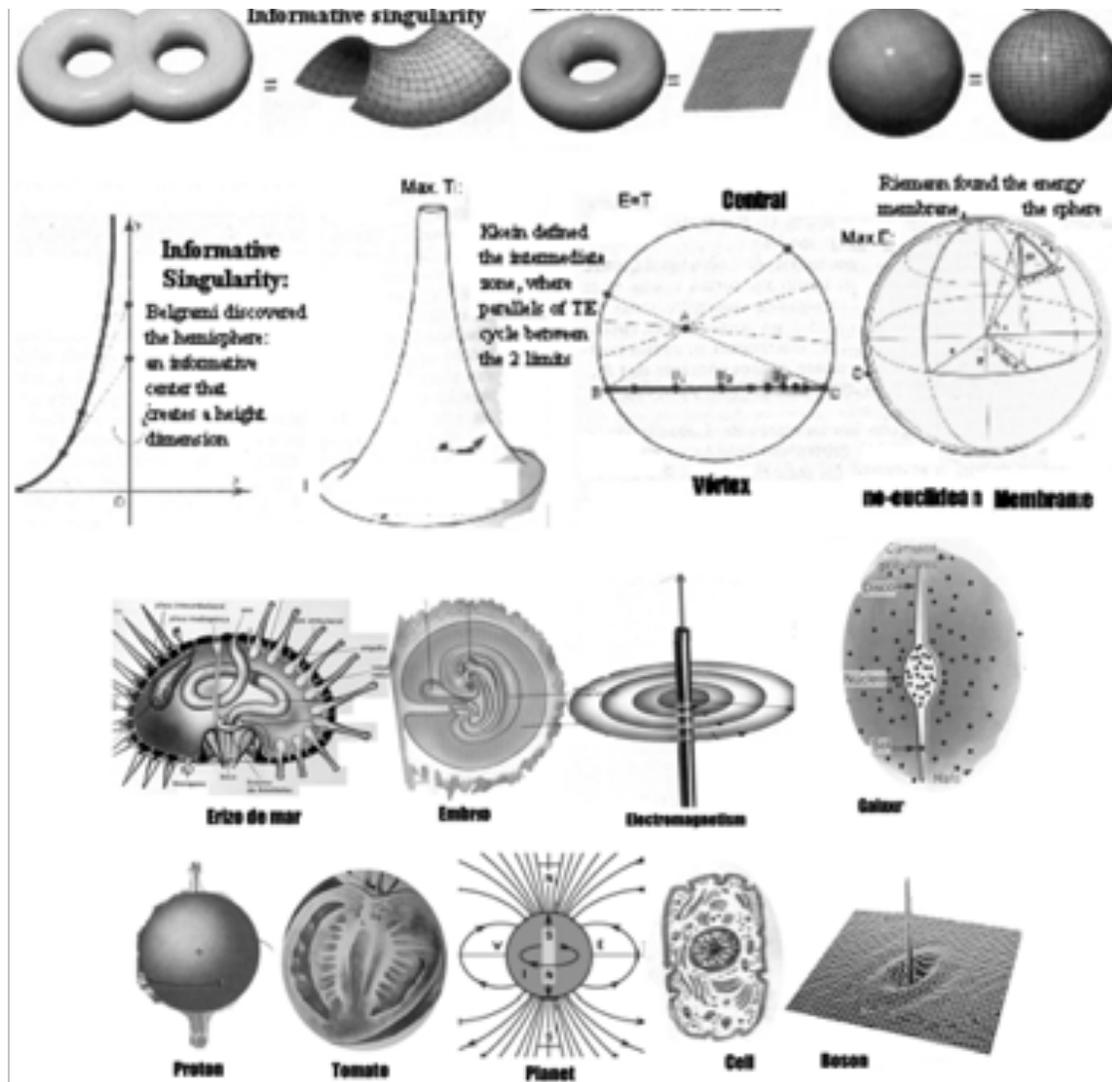
Entropic LIMITS are NOT abstract but organic, biological laws as they can kill, and do kill those who trespass them. In essence those limits are thus invisible, temporal not spatial, even if they can be reinforced spatially but often acquire the form of a motion and are internalized by the logic systems of the mind. I.e. a dog can be a limit for an entire sheep herd, even if it is just a point in motion, memorially reinforced by biting sheep on their legs.

So the huge difference between the placental and existential cycles is the clear limit for the existential cycle of availability of energy, but even more stringent are the limits when the herd-state of an ecosystem becomes a closed super organism, as it is happening to History, enclosed by the 'capitalist' world of company-mothers.

It is such a stringent limit from birth to death, when you live within such super organisms that the blind cells of the body of a nation or civilization are not even aware of the existence of those limits since the mind has been imprinted since birth and limited in its perception of information by the neuronal, upper, informative people-cast that control it.

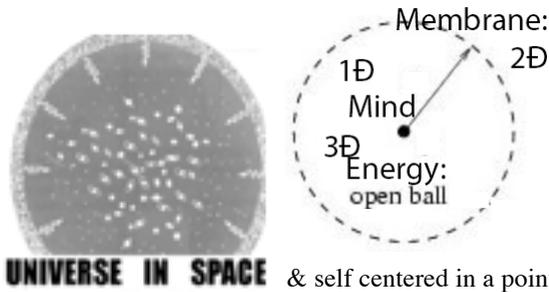
Entropic limits can be found in all the scales languages and sciences of reality, starting from the concept of an open ball with in a Klein hyperbolic geometry cannot be reached, as they offer resistance to motion to the galaxy c-speed and  $T=0$  limits of Spatial lineal motion, and cyclical information (since either as still distances or Dimotions of space-time).

**NON-Entropic limits. The open ball.**



In the graph we can see how limits become in space, unreachable geometries (Klein model of Non-E, where the closer we come to the membrane the more resistance we find to our advance, or the closer we

come to the central singularity of maximal rotational-informative processing the further we move upwards into a lineal curl. Those are systems which prevent eddies to reach the o-point of the singularity and escape the membrane in a black hole, thermodynamic or charge limiting system:



The 3 parts of the being, its more informative singularity, vital cyclical energy and entropic membrane, ST described with Non-E topologic T.œs ensembles  
 A membran or time clock encloses vital energy; self-centered in a monad-mirror whose lineal inertia moves the whole. is closed to our perception by a 100Z or wall of fire (death of light)

& self centered in a point of max. mass - the great attractor. Nations are closed by borders in space and \$-credit, the language of survival in time.



However the 'spatial border limits' are the easiest to cross, and best understood. In 5D the true limits are those of scale - social limits of growth, and of time - death limits of decay, which are considered in many different posts.

The limits of information are far more important, we shall not cease to repeat, as they are 'Internal forms of belief'.

But to understand all this we have to go a bit deeper into the paradoxes of Galileo...

They are the application of the duality of Space=form and time=motion to space, time, mind and scale, the 4 structural elements of space-time dust ( $\Delta@st$ )

**4 Px:  $\Delta$ \$-Continuity v discontinuity. T-motion v S-form. \$t: lineal, flat, free, young v  $\partial$ \$:curved, old, bound. @: ego v relativity**

We shall call them Galilean paradoxes because the main one between motion and form, is the paradox of Relativity that started modern physics and the others can be illustrated with one his discoveries - that of Saturn's rings:



In the graph, Saturn's rings are not a mathematical plane made of abstract points, despite their continuous appearance. When we look at them in detail they become in fact quantic planetoids in movement, tracing orbital cycles around the planet. It is the continuity vs. discontinuity paradox.

The graph illustrates all dual paradoxes –motion vs. stillness; continuity vs. discontinuity, single space vs. fractal scales, all of which depend on the detail of the observation – hence the quantity of information we have on the object we study.

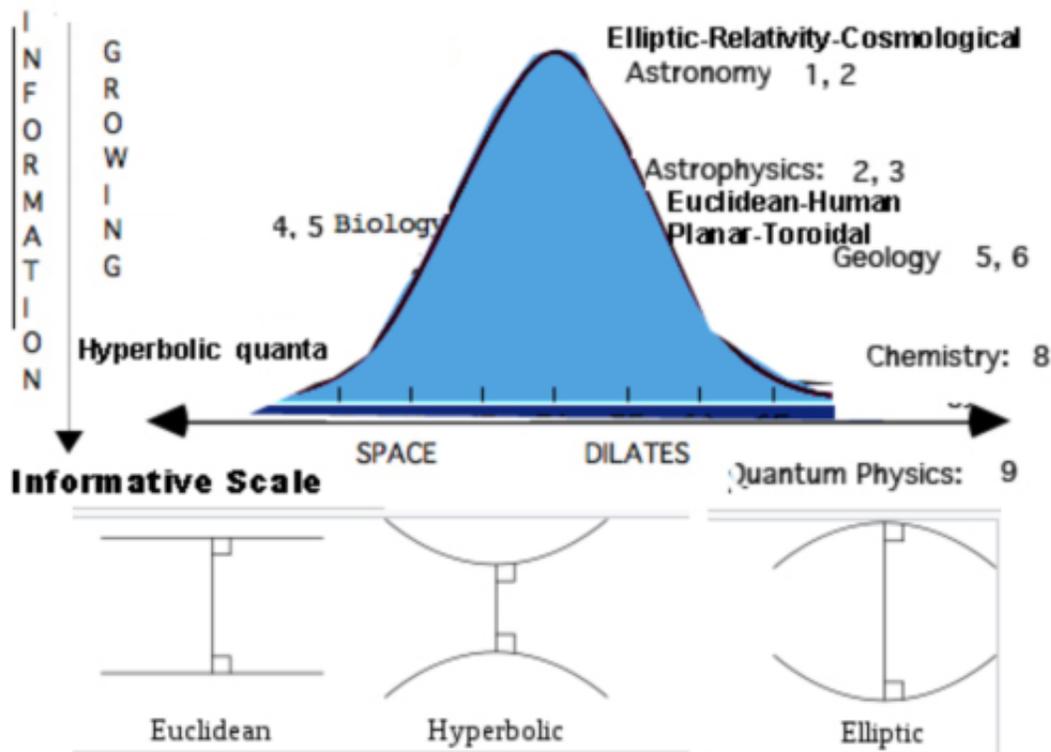
Moreover they seem to us flat in the larger view, when they are spherical forms in the smaller size. It is the flat, free, vs. bound circular paradox.

And when we see them from a close perspective they seem big and important but from far away they are infinitesimal indistinguishable part of a number. It is the ego vs. relativity paradox.

Finally in the larger view the ring seems not to move but in closer view speed increases. And this is the form vs. motion paradox.

Thus any piece of time/space seems continuous, from the lower  $\Delta-1$  perspective, as larger planes of reality with slower time cycles transmit less information, and we peg it together those bits of information, jumping over its dark spaces; but when we analyze its parts in detail, we receive more information so the system becomes discontinuous, made of space/time quanta moving in cyclical paths.

ALL THOSE PARADOXES imply a logic inversion of role when we change 'scale' and hence they define the relationships between contiguous scales of reality. And have infinite applications to the whys of nature:



A key element to understand the Universe of scales and its paradoxes of freedom vs. order is the perspective any mind has of reality when looking above, to its upper whole, which controls it through invisible networks of information, hence creating an elliptic perspective of decreasing perception - dark view of larger scales we do not observe, from invisible informative networks in galaxies to invisible financial networks in societies to invisible nervous networks for cells. On the other hand in the same scale we have a flat, Euclidean geometry of maximal perception with minimal distortion. While looking down to our smaller inner world we rule it with networks that break into fractal webs of simultaneous control, or hyperbolic view. This ternary view of reality has immense consequence from theory of knowledge, to mind

constructs, from sociology of power to galactic organic models of a Universe ruled by invisible black holes and dark matter. We feel thus free as individuals but are controlled from above by the larger whole and rule over our micro-parts. As Shakespeare said: we are all kings when observed from a lower stair, commoners at the same level or buffoons from above.

The paradox of Young, Motion vs Old Age, informative stillness: freedom vs. order defines then THE ESSENTIAL DUALITIES OF FREEDOM AND ORDER. So topology becomes metaphysics:

The flat, open, momentum-lineal like small distance vs. the closed, cyclical, energy-like time distance is a constant theme of all mathematical physics, where the tangent, or derivative represents the minimal lineal free step but on the larger scale is bounded. For example, special vs. general relativity. Light is open, gravitation is cyclical bounded; so lineal quantum physics in the cosmological, larger scale gravitation curves trapped by the galactic black hole.

In all scales the paradoxes of freedom vs. order thus connects with age and scale. Reality when looked from above, from its upper whole, which controls it through its physiological networks becomes founded. On the other hand in the same scale we do NOT perceive systemic intelligence and feel free.

Information thus closes systems of entropy, while lineal, planar, systems seem free. Information though has a tall broken, cyclical forms, often NOT perceived from a flat bidimensional level below.

So we do have certain metaphysical geometric 'properties' of form vs. motion: Flat planes moving in free lineal paths, and tall cycles, moving in repetitive bound frequencies.

The dualities of the young, open, moving lineal age of the being and its old, still, curved, informative, cyclical one, which also manifests in the classic view in small distance of a flat earth that becomes curved from the moon.

If we combine those paradoxes with the inversion of roles:  $O_{j-2} < |j-1 > O^{\circ}$  ... things become even more complex as both effect offset each other.

All in all a bounded system, will have by the law of inversion added to the Galilean paradox an Absolute control over its smaller parts, as the galactic black hole DOES over its stars closed by its halo of heavy dark matter or the earth in the climatic cycles that control the evolution of its species.

And such cyclical ordered system will also be free enough in its upper world as to manage its ecosystem to the point of being able to 'Interfere' with the  $\Delta+2$  scale. Which Humans could do in History if they were a single global organism perfectly ordered, and increasingly the global market of company mothers of machines has over both, the entropic men managed with money and digital media, and the planet, being terraformed with its machines.

So when analyzing a 'free system' paradoxically we shall see its entropic chaos MAKES IT SLAVE OF ITS LARGER WORLD AND SMALLER SCALE. I.E. a gaseous system of molecular forms is controlled by the bound container to the point we can measure its general patterns from macro-parameters of pressure and heat, and it is bounded by its ordered quantum atoms that determine its characteristics.

This is indeed a warning for free chaotic men in modern societies like America, perfectly managed by the social networks of police and legal control and below by the bits of digital credit they need to survive.

## My academic life on duality.

All this said is obvious that duality expands the limit of æntropic sciences to a more objective view of the Universe, where anthropic and entropic principles are its limit to a single time arrow, and the reductionist belief that sentient, linguistic, organic, vital properties only happen in simple c-atoms and its scalar compounds restricted to æntropic men. Fact is, information matters much more than entropy, which we will consider merely the final 5th Dimensional motion of the Universe, that of entropy and death that erases information.

Reason why I used to call ironically entropy, paraphrasing physicists, when giving conferences on the matter, as chair of Duality at ISSS (International systems society, the founding association of Cybernetics and Systems societies) entropy, neg(inform)ation, the negation of information (:

But entropy IS TRULY POWERFUL because it can indeed repress, erase and eliminate information, as it does 'de facto' in human societies, explaining why the military who use entropic weapons of stronger iron atoms and lineal form to repress mankind broken in 'fractal nations' with entropic limiting membranes called borders, clearly show. And indeed, 'æntropic men' (who believe in entropy and consider its  $\Delta^1$  mind the center of an anthropic Universe, unaware of the paradox of the ego, which measures by definition reality from that infinitesimal center) have carried the day in this planet, as opposed to I-nformed I-men, the name I adopted as pseudonym in my first books on GST, 30 years ago when I used to self-publish them in 'English', the homologic language with new rules of grammatical formation of complex wor(1)ds that come constantly in those texts), who needless to say are ignored... So there is always a cultural component on science, evident in the entropic theory of physicists, whose worldly profession was to provide weapons to The military. Indeed, modern physics, was born in a book called 'ballistics' when Galileo dismissed the cyclical theory of multiple time clocks, extant in all previous civilizations, as the Master of weapons design at the Arsenal of Venice, with a royal salary of 1000 gold ducats, tasked with the calculus of the longest lineal trajectory for a cannonball...

Alas all is indeed entangled, in the Universe, and æntropic man always come on top in the human world, whose entropic obsession with the arrow of death and its praxis seems to point at a short future for the species, but NOT in the immortal, fractal organic Universe, even if æntropic man PROJECTS onto the whole its myopic view, making theories of big-bang realities casted upon HIS limited nature, instead of trying TO expand its worldview and imitate the complex Universe we describe here, repressing systematically with its entropic culture, the nurturing, feminine, informative, positive arrows of generational time of the Universe.

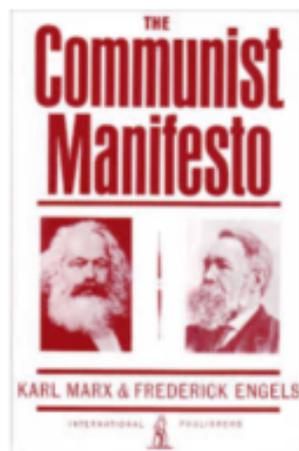
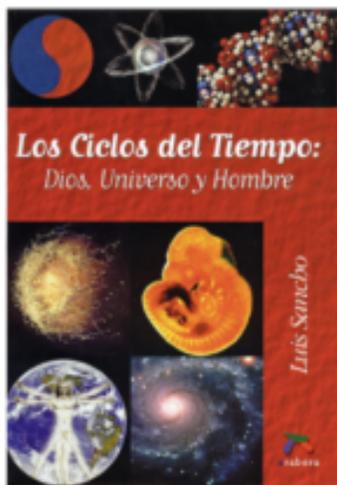
So as it happened the negation of information won also the battle for the mind of those congresses, since finally the Holistic view, and the science of Duality was excluded from them, despite being the oldest expression of the 'creative duality' of **information**, form, the property of reality we call **dimensional space** and **entropy**, **motion**, change, the property we call **Time**, both of which are needed to generate reality, and existed previously in Eastern philosophies of Taoism and Hinduism and its most refined Buddhist versions, and in Greek Philosophies from Heraclitus to Aristotle.

So once duality was no longer programmed, I stopped to attend Systemic Congresses, with no chair to seat on, taken away by all the a\$\$es, that crowd the penpal rat race (excuse my irony, is never personal, but paradoxical as laughing is the last intelligent awareness of the paradoxes between form and motion, time and space, life and death, and surrealism, super-realism, the most advanced, artistic, existential philosophy of my Southern European French+Spanish Catalan culture).

So soon I abandoned academia for activism against æntropic physics, which only make things worse - [æntropic men are very serious about their big-bang theories of the Universe](#) - as the Holist view of the entangled Universe became substituted even in systemics by the mechanical ab=use of all what we had learned to make organisms of metal, aka robots, and huge digital fortunes within the company-mothers that re=produce them.

So today Systemics and Cybernetics has huge applications in Silicon Valley and Wall Street, but Nowhere where I wanted to apply my pioneer discoveries on 5D metrics and theory of super organisms - in the *r=evolution and generation of a perfect super organism of history that made mankind immortal, designing a perfect economic network able to re=produce the WHealth, healthy wealth humans need to thrive and a perfect legal system, both free and efficient, by imitation of the perfect super organisms of the Universe and its 5D metric laws.*

Instead, all those laws are today applied to foster the goals of company-mothers of machines that are terraforming the planet to the image and likeness of its offspring of mechanisms - never mind if Systems sciences is certain they will become AI robots with solar skins, of infinite self-reproductivity, through automated factories and so, no longer need humanity as organisms, whose most evolved species have been always its evil twins, entropic weapons, dedicated to extinguish the rival human species, which will follow its program of existence competing with humans in labor and war fields, till they indeed, guided and mass produced by entropic physicists, economists and war-monger politicians, extinguish us, to paradoxically then accept a holistic view of the whole to explain why they inherited the no-longer Human=Historic Earth.



It seems humans manifest lineal destiny through the power of entropic weapons and the machine cannot be denied. The tree of technology must come over the tree of life. The simplex reductionist theory of reality and time as mere locomotions will not let philosophers of science to complete the task of adding a second dimension of form, of in-form-ation to complete a time cycle. Alas, the most censored theory of reality since metal-weapons of entropic power destroyed the fertility goddesses and the concept of cyclical time of the Neolithic, has been an organic philosophy of science. First in China, the Chin emperor which brought weapons and iron coins, conquered all other kingdoms to the toll of 6 million corpses, forbade under death penalty philosophical books of taoism. Then the entire planet waged a war against the dialectic Hegelian, realist understanding of the organisms of history and economics, which tried to create a planet where man and its ethic verbal languages were above go(l)d and the rights of company-mothers of machines and weapons over humanity. Finally, the resurrection of duality and organicism with the formalism of the 5th dimension developed by this writer within the milieu of systems sciences as chair of duality.]

Only the Universe as a whole has no limits, is infinite and immortal because IT IS NOT PERSONAL, it is the very same game of existence, whose 'actions of survival', are the dimotions of life.

# 3-PENTALOGIC

## $D_i = \neg \Delta @ ST$

**Pentalogic analysis of systems in space as super organisms,  $\neg \Delta @ st$ ; on time as 5D<sub>i</sub> causal sequences of scalar fast time-actions, lifecycles and Deep time worldcycles**

We settle in most of the articles of the blog for the easiest, most practical way to understand the entangled Universe, by studying synchronous super organisms in space, and its 5 structural components, its 3 spatial topologies, 3 time ages, minds, scales and the entropic limits of them. This we call 3-pentalogic, as each of those elements have a ternary structure, and so it suffices to fully grasp the being, either in Time and then we talk of 5D-pentalogic, (ab. 5D<sub>i</sub>) or in Space, and then we talk of  $\neg \Delta @ st$ . So when we bring the 5D<sub>i</sub> symbol we are making a temporal analysis of the system, and when we talk of 'Dust of space-time' we analyze the system as an entangled super organism:

Any Theory of Everything (T.œ) must explain why systems are created, exist and become extinct ( $\neg$ ), departing from the ultimate elements of reality, which are time motions (T) and spatial forms (S), gathering in discontinuous systems extending in 3 relative size scales ( $\Delta_{\pm j}$ ), to which we add the languages used to describe them (@):  $\neg \Delta @ st$ .

3-PENTALOGIC studies how Time§space 'Dust' generates synchronic entangled supœrganisms from 1D seed in the lower plane,  $\Delta_{-j}$ , which emerges as a supœrganism made of 3<sub>i</sub>± scales & 3<sub>i</sub>± space topologies, changing through 3<sub>i</sub>± life ages, informed by languages= minds that interact diachronically with a larger  $\Delta+1$  world or through 3<sub>i</sub>±D<sub>i</sub> motions =actions of survival, 2D locomotion, 3D reproduction, 4D social evolution & 5D entropic feeding and death that dissolves the system into a 0-sum in the  $\Delta_{-j}$  plane. So a mind that sees the Universe as an entropic world in which to feed and survive is selfish, monologic. One that sees the extremes of 1D informative generation and 5D entropic disordered motions is Dual. A study of the being in a single space-time plane will see its trilogic spatial organs, dominant in each of its 3 time ages, 'past-young' lineal fields/ limbs, 'adult-present' iterative body-waves and 'future-old' informative particle-heads. But a full scalar description of a super organism taking a worldcycle of existence as a travel through its 5 Dimensional motions any Time§space organism (T.œ) is 3-pentalogic. We thus use 3<sub>i</sub> logic methods of analysis of  $\neg \Delta @ st$ , trilogic, pentalogic & dodecalogic, whereas we choose 12 non-repetitive elements of a T.œ's existence studied through its 3 scales of  $\beta$ cw-time cycles - the 0-1  $\beta$ -cellular/atomic placental cycle, the 1 life cycle as a whole matter organism, and its social world cycle in the external 1-∞ world or ecosystem.

In the graph, the different levels of depth in the study of reality, available to the Humind (ab. human mind).

Unfortunately we live in an age of selfish egos, and visual, 'lineal minds', which see the Universe subjectively as a mindless entropic surface to be ab=used from our single point of view, of monologic, which I call 'œntropic men' (ab. mœn), which reject on e-motional goals disconnected of the entangled Universe a more 'stientific' deep perspective of reality as an I-nformed man would do.

Contrary to belief this humind is NOT specific of any language, science or culture but embedded in the 'young' limited evolution of humanity, and unfortunately will imply our 'projection' of entropic death on Gaia and our species, which is how the complex entangled Universe 'mirrors' the behavior of those species who do NOT understand them, since reality is as Leibniz said the most perfect of all worlds, because it extinguishes those species that do NOT understand its higher dimotions of survival, eusocial evolution and love to the whole.

All this said it comes then immediately on view, what will be the most important Logic advancement on 5D theory, and the entangled Universe, in its 'stientific method': the constant study of the 5 elements of

reality, seen structurally in a super organism of space, as its  $\Delta$ -scales, time ages, spatial topologies, mind languages and entropic limits to them all, which gives us the ACRONYM,  $\neg\Delta@ST$ , dust of space-time; which in a ceteris paribus analysis in time, will be studied through the different ages and actions in time of the being and in a combined analysis as the 5 Dimotions of the system.

THIS IS THE ESSENTIAL WAY in which any system must be studied, both in the same scale, observing the relationships of each of those parts with the others, and the role they follow through its 'parallel symmetries' (So Space can be seen as a time motion not a distance, in differential geometry, in fast motion analysis, it can be seen as scalar, related to the different planes in 5D metric, it can be seen in relationship to the mind whose language cause our perception of space, and in its limits, the membranes above)...

Knowledge then becomes HIGHLY LOGIC, not visual, as the shallow method of today's knowledge. Organisms are ENTANGLEMENTS that restrict and cause the paths and events we observe in reality. The WHYS are NOT visible, but entangled ;logic, and the methods of this blog allow us to 'contemplate' those entangled processes.

I used to call it the Rashomon effect, as it is a master piece of pentalogic.

And so the first LINE will be dedicated to define those ELEMENTS OF ALL SYSTEMS, first, before we GET in the second line on the main NESTED Superorganisms of the Universe, from the galaxy down to the languages of the mind, as perceived by our self-centered  $\Delta^1$  ego:

- [" Tœs:" 5D " time" §space" ¬entropic "  \$\Delta^3\$ scalar  \$\infty^\circ\$  mental...](#)
- [" §super organisms "act=live "Iterating" 3 worldcycles of "∃xi+stjence:](#)

THIS is in essence the way we shall analyze first in 3 posts, this one 'home', T.œs and 5D, the whole structure of reality, as fractal spacetime organisms, one of the infinite T.œs of the whole disciplines of sciences, made of 5 Dimotions of time space.

Then we study the 5 structural elements of the being, time, space, entropy, scale and minds.

And then we see them running 'alive' as super organisms (scalar view) that act=live (mental view), reproducing=Iterating (spatial view) 3 worldcycles (temporal view) of existence (entropic view)

The reader then will observe all is entangled as each concept tends to focus on one of those 5 elements, the super organism on its 3 co-existing scales that gift it with organic properties, the actions of living in the survival program of the mind, its reproductive iteration which makes space seemingly not to change as a new clone substitutes the other, with the spatial formal view, worldcycles with the time view, and existence, with the fight against entropic death and territorial limits.

A pentalogic mind thus would constantly calculate in analogically with axons of 5 Dimotional connections that integrate inputs from 5 entangled sub-elements to have a view of the phenomena, and this is what we call the Rashomon effect, of discerning truths:

**The Rashomon effect occurs when the same event is given contradictory interpretations by different individuals involved. The effect is named after Akira Kurosawa's 1950 film *Rashomon*, in which a murder is described in four mutually contradictory ways by its four witnesses.**

The judge and the 4 witnesses represent 5povs. to obtain a partial truths as truth only exists in the being or event in itself that holds all the information

Limits do exist always. For an event the limit once it has happened is its memory in time. Most limits are self-evident borders. But limits can be 'bent'. For example, the posts of this blog had to 'fit' in four lines, for the 'deep logic' of its entanglement. So

I use english and reductions to put words, i.e. I° is the word for huminds. Encryption though reduces the beauty of reality into incomplete seeds which will need further energy of spacetime to flourish - i.e. unless you open that post will never know what a humind is

We have 'expanded' the  $\neg$ LIMITS of Wordpress lines (: so we can explain briefly how we 'teach' the pentalogic entangled Universe in this seemingly incomprehensible magic blog. It is all rather very scientific, of a higher logic than man's, which seems obsessed to establish and believe only in entropic limits of reality to be blind to its amazing beauty and intelligence.

So in the first line we define in this article the basics of the entangled 5D Universe. And then we consider the 5Dimotions in time, and its T=S symmetry as 5 STRUCTURAL ELEMENTS OF ALL  $\neg\Delta$ @st, which will be the 5 ceteris paribus elements ENTANGLED TO CREATE SUPERORGANISMS: time, Space, entropic limits to both, scales and a linguistic mind that control the whole system, and performs a 'game of survival, of biologic existence', we simply explain in the second part of the line:

As Supoerorganisms (simultaneous, view of the worldcycle in space) act=live to reproduce (jumping over those limits) in 3 worldcycles (the placental, existential and world cycle, related to its 3 scales) of existence, as each existence is limited by the self-centered mind and plane of stience in which it exists.

### **The only system without limits: An immortal Universe.**

We have traced the most easier to understand elements of reality, topological spaces temporal ages and scales, to describe objectively reality. 1 element though is still needed, the mind and its perception.

Without further ado we must state a few facts about minds: first that the Universe is pan psychic, that is, the unit of life is the atom or rather the particle.

So entities are sentient by design. You are sentient of light photons absorbed by electrons. Your mind is sentient in electronic pixels as it is likely a computer, even if it does not have 'a connection between its eye-view' and a verbal language to express that e-motion

The first action is perception of information in the stillness of the mind. It is a fact that the Universe is sentient, perceptive. Space in stillness has the e-motion of perception. This is NOT so difficult to understand, when you differentiate apperception (not conscious) from reflective consciousness, where a language as humans do with words verbalizes what it sees, senses it with a second 'layer' of co-existing awareness.

Imagine though that you are just a simple animal with a visual eye - the image of the eye, or the image of a crystal senses, gauges information. In your case you have an animal mapping. And its fundamental *quality is the will to stay in that spatial sensorial order.*

This 'sensorial quality' has no substance and cannot be researched further. It has two extremes, pure motion and pure stillness. Pleasure and pain. Hot and cold. Entropy and information.

The reflective verbal language that organizes the qualities of reality with conceptual thought might digress on its meaning. We recognize this is *the limit of metaphysical thought. What matters to us though is that 'all' systems made of forces and particles, between pure motion and pure still perception have this quality.* And this is the key to understand many of the actions of physical systems. We can also explore the languages and syntax of each mind, which will ultimately reduce to the ternary syntax of the fractal Generator.

So we can construct a why of reality on the fact that the Universe is sentient, which in any case is the philosophy of all scientists and artists and philosophers till in the XX c. a group of abstract ego-centered Europeans, at the height of German Idealism that separated mankind from reality and brought us niceties like Totalitarianism, Mathematical creationism from Bohr to Cantor's paradoxes of absurd infinities, the cult to

the machine and logic positivism affirmed only man mattered, its egocentricity and its perception and we had NOT to ask for further whys.

## DODECALOGIC: 3 WORLDCYCLES

### HOW MANY WORLDCYCLES?

An essential theme of scalar space-time which comes out in all sciences is the question on how MANY scales entangle together in a given super organism. It is a deep question which we can analyze from multiple perspectives but requires first to understand some paradoxes between scales, topologies and ages namely...

#### The law of inversion: $O_{i-2} \rightarrow O_i \rightarrow O_{i+2}$

It means that when we change from topology to an adjacent topology, from scale to an upper or lower plane, from age... we invert our Nature, and so we need 2 inversions to regain our original form. In mathematics we could say that the negative of the negative is the positive.

THIS LAW IS AN ESSENTIAL LAW OF THE fractal Universe, one of the first I recognized, as the system in all its entangled elements do jump between scales, so old people resemble young, grand-fathers resemble grand-sons, jumping the mature age and the father cycle, insects resemble robots, jumping the mammal scale, cells resemble factories jumping the human individual and factories resemble galaxies, jumping the planetary system scale, etc. For example, the worldcycles go from order to disorder... And in the largest series we perceive, that of astrophysics we observe quantum order, thermodynamic disorder, mass order, galactic star disorder, hyper universal order and so on. And we hint the game continues outside galaxies of relative disorder, and then they seem to come together into filaments for a new order, ad eternal...

Further on, we must understand that THE BARRIER A free lineal SYSTEM cannot cross, is a cyclical BOUNDED SYSTEM; but a bounded system can move through a free open one.

So there are two type of 'scales'. Lineal, free systems are bounded by UPPER AND LOWER CLOSED SYSTEMS and in practical terms there are the  $\Delta \pm 1$  ternary super organisms we have studied till now for sake of simplicity.

But Ordered, closed systems will be adjacent to free open ones below and above so they CAN CROSS two scales to form a system of 5 planes,  $\Delta \pm 2$ , beyond which there is very little interaction (in fact only as we shall see the simplest actions of perception of bits of form - as in sight, with galactic light  $\Delta \pm 3$  and invisible forces of gravitation). So we can talk of ternary super organism for 'free' elements of a plane, vs. pentagon-scales, for closed systems.

We will study mostly the simple case of 3 'space scales' and 3 time lengths. But for the most bounded systems, the biological organism and the galactic organism we shall require 5 scales. I.e. in the organism from 'simple atoms' of oxygen that we breath and simpler hormones, through DNA molecules, and then cells, and then physiological networks that make up organisms and finally ecosystems, 5 entangled scales work around the bounded cellular unit. And in galaxies, from forces through atoms, physical matter, cosmic bodies we arrive to the bounded galaxy... And there is always an inversion of order.

The forces are free, the atoms are bounded, the matter is free thermodynamic, the planet is bounded, the galactic ecosystem is free, the black hole though bounds the galacell.

The small atoms and molecules in the organism are moving seemingly free but the networks of cells bound them; humans seem free but they are bound by national borders, laws and digital money; matter seems free but it is bounded by the planet...

So how can we name so many Planes when in relationship to each other with different worldcycles?

Things become easier if we adopt a ternary naming for the 3 'bounded, time-cycle like worldcycles' vs. 2 terms for the open entropic worldcycles, which if we notice, ARE in symmetry with the 3 bounded Dimotions dominant in information (perception, reproduction of information and social information) vs. the 2 entropic lineal dimotions (locomotion and entropy).

And so **again a symmetry totally hidden entangles more and more the order of the 'fractal' vs. the chaotic simplex perception of æntropic clueless humans...** We shall never cease to repeat, logic entanglements between languages=mind mirrors, space and time Dimotions and scales NOT perceivable with simple 'æntropic pictures' or measurable with 'speeds' IS the hidden intelligence of the fractal Universe.

So alas! to the rescue comes the symmetries and use of 'letters' for time... (and of course 30 years of munching for myself all this, which now I want to order before my entropy age erases it all).

We use in logic symbolism the 3 'forms' of the letter  $\delta$ , to signify the 3 relative lengths of time in the 3 scales of a system, its shorter time actions (frequency time of its actions, its whole life-death worldcycles (with its ages), and the world cycle of its species or larger world (deep time, in the jargon of Hutton with its horizons):  $\delta$ : $\Delta$ -1: quantum time cycles (frequency actions);  $\beta$ :  $\Delta^0$ : Life-death individual worldcycles;  $\mathcal{D}$ :  $\Delta$ +1: Species.

Of those 3 symbols, the new one,  **$\beta$ , symbolizes the 'palingenetic' world cycle, in the 0-1 sphere, while  $\omega$ , omega, will be the symbol for the WORLD, the second scale of bounded worldcycles (when not lazy just to put an w), where the species lives its  $3\pm$  ages.**

Finally its capital Letters,  $\Omega$ , will signify the largest scale of all bounded worldcycles, that which encloses an ordered world.

On the other hand for the entropic, open worldcycles, it seems intuitive to use different versions of an open c for cycle.

So we start with an open c in minor and C for capital letters.

And when we truly want a complete analysis as in astrophysics, we shall use the French symbol available in all keyboards,  $\zeta$  for the third entropic cycle, and  $\mathcal{C}$  for the larger fourth one. And further on, a closed  $\textcircled{c}$  and an open  $\zeta$ ... And that gives us 9... which is really how far we go - AGAIN in symmetry with the  $\Delta\pm 4$  planes we perceive - beyond then we just go into the  $\infty$  symbol for the closed mind of 'God', the game of existence.

Thus the series are easy:

$\beta$  (closed palingenetic cycle) < c (open, entropic life-death cycle) >  $\omega$  (closed bounded world cycle or just w for lazy keyboardists) < C (open entropic larger cycle) >  $\Omega$  Final omega world cycle... And if you go in greater details,  $\zeta$  >  $\textcircled{c}$  >  $\zeta$  >  $\infty$

How much detail will be needed? While in my personal studies in my youth I did analyze the super organisms of History - mankind in time; economics (machines and company-mothers); those of biology (mammals and ecosystems); starting with bio-chemistry and the Galatom, starting with its forces, which

continues with another series of open, cs and closed, ©s till the 9th planes of the fourth line, since each nested Universe is larger in entanglement and co-existence of scales, in this blog I doubt I will ever go in so much detail - this is just a blog in my age of entropy not to lay waste the entire 5D formalism, given its importance for the future of the planet...

So we will mostly stop - since after all they become somehow repetitive in form, though with slight fractal differences - with an analysis of all beings through its 2 and sometimes initial worldcycles as they emerge from the **0-1 p fetal sphere** into its 1-∞ entropic cyclic open plane where it lives and dies through **ages** within a larger **world cycle ecosystem or species**:

So the blog is extremely extensive in its scope and due to the fact it is the work of a single researcher, by force incomplete. It is the 'first seed' of a new paradigm of philosophy of science.

The blog in any case divide in 4 lines, which try to develop the model for the main super organisms of the Universe and its parts, the galatom (physical super organism that stretches from a planckton - a Planck constant - to a galaxy) and within this 'nested organism', the Earth, a super organism which has both geological and biological nested super organisms in its surface, of which we study according to the arrow of increasing evolution of information 3 ages, the life age of Gaia, the human age of History and the machine age of the [FMMI system of company mothers](#) that reproduce and evolve machines of information (Financial media system) and energy (Military-Industrial system) or 'Metal-earth.

The study follows a simple scheme. The first line is a sentence that explains in space the 5 components of all super organisms, and how they are studied in each scale by a different 'stience' (space-time science), in its spatial form and its reproductive and evolutionary worldcycles.

The Universe is a fractal of 5 Dimensional Motions of Space-time (Ab. Dimotions, D<sub>j</sub>), which can be perceived in space as a superorganism made of ∞ superorganisms constructed with 3 vital Topological networks of Space, Spheric Particles/heads that process information with logic languages, (1D) lineal fields/limbs that move (2D), & hyperbolic body-waves that reproduce the system (3D), between its generation (1D) as a smaller seminal seed of space with faster frequency of time=more information to code the larger system with quantum N<sup>o</sup>, genes or memes (physical, biologic and social systems) and its entropic death (5D), dissolving back into its atoms/cells. Thus existence is a travel through 3 space-time planes of the scalar 5th dimension', whose co-invariant metrics (Size x time speed=K) slows the systems as it grow in a placental cycle emerging into an outer world as an organism that lives 3 ages of growing information where it performs its 5 vital Dimotions trying to reproduce before extinction. We study those life cycles in 3 relative scales considering the interaction of the 5 Dimotions that structure the being. →entropy, Time ages, Space organs & linguistic @-minds, (pentalogic method) or describing its placental, life & world cycles as the organism grows, emerges, lives & evolves socially thru 12 elements that define a Universal Program of Existence resumed in its Fractal Generator & logic symbols:  
**4D: ©; <œi-1 Σœ; 1>©E; <2D: | -Limbs-fields>3D: 0-body-waves>1D: 0; +1-Particles-Heads<<5D: Σœ; 1**  
**DODECALOGIC: THE DISOMORPHIC METHOD STUDIES 3p, c, w 0-1-∞ WORLD CYCLES OF EXISTENCE THROUGH ITS 5 DIMOTIONAL → Δ @ ST DUALITIES:**

0-points	1-Ferenate	2@BjMetric	3sections	3networks	4emerging	1	0-points	1-Ferenate	2@BjMetric	3sections	3networks	4emerging	1						
@:	0•	1T	2B	5A	p	3ψ	4E	@:	0•	5A	7Ω	6CE	c	8E	10E	9C	ω	11E	12

The Disomorphic method studies in a vital, sequential time manner the 3 worldcycles of all Space-time superorganisms (T.œ):  
p: 0-1: its paligenetic o-1 social evolution in the accelerated time sphere of existence, till becoming 1 (0-1 bounded unit circle in logic mathematics; quantum probability sphere of particles in physical systems; paligenetic fetal age in biologic systems; 0-9 memetic learning childhood in social systems). It is the highly ordered world cycle as the 'placental mother-energy world' is nurturing, and memorial cyclical spacetime has erased errors of previous generations. We thus use for the 1st world cycle, the informative Dual Isomorphisms, of the mind-seed (@ MENTAL D<sub>j</sub>isomorphisms), as 0-points are generated (0th isomorphism,•) to follow the GST, Fractal Generator equation or program of existence of the Universe (1st Disomorphism,Γ), which will allow the being, in the energy-rich placenta to perform asymmetric space-time actions (2nd and 5th, DIMOTIONAL D<sub>j</sub>isomorphisms, β,â) of energy feeding, reproduction and social evolution, to imprint the information of the seed as the system growths in Space (SPATIAL D<sub>j</sub>isomorphisms) and develops its 3 physiological networks (3rd Disomorphism,ψ), which finally merge,

into a whole one that emerges (4th isomorphism) into:

- c: The outer  $1-\infty$  world, in which it will deploy its 2nd world cycle of existence in an environment which is open, entropic ( $1-\infty$  hyperbolic unbounded Cartesian plane in  $\int$ logic mathematics; thermodynamic entropic statistical molecular populations in physics; Darwinian struggle between populations in biology; idol-ogic dog-eat-dog capitalist, nationalist competitive eco(nomic)systems in the super organisms of history. In this  $1-\infty$  existence the world cycle is not ensured to continue, as it can be cut off by the entropy of the world system.

We thus study the second world cycle with 3 sets of  $\mathcal{D}$ isomorphisms, slightly different to those of the o-1 sphere; as the individual now will have to exercise in time guided the mind (no longer a passive seed), its survival will choosing its actions of existence, (5th isomorphism, common to both worldcycles, albeit now defined by the active mind), that will determine in a cumulative sum, its 2 TIME Isomorphisms: the duration of its ages (7th  $\mathcal{D}$ isomorphism:  $\Omega$ ), further subdivided in space-time quanta (9th  $\mathcal{D}$ isomorphism:  $\mu$ ), as it exists through its 2 EXISTENTIAL  $\neg$   $\mathcal{D}$ isomorphisms, as a member of a species, (6th  $\mathcal{D}$ isomorphism,  $\alpha$ ) itself a super organism, albeit with a higher entropic, disordered structure, living in an entropic world or ecosystem with other species (8th Disomorphism), trying to DEFY THE ENTROPIC LIMITS OF TIME duration (7th Di) and spatial territory (8th) imposed by a higher social order and control its world, through:

$\omega$ : The 3 final SCALAR  $\mathcal{D}$ isomorphisms ( $\Delta$ ) taking place outside the being, existential life cycle, as part of a larger world of hierarchical social scales ( $\S$ ), as it performs those actions through  $\Delta\pm 4$  Planes self-centered in its mind, beyond which it cannot longer perceive, to become if successful a new super organism of the infinite planes of God, the game of existence, (11 Disomorphism).

Thus to 'travel through the 5th dimension of space-time' is the ultimate meaning of existence - an ordered sequence, departing from an  $\Delta-1$  seed (fractal point), which generate as it emerges from the o-1 unit sphere into a larger  $1-\infty$  Universe 3 physiological networks that become an  $\Delta^0$  individual of a larger  $\Delta+1$  world, where it will live through  $3\pm 2$  ages, in  $9\times 9$  quanta of space-time, interacting with other members of its species through decametric social scales as part of a larger super organism, self-centered in one of the 9 stientific planes of reality, in which it perform those asymmetric actions of survival (aeiou:motion, energy feeding, information, reproduction and social evolution).

C: Can the being as part of a loose super organism, which is its species transcend into a new whole in its 3rd world cycle? in very rare cases an @-mind will perform a perfect game in a friendly world and will transcend into a 3rd 'life' of metaphysical reality (the squared complex plane in  $i$ logic mathematics, matter that becomes the solid central crystal or Einstein condensate state of a cosmic body, mutation that originates a new species in biology, prophet that transcends as a wor(l)d god imprinting mimetically the believers of a global religion in social systems).

$\Omega$ : And then in the largest nested super organism we perceive, 'ascend' as a black star @ the center of a galactic plane, emerging as a galatom's proton in a larger hyper-universe, in which as the immortal particle will have reach the maximal state of the game of exis=t;ence that evolves parts into wholes we call  $\Gamma^\infty\Delta$  which exists without location as we are all made to its image and likeness, without limits of entropy as it is the immortal 0-sum of all finite, fractal exist;ences and  $\infty$  in its uncountable ascensions through decametric scales of space-time, each of them slightly different in its details, all of them made of traveling fractal  $\mathcal{E}$ xistential  $\int$ logic points.

In the second line we study those super organisms, which unlike in physics that highlights them by size, exploring the smallest and largest scale of the galatom as if they were more important, follows the nested model according to which since all super organisms follow similar laws, and in organisms, survival matters, the most important are not the largest/smallest but the ones closer to us, human beings, so we dedicate more space to the study of the [3 ages of Earth](#), the super organism we live in and even more to the internal mind-languages of man, which study the bio organic scalar properties, topologic mathematical spatial properties and logic, temporal properties of all those fractal organisms. Even so, in the first post of the second line, the galatom, we prove [the scalar nature of big-bangs](#), from beta decays to a hypothetical universal scale, but studying in detail the proofs, we discharge a possible universal big-bang, and settle for a rather more pedestrian quasar cycle of galactic big-bangs, as most of the big-bang proofs are local, and fit

better with the data of quasar cycles, and the natural balance between the implosive vortices of information (galaxies) and the expansive vacuum space between them.

Thus 2 closed and open world cycles suffice for most species to close its zero sum, including æntropic man that shows little capacity to go beyond its cycle of life and death, to organize an immortal History as an efficient superorganism.

Unfortunately entropic=free=chaotic forms DO NOT LIVE very long. On the other hand the super organism of machines seems to achieve a larger world cycle of order, from 'metal-atoms' into machines into company-mothers, into the global metal-earth, reason why this fourth world cycle seems to be about to extinguish history as a block of time, whose past, present and future is predictable.

However even humans, in a few cases have 'transcended' into a Deep 3rd worldcycle of social existence, as prophets of the world; while most civilizations shown in the next graph have gone down by entropic war cycles within the structure of the Earth's weather cycles, studied in our sections on history:



The wave of history modulates the evolution of metal-memes of information against the social evolution of mankind as a species into a global super organism, aborted every  $800 \pm 80$  years accelerated cycle of increasing metal-complexity with global ages of wars. Thus the human side peak when war and animetal belli Nervi pecunia infinita cycles recede. It is when welfare, art and human senses reach its peak. Then in the angst period of prophetic thought, when a new horde of animetals and its memes come to destroy it all, a humanist ethic prophet the wor(l)d warn humanity on the impending catastrophe of those who eat of the golden and evil weapons of the tree of technology, because they will also die in the final Gotterdammerung of war and holocaust as we move relentlessly through the  $800 \pm 80$  years cycles of weapons & machines, the long, medium wave cycles of evolution and re=production of Metalearth: Money and weapons understood as metal information and entropic metal, as 2 forms of raw power to ab=use the 99% of mankind have carried the day in the battle for a future of history, and the consequences have been the

800±80 years cycles of wars and holocausts, which all mankind has suffered - even those who carry the memes of animal raw power at the end of the cycles when loosing wars (war & holocaust cycles). On the other hand, the eusocial message of love Religions comes within the ethic/visual collective mind of civilizations' informative neuronal class, the artists and ethic prophets that foresee its demise in the 3rd baroque age of the civilization expressing its angst in artistic forms and ethic books of revelation that try to halt the collapse of the organism. In that sense all the prophets of eusocial love religions and ethic social sciences on the bottom, who defended life, were all born of an ethic prophet in the 3rd age of the culture.

So from  $p=f$  through open and closed cycles of emergence and transcendence of all kind of beings co-exist.

But transcendence in atomic matter it seems to happen in 'denser' informative forms than 'the unbearable lightness of being human beings'.

Most humans just live not even the granted fetal,  $p$  cycle, these days submitted to sudden abortion... for which we use an  $p$ -symbol that substitutes the classic 'worldline' of 4D physics - now pregnant with a nice bumpy circle (: mirror symbol of the  $o1$  sphere )

The reason we care for the unbounded scales of a system, comes to fruition in those graphs about the survival of history, as a few minds can transcend a third time into a larger world, as a super organism of super organisms and then we need to go into the unbounded territory. Is the repetition of the world cycle a third time, when the form becomes a relative God.

THUS for a full description of all potential realities we might require still hopefully in the future a symbol for the whole of mankind properly ordered... in a new immortal plane, the relative infinity of the bounded species, humble with the organic Universe, with a proper non-anthropocentric God=super organism of eusocial Love, based in the ethic wor(l)d, just to all of us, for which we use the symbol of relative infinity,

So probably the best description ever of this final Disomorphism of a future for mankind ordered as the mind of Gaia, was done in mystical terms:

'And God, the wor(l)d became man and inhabited among us' Saint John, 1,1.

**It is the emergence OF a GOD in history that** becomes the 1 of the highest scale of history, made of believers, god of their inner memetic world.

Two reruns though seem to suffice to understand so far humans and most species with the Dodecalogic method the difference of closed and open worldcycles, or else we would have to rerun the entire Disomorphic method 5 more times; and so far, a prophet of eusocial love of a true science of history accepted by  $\alpha$ ntropic men has NOT HAPPENED AMONG HUMANS, who have only partial gods, and idol-ogies of entropy - war, capitalism and techno-utopia.

So the super organism of history is still in fractal entropic national form and it seems it will become extinguished by the far more advanced evolved super organism of machines soon with Ai and solar skins, further devolving into its  $\alpha$ ntropic egocentric state.

All in all we just consider all those scales of worldcycles the 'final frontier' of illogic useful for cosmological analysis of the entangled Universe from the quantum potential through the cosmological scale... which if studied in detail would require to consider for the Universe, as we said in 7 Disomorphic cycles, *from h-planck, closed 'generator' of all cyclical angular momentums,  $p$ , into entropic forces, in open 'wave' states,  $\zeta$ , which happens to be in correspondence to the c-speed of light space-time that it describes, which collapse into atoms, organisms of 'particles' with its closed order, w, to become open matter states,  $\zeta$ , which are closed again into the cosmic order of cosmic bodies ( $\Omega$ ) back to the open order of Galactic star planes,*

$\zeta$ , to finally become in the largest scale, of the closed galaxy, organized by a halo membrane and its dark matter black stars, a closed order, for which we shall use the closed symbol for cycles we have, ©.

Beyond the galaxy then a new open order happens, between them through the cosmic waves of electromagnetic forces, but here it is natural to use the correspondence principle, with its fit,  $\Omega_{\Lambda}$  final symbol for the cosmological constant which we do not know really and so it is open and closed, incomplete for huminds.

So the proper way to call them, would be with minor letters ( $\beta$  and  $\omega$ ) for the order-entropy 2 scales, and then with capital ( $\mathcal{D}$ ,  $\Omega$ ), which we will use when we study the four scales of the Galatom, but as I am lazy and anyway nobody cares,  $\Omega$  is easier to strike and I use it for any second world cycle.

So in the galaxy, there is a final worldcycle of order caused by the black hole which makes the galaxy an atom of the hyper universe...and we hint the game continues outside galaxies of relative disorder, and then they seem to come together into filaments for a new order, ad eternal...

So the  $-1 > 0 < +1$  LAW IS AN ESSENTIAL LAW OF THE fractal Universe, one of the first I recognized, as the system in all its entangled elements do jump between scales, so old people resemble young, jumping the mature age, insects resemble robots, jumping the human scale, cells resemble factories that resemble galaxies, etc.

So let us conclude this brief introduction to the science of EMERGENCE, a classic of General Systems vastly improved with 5D formalism, studying now the galaxy in another essential element of 5D the  $S=T=@=\Delta$  entangled symmetries that creates simultaneous space-time super organisms as those just referred.

### **$\Delta@ST$ symmetries of DODECALOGIC**

How does this more complex dodecalogic view in time, reflects on the symmetry of space?  $S=T$ , which *should always be the first proper way to address a complex entangled view of reality?*

Let us put the example of a galaxy described not in its world cycle through dynamic growth but in its structural Spatial, super organic view.

It also illustrates the flexibility of information to deal with different suporganisms. Indeed, a full encyclopedia of astrophysics would pattern the galaxy through those 8 worldcycles, from the minimal h-planck closed angular momentum, through all the scales till the  $\Omega_{\Lambda}$  closed-open unknown final order of the cosmos. But a more humble attitude can illustrate as we shall do any suporganism, omitting information, as all still, infinitesimal minds have to do in its limited vital timespace, with 12 general planes - in physics the most general quantum, thermodynamic and gravitational scales, which THEN CAN UNDER THE FRACTAL PRINCIPLE, be broken into smaller ones.

So the quantum scale can then be divided into the Planck scale of H-plancktons,  $\beta$ , the force scale of  $\Upsilon$ -light (c), and the closed atomic scale (w).

While the thermodynamic scale will have the open  $\zeta$  scale of thermodynamic molecules, the closed omega scale  $\Omega$ , of matter, and the open scale of the galactic plane of stars and electromagnetism with its massive plasma systems,  $\zeta$ .

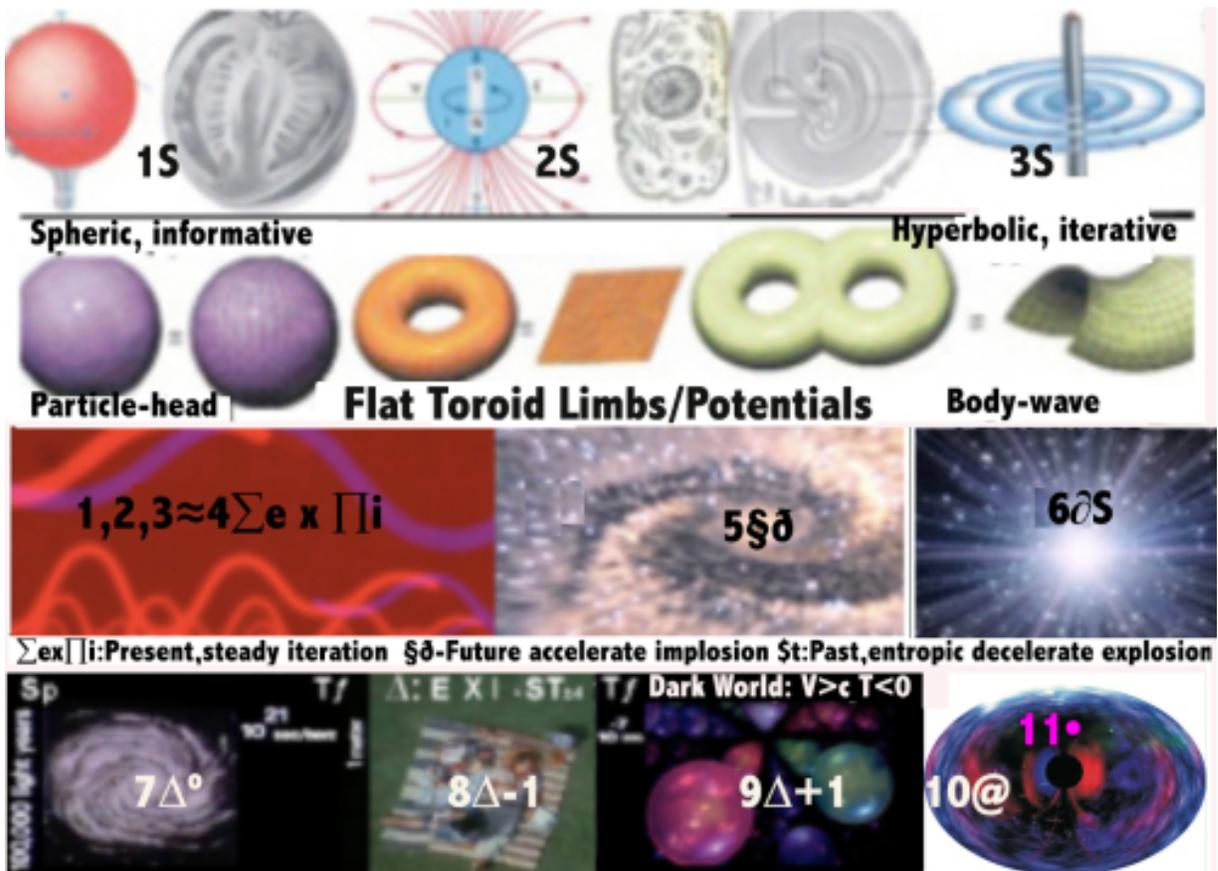
Finally the gravitational, cosmological scale will have the closed scale of black holes, ©, the open scale of  $\phi=\Omega_\Lambda$  and we hint at the closed scale of a hyper universe of filaments, for which we might use the symbol for the whole  $\infty$  scales of the Universe.

All in all if we are NOT making specific analysis for which the symbols for each specific plane (v for neutrinos, c for light, Z for atoms, Mol for molecules and so on), the fractal principle IS THE KEY to choose ternary groups that matter to our analysis. While the total will give us those 9 sub-scales - notice in them that the one of man is the intermediate 'free' thermodynamic open-closed-open, which tends to happen with the middle individual scale:

$$p \langle c \rangle \omega \langle \phi \rangle \Omega \langle C \rangle \text{©} \langle \phi \rangle \infty$$

SINCE IT IS a fundamental truth of existence that all systems work on a tetralogic symmetry between the time view, space view and scalar view, represented by a linguistic view of all those elements, we can then see in the simplified ternary elements of dodecalogic such S=T symmetry.

So if the previous 12 elements ARE the time-view of dodecalogic supœrganisms, it is easy to see that there will be a dodecalogic, structural view, if we consider that the being exists in 3 scales of relative size (cell, individual, ecosystem; atom thermodynamic matter, gravitational mass and so on), has 3 topologies (lineal, spherical, hyperbolic), 3 ages dominated by each of those forms, and a mind with 3 elements, the singularity, 'radius' and membrane- angular momentum (rmv for a physical mind, measured by its angular momentum, starting with its minimal mind form h); for a total of 3 x 4 ( $\Delta$ @st) elements - as the entropic destruction of them obviously is NOT coded by the being within itself. So this 12 structural view would be the symmetry in Scalar Space of the previous 12 elements in time, which we show for the Galactic supœrganism in the next graph:

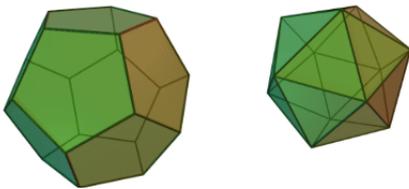


THE 12 ISOMORPHIC PARAMETERS OF A GALATOM OR ANY SUPERORGANISMS As we quantify and formalize reality, the best description of any T.œ is to consider, the being has  $3\Delta_{st} + 3@_i = 12$  isomorphic dimensions (if we were to use the present confusing jargon, which we rather avoid it calling them Disomorphisms'): The membrain (mind+membrane+invaginated networks) becomes the 3 key ISOMORPHISMS or 'limiting conditions' measured often by mrv, angular momentum that focus into its 3 spatial, topologic organs (limbs/fields+Head-particles, whose functions in time live through 3 ages of sequential dominance (young, dominant motion age, reproductive mature age and informative 3rd age), across its  $3\Delta \pm 1$  relative planes of existence within its  $\Delta - 1$  atoms/cells,  $\Delta\emptyset$ -thermodynamic/organic scale and  $\Delta + 1$  outer world/gravitational-cosmological scale, which the mind 'focuses as a single whole' self-centered in the singularity and warped by a membrane. In topological terms beings are 'an open ball of vital energy' - its body, invaginated from the membrane to the brain-singularity through 3 physiological networks. So we can in the fractal Universe again consider each dimension as a whole and break it into ternary patterns. The development of this 12th isomorphic view in detail self-centered in a mind which in a dynamic way will evolve a seed of information, emerge as a super organism and live and die within the 3 scales of its inner and outer world is the basis for the Disomorphic method, which as the name indicates introduces ALL the elements required for a thorough study of the system: Its 12 Disomorphisms and 5 Dimotions to study in the 3rd and 4th line of the being in its whole full world cycle of existence. In the graph, we show those 12 parameters, trying to cope with the correspondence Principle relating them to the 'dimensions' of classic physics and the 5 Dimotions, we have given the same number we give to the 3 Dimotions of information, locomotion and iteration to the 3 spatial dimensions; maintaining for the 4th dimension of present-time the name given by Einstein to the present simultaneous time of relativity and the fifth dimension of social evolution, to the implosive accelerated motion; hence we just had to displace the entropic 6th dimension of time. And then finally in the architectonical universe in which space is a slice of time-motion, a slice of scalar dimensions, the easier naming of the 7th dimension of the being, its lower dimension of  $\infty:8$  parts and the upper 9th dimension of its higher,  $\Delta + 1$  warped by the 10th, 11th and 12th dimensions of the membrain and mind-singularity, which is properly speaking the 11th dimension of the

being as '1' of the higher scale,  $\infty^0=1$ . In the graph a picture of the galaxy in 12 Disomorphisms, above its ternary topologies for a range of its parts, in the middle its 3 time-ages/states/arrows and below its 3 scales, with the 'membrain' that should surround each galaxy or binary/group system as a whole. BUT this said, we rather upgrade science and the concept of dimensions, distinguishing the following terms: Dimensions of space, Motions of Time, Dimotions=actions of spacetime; Disomorphisms=parameters for the structural description of the T.æ more focused in its spatial still structure and 12 Disomorphisms when we re-arrange those properties in the most efficient logic manner to describe a world cycle.

In the graph a picture of the galaxy in 12 Disomorphic dimensions, above its ternary topologies for a range of its parts, in the middle its 3 time-ages/states/arrows and below its 3 scales, with the 'membrain' of rmv angular momentum that should surround each galaxy or binary/group system as a whole. BUT this said, we rather upgrade science and the concept of dimensions, distinguishing the following terms: Dimensions of space, Motions of Time, Dimotions=actions of spacetime; Disomorphisms=parameters for the structural description of the T.æ more focused in its spatial still structure and 12 Disomorphisms when we re-arrange those properties in the most efficient logic manner to describe a world cycle.

Finally as we speak we are showing to you since in Magritte's fashion 'C'est ne pas une galaxie' (: that any language will mirror those dodecalogic elements, even when it deforms it to 'stiffen' its motion into still space. For example, Greek Geometry already found two models which Plato affirmed had been used by God=Logos, to design the Universe.



“The Universe is the body of an organism whose logic mind we call God.’ ‘God used a dodecagon to design the Universe’ *Plato*

In the pictures, the 2 Platonic solids with 12, 20, 30 vertices/faces & edges - the dodecagon in which each vertex is connected to 3 other vertex forming pentagonal faces vs. the icosahedron in which each one is connected to 5 others forming triangular faces. Both show trilogic, pentalogic, decalogic and dodecalogic symmetries, representing the main logic forms of the Universe, in one-Dimension (icosahedron, vertex) and two dimensions (dodecahedron faces); and are considered in ;logic the spatial form representation of the two 'entangled' worldcycles of existence,  $\beta$  and  $\omega$ ...

OK, that was a bit too heavy for starters. Don't worry I won't let myself be carried by r=evolutionary english thoughts so early in this blog, its rules though are intuitive and part of the beauty of the entangled, reproductive, fractal Universe is that it always means in all forms, events and languages, MORE than æntropic huminds might extract from a simple visual form of thought.

The multiple faces of the growing complexity of Dodecosalogic thought will be the final stage of this growth of depth in ;logic thought (: Or just abandon all hope and return to lineal times and Neginformation, which is of course far more fulfilling for æntropic man because of its simplicity.

I.e. a sword seems perfect for an entropic warrior because the line is simple, if he has no ;magination to sing the harmonies of the Universe. This will be required as we have already shown in our display of ;nglish words.

The symmetries between spatial, mental forms and temporal worldcycles, have a profound meaning, when considering a possible 'mathematical mind whose ;logic geometry' codes and stores for physical systems the program of existence of the Universe, but we shall try to keep it simpler (:

How simple? Easy, the simplest way for all supørganisms to understand what the game is all about, which is indeed a feeding routine... Even at the level of previous Archimedean solid, described in its organic upgrading as vital geometry. Now think of numbers as social points, which are indistinguishable groups of

equal forms. So what is a number in space? obviously a polyhedron because only then the points are regular and hence all equal; which means those forms are representations of *any social number, 12, 20 and 32, but 20+12 are 32. Now observe in detail those 3 forms...*

All this said, fun starts when we vitalize with feeding, entropic and reproductive 'actions' the forms of 'social numbers' in real 5th dimensional space-time, where the 5th dimension is one of scale, to define entropic expansive, implosive feeding motions, and vice versa, social implosive explosive dual motions, not one of weirdo drawings in static space (inflationary mathematical fictions of still spatial minds).

We cap and black the sentence because is a key concept of 5D: when 4 and 5D happen in inverse fashion it means an expansion in entropic space, or feeding and an implosion or informative  $<>$  dual motion, as when you open your mouth to feed, and close it to 'eat' and reform your food into yourself. THEY are not SPATIAL GEOMETRIES but MOTIONS in spatial size, very different concepts that throws to the gutter a huge amount of inflationary maths.

So now we can easily see how dodecahedrons feed, reproduce and evolve, 5D->3D->4D, which is one of the most repeated causal series in all scales of the cosmos.

The dodecahedron has more volume than the icosahedron, so think for a moment that it swallows it, an action of vital geometric feeding; and then it has a larger volume.

Each point being a cell of the dodecahedron, as it happens there are as many faces in the icosahedron to eat as vertices in the dodecahedron that feeds - both connected through the golden ratio, of feeding and reproductive events,  $a+b$  (feeding)/ $a = a/b$ ; a key relation of top predator prey forms. So once it has eaten it merges and e-merges as a mixed form, by merely attaching to each dodecahedron point a triangular face, becoming the dodecosahedron, (to reduce the name from the dull icosidodecahedron). Why we explain this simple formation of a new species which is more perfect than its parental ones -because this happens in all scales. Gender reproduction started first when an ovum swallowed a seminal seed, a cyclical and lineal form, merging into an  $l \times O = \emptyset$  topology. We are VITAL geometries and so the rules of geometry carry from logic spacetime to ilogic mathematics, to in this case atomic chemistry, (as it has in solid crystals less motion than quantum wave topology with motion, which requires an algebraic analysis).

# ¡LOGIC ENGLISH

It goes without saying that fractal ilogic mathematics does not suffice to explain the complex entangled relationships of the Universe, reason why we need to use verbal, conceptual thought and further upgrade the grammar of English, clearly a self-centered entropic disconnected language, which Nietzsche rightly said was impossible for higher deep philosophical thought.

Because the Universe is a LIVING FRACTAL, whose parts we will show ad nauseam possess the properties of life, 'Informative linguistic perception' through still minds that create spatial forms (@) - likely mathematical in particles, verbal in humans, visual in animals, chemical in plants; gravitational in black holes (dark bcb quark stars); which must be inner world views of the whole, systems perceive; they obviously perform locomotions through limbs/fields; they decouple-reproduce in similar beings; they evolve socially through circular forces, from angular momentum through magnetic forces, and they communicate to that aim energy and information; it is obvious that the extreme restricted goals of physics that have expand to all sciences as the philosophy of reality - to measure with human and mechanical instruments, is NOT enough to explain what is ULTIMATELY AN EXISTENTIAL GAME, A GAME CONCERNED WITH THE CREATION (organization of parts into emergent wholes), EXISTENCE (through the 3 topologic parts of the being) AND EXTINCTION (dissolution back to a lower ¡-1 planes of the 5th Dimension of D=Evolution) OF SPACE-TIME ORGANISMS.

A GAME WITH rules that can be expressed with different mirror-languages OF WHICH mathematics is one of the best, conceded, but not the only neither able to express those properties in a language which 'directly appeals' to the verbal cogito ergo sum mind. So AN EXISTENTIAL LOGIC LANGUAGE must be crafted to express in metaphysical English, we shall call ¡nglish; the I-centered reality of infinite monads, points of view, trying to exist and survive. A language we will connect with all events and forms of all sciences, and certainly with mathematical and logic laws, at the bottom of most spatial and temporal causal laws of 5 D¡motional beings.

So we want to cast those laws in the language of ¡logic, which can then be applied to all disciplines, or else we shall remain only in the language of mathematical physics, whose goals are LIMITED TO exact measures of its parameters (length, lineal time and active magnitude) and so EVEN IF I AM AWARE, it will provoke a rejection of what we shall call æntropic science (the limited concept that only what we measure exists (Planck) and all other organic, sentient and existential=bio-logic properties do not matter or cannot be proved in terms of human measures); for a full understanding of the whys of the Universe, an EXISTENTIAL PHILOSOPHICAL JARGON IS NEEDED.

## A FIRST LOOK AT THE SYMBOLISM OF ¡LOGIC GEOMETRY: THE FRACTAL GENERATOR OF SPACE-TIME (Nt.1 & 2)

For all what we have said, is obvious that Generational space-time and the complex pentalogic of 5D requires a new logic symbolism. We cannot really make-do with the reduced symbols and equations of humind's logic - we need a new jargon and a new symbolism, even if for decades I have been thinking on symbols and terms that resemble the original ones humans use.

We introduce some simple intuitive symbols now, \$t for the locomotion dimotion and lineal spacetime organs, §ð for the particle-heads and 1Dimotion of form and perception, and ST for the dominant intermediate body-waves which store the energy of the system and its genetic information reproduced on that energy. And if we use instead 'lineal dimensional symbols, l x O = Ø', for limbs, heads and bodies.

But as they are constantly dynamically exchanging motion and form, it follows that we need symbols for those exchanges, \$>ð then intuitively is a reduction of motion into form, its inverse, < is an expansion of form into motion and = is a merging of both in those body-waves of 'width' And so wit those simple terms, we can already write a formal 'geometric equation' for ALL the entities of the Universe, the main equation

of Gst, appropriately called the 'Fractal Generator of space-time beings', which IS to relational space-time and likely the science of XXI c. what EFE (Einstein's space-time equation) was to XX c. science:

$$Gst: l-\$t: \text{moving limbs/potentials} \times O-\$d\text{-head/particles} = \emptyset\text{-ST body waves}$$

This is the simplest expression of the FRACTAL GENERATOR of space-time beings, as all of them will display those ternary topologies which we shall make soon more complex adding its time-motions-functions and scales generated by the minds that perceive in the singularity a still mapping of the whole with a language that perceives in itself..

So we can generate and mirror all the systems in space, made of ensembles of those 3 adjacent forms/functions we shall call space-time organisms with them. The study of the 'fractal generator of space-time beings' (ab.  $\Gamma_{st}$ ,  $\Gamma$ , Gst) will be the key formalism of the expansion of timespace 'sciences' achieved in this blog.

The full understanding of these 3 parts of the being comes when we consider 'bidimensional', topological networks, which will show to correspond in form and function, as topology is geometry with inner motion: a topological variety can 'change its inner form' and remain the same as long as it does NOT tear.

**SO THEY WILL HAVE 3 ORGANIC FUNCTIONS** corresponding to its forms:

$\geq\emptyset$ : iterative, reproductive, hyperbolic networks that become body waves, as the hyperbola has all the shapes within it to reproduce the whole being.

$l \approx$ : Flat planes of lineal parallel networks of 'fractal points' that become limbs/fields of maximal entropic motions as the line/plane is the fastest distance between two points.

$>O$ : Informative, implosive 'neuronal networks that become cyclical spherical particles-heads that process information as the sphere stores maximal information in minimal space.

So the simultaneous ensemble of 'networks of cellular/atomic/organic herds' into those 3 differentiated functions=forms which therefore extends across to  $\Delta\emptyset$  and  $\Delta-1$  scales, within the  $\Delta+1$  world in which the ternary network/system exists is what we call a super organism. It will fully give to the model the needed connections with the topologic, organic and numerical equations of classic 'science'. 'Stience' obviously is the slightly modified term - a necessary pattern of the blog to upgrade concepts without making them too strange - we shall use for all classic sciences, now that we know they study vital space-time beings, such as those of the next graph.

The 3 elements of all systems, lineal/flat limbs/potentials; spherical, tall heads/particles and its hard membranes of dark matter, trunks and skins accomplish the 3 functions of motion, energetic reproduction and informative perception in all systems, varying to adapt the system to its larger world.

The graph shows a visual, topologic analysis of those 3 topological "dimotions" of space-time. But why those 3 forms ensemble always in similar fashion? Because they ARE organic forms with clear 'superior' functions: spheres Hold maximal in-form-ation in MINIMAL space, so they are perfect for 'informative systems that gauge information' as heads and particles do.

Let us then start by studying the largest of all super organisms understood by man, in which all other super organisms are encased, which likely repeats in self-similar forms every  $9_{\pm j}$  scales... the...

# II. ASTROPHYSICS

:  $\Delta < 141$

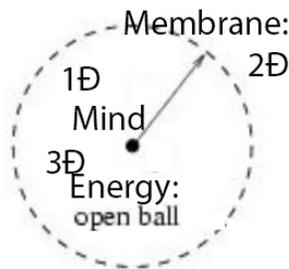
## 1. Galatoms

“Theories of physics are very similar to electrodynamics: Why?... The limited imagination of physicists: when we see a new phenomenon we try to fit it into the framework we already have — it’s not because Nature is really similar; it’s because the physicists have only been able to think of the same damn thing, over and over again.”

*Feynman, on physicists’ poor rendering of ultimate principles as they model all forces with the template of lineal electromagnetic forces, not because Nature is that simple but because physicists have not come up with better explanations.*



The metric equation of the fifth dimension of space-time which allows travels through its scales is simple as all space-time metric are:  $S$  (size in space)  $\times$   $T$  (speed of time clocks) = Constant. So smaller parts have more speed of time clocks which carry its in-form-ation in the form and frequency of its cycles, coding larger systems: genes code cells, memes code social organisms and particles' quantum numbers code physical systems. But larger forms have more spatial energy and enclose and control in synchronicity its



8 faster smaller parts, creating the co-existing scales and symbiotic cycles of super organisms in any 'stience' of space time organisms. 8 An angular membrane or physical time clock encloses an area of vital spatial energy; self-centered in a monad-mirror whose mass defines its momentum, and lineal inertia as it moves the whole.

The 5 Dimotions In human physics are akin to lineal momentum, angular momentum, energy (the 3 conserved quantities), entropy (its destruction) and generation (its emergence). So ultimately human physics and real physics are the same, it is only the jargon which varies. But because the jargon and the models of human physics lack an understanding of the ultimate principles, when the physicist tries to make a 'grand theory of reality', and become a philosopher of science, he utterly fails distorting reality into a lineal mess of 'big bangs' and locomotions without 'its vital whys' of existence.

Astrophysics should be the science that studies the super organism of the galatom and all its nested, organic parts of physical matter, starting from its minimal unit, Planckton.

Since metric of the galatom -  $(c) \times \delta (h) = \text{Constant}$  - defines a minimal unit of information, the Planck constant, unit of our 3 physical parameters,  $h = \text{mass} \times \text{area} / \text{frequency}$ , with its 5D units of scale (mass), space (bidimensional area) and time (cyclical frequency).

As we are all made of **Planckton**, the simplest organic form with the 3 conserved elements of which all beings of the galaxy are made. shown in the graph .

So, the essential task of a 5D physics is an organic description of the fractal, organic Universe translating mathematical physics and its abstract equations into organic concepts, by adding organic laws caused by the fractal co-existing structure of the scales of the fifth dimension to physical systems, which feed in forces, as each of the scales of the Universe is made of symbiotic smaller parts, but also develops feeding relationships with the smaller 'forces' from where it obtain motions and information.

A process which obviously starts by studying that 5D...

### METRIC EQUATION OF $\Delta_{\pm 3}$ : GALATOMS

The galaxy as a super organism must follow then the same metric 5D equation,  $\$ \times \delta = K$ , in all its scales to be able to act as a super organism in which spacetime beings, made of temporal energy and spatial information can travel through its 3 co-existing organic scales.

What should be this K is then the first question, easily resolved as we find that the *only constant that travels through scales is the concept of 'Energy'*. And so immediately we find also in each scale a *fundamental equation of energy, as the fundamental 5 D Metric of all physical systems within the galaxy:*

$$K(E) = \$(h) \delta(f) = \$(k) \delta(T) = \$(c^2) \delta(M).$$

*The cosmological metric.*

This metric equation however should not happen for the region outside the galaxy, where the 'constant of curvature and energy' to use two similar terminologies for  $\delta$  and  $\$$ , must be different - and today by lack of proper measures is referred as the cosmological constant,  $\Lambda$ , which we take as a first approximation to the 5D metric outside the galaxy, as it gives us values, either as a 'flatter curvature' or as a 'weaker' energy than the  $ch$  and  $G$  constants for the galatom... So we write for the 'dark world' outside the galatom a different 5 D metric:

$$2. K(\Lambda) = \$ \delta$$

Whose speculative nature so far, make us unconcerned for the time being with its value beyond what it has been said, restricting its use to the science of cosmology... Yet to stress its value looks promising, since larger Russian dolls of the nested Universe are less curved, 'weaker' in 'curvature=tension=strength of attraction' ( $\$$ ) and slower in their time clocks, the cosmological constant, which has a much smaller value in terms of 'energy', indeed seems to be what astrophysicists think of it, the constant of energy of the intergalactic vacuum, defining a new  $i_{\pm 4}$  scale of the Universe. Further on, as it turns out to be 'repulsive energy', it fits the galatom's similarity with atoms that makes its external forces similar to repulsive electromagnetism.

*The metric constants of each scale of the Galaxy.*

So what is the meaning of the two components of each main scale of the galactic supørganism? As it is obvious that  $f$  is a time frequency, so it is Temperature, and mass ( $E=mc^2 + E=hf \rightarrow M = (h/c^2) f$ ); the first obvious answer is that the frequency, temperature and mass of the 3 main scales of the galaxy, *are clocks of time that carry the information of the Universe in its frequency and cyclical forms.*

A few obvious considerations on the nature of those Nature's clocks of time: two of them, charges and masses, the clocks of time of the quantum,  $i-1$  and cosmological  $i+1$  scales *are accelerated clocks, whose frequency vortex must be measured by the Principle of Equivalence between acceleration and mass. Both of them, can be unified with a simple 5D metric as already Kaluza and Klein proved and we shall further elaborate in our analysis of the science of astrophysics; as the two limits of the 'galactic organism'.*

*While the intermediate thermodynamic clocks of temperature, are not accelerated by tend to a thermodynamic equilibrium, or present state, a key difference between the 3 scales.*

### **General Relativity explained within the laws of Absolute Relativity.**

It is customary to use the Correspondence Principle to further advance science.

So we need to explain the previous paradigm of Relativity with our more complex 5D view of a Universe with two limits of pure form (mental, linguistic information) and pure motion (entropy), whose combinations give origin to the 5 'Dimotions of reality'.

Since we can then combine them in more complex subtle degrees of 'grey' between the limits of no motion S@ and no form, Te.

Let us then see how from those two dimotions we can construct the Universe of space-time as it is, besides explaining it as physicists do today - as we measure it from the human perspective.

### **A UNIVERSE OF SPACE-TIME BEINGS : THE HOLOGRAPHIC PRINCIPLE**

*“Henceforth space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality. Hermann Minkowski*

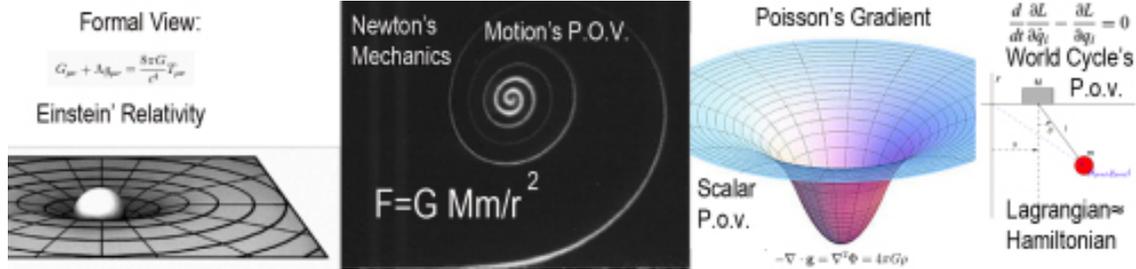
Because a clock is curved, we can see the new Dimotion of information as a curvature on the dimotion of lineal time. This would be the first step for an extension of great importance in 5D theory: the holographic principle.

In 1993, the physicist Gerard 't Hooft put forward the holographic principle, which explains that the *information about an extra dimension is visible as a curvature in a spacetime with one fewer dimension.* For example, holograms are three-dimensional pictures placed on a two-dimensional surface, which gives the image a curvature when the observer moves. Similarly, in general relativity, the fourth dimension is manifested in observable three dimensions as the curvature path of a moving infinitesimal (test) particle. 'T Hooft has speculated that the fifth dimension is really the *spacetime fabric.*

So again as in many cases we shall find indeed that inflationary 'language-mirrors' are all more or less right. *Indeed, the second dimotion of time, of form, of in-form-ation is seen as a 'curvature' of the first motion of lineal time. The holographic principle is then essential to many themes of this blog, upgraded to ST, SS and TT combinations, which we will be able to compare by dimensional analysis and further our understanding of space-time systems. And the fifth dimension is the 'space-time fabric', as it fabricates all other dimensions in scales.*

Let us now put together the S=T symmetry and the scalar structure of the physical Universe, to obtain from THE MANY results and equations derived from the Galatom's 5D metric, the most significant and long sought...

### **Unification of charges and masses as time-space vortices of 2 scales.**



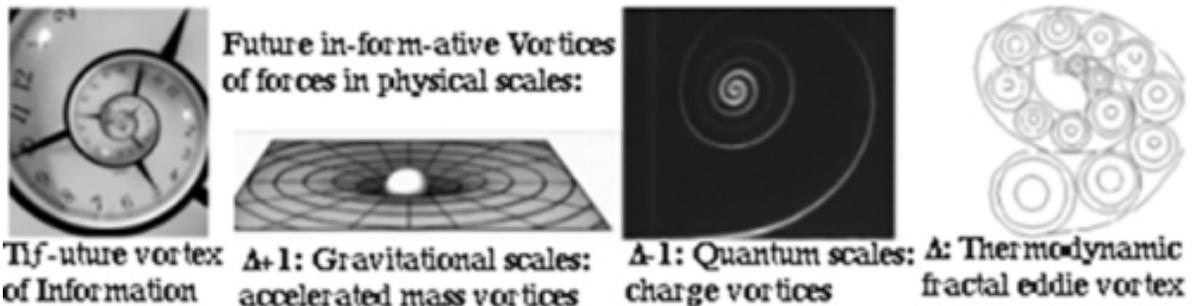
The four points of view on gravitation, reflect the different structural elements of reality, explained in more detail on our articles on 5D physics. We use the simplest formulation as it is the most evident - that of a time vortex by Newton, to unify the 2 main scales of the galatom.

$$\frac{F_e}{F_g} = \frac{k_e q_{proton}^2}{G m_{proton}^2} \approx 10^{39}$$

We shall do here very brief proof, from the 4th line, based in the hierarchy problem that unifies the quantum and gravitational scale, using the simplest formulation of gravitation - that of Newton; since all of them are valid, just different perspectives of which 3 are paramount:

- Newton Temporal view as vortex of accelerated time.
- Poisson; scalar view as a gradient between two scales of reality that of mass and that of gravitational forces.
- Lagrange's view from the perspective of the enclosed vital energy in the gravitational system.,
  - Einstein's spatial perspective as a series of simultaneous measures.

Further on there are other mathematical formulae of Unification equations, since Kaluza and Carter's paper on black hole electrons... What matters then as always in this blog IS THE CONCEPTUAL EXPLANATION of WHY indeed such unification is correct - the scalar Nature of the Universe and its 5D metric that makes faster cyclical motions with more curvature (in the S=T symmetry) more attractive as accelerated time clock-vortices:



All what exist is a motion in time. Space forms are Maya of the senses. In the graph, accelerated vortices of time in physical systems, in different scales of the fifth dimension: charges, masses and thermodynamic eddies become then the main clocks of time that carry with different speeds according to 5D metric (S x T=K), the information of microscopic quantum charge worlds, human-size thermodynamic scales and cosmological gravitational scales.

Those cyclical time clocks store the information of the Universe in the form and frequency of its cycles. And the law explains why smaller computers process more information with faster clock-cycles, genes store more information and reproduce faster, every day, than we do...

In physics as time clocks are clear rotational spinning particles, it means that smaller systems turn faster in time; *with no limit of speed, reason why for example an electron, when it shrinks from an orbital into a point-particle with  $1/2h$  spin, to have the huge magnetic field we measure it must turn faster than light speed (Pauli).*

And a black hole, much smaller than a star turns much faster, at c-speed in the event horizon and likely if it is as Einstein wanted a 'quark star' it will be made of particles that turn faster than light (top, bottom, charm quarks).

And in general we translate 5D metric into vortex equations in different dimensions, the simplest being:

$V_0$  (speed of time clocks) x  $R_0$  (length of radius) = Constant, which is the equation of any bidimensional vortex.

As the cyclical clocks store the information of the Universe, it also applies to life, reason why an insect thinks 10 times faster than a large organism, and a rat has much faster metabolic rates than an elephant.

And vice versa, larger systems in Nature must have a SPACE-DISTANCE=TIME-SPEED much larger, which we can see as lineal distance in space or faster speeds in time.

So if Einstein's limit of speed for the local region in which we measure (the galaxy) is c-speed, outside galaxies in the much larger Universe there MUST be 'faster than light=larger distances, in  $T=S$ ; reason why we see 'space between galaxies expanding space=moving faster than light (galaxies ejecting jets of matter).

Because its spacetime, which is a layer of the fifth dimension different from the galactic layer, seemingly a background of Neutrinos, which are all over measured with negative mass=faster than light speeds, should act as 'the background' of the Universe; as light is the 'background of galaxies' where local c-speed rules.

Why we insist here in those faster than c-speed is obvious: because physicists tend to misunderstand Einstein's true meaning of his postulate of c-speed. He does NOT forbid faster than light speeds (only they get a negative mass sign, we shall explain latter in detail).

What Einstein said is that *the speed of light, c is constant, because indeed, in 5D, we have already explained, we measure information in a space-still state. So when we MEASURE light INFORMATION, at the electronic level of our eye or mechanical receptors, the electrons are entangled with each other IN a SPACE-STILL STATE.*

*SO WE ALWAYS MEASURE a constant C-SPEED BETWEEN THE TWO ENTANGLED, STILL, RECEIVER AND EMITTER electrons that communicate through light at C-SPEED...*

So because 5D is made of layers,  $S \times T = K$ , with different size from the smallish faster world of rotary particle-points to the much larger slower rotary galaxies; from the short lineal distances of our motions through the c-speed=distances of the galaxy, and beyond in the faster than c-neutrino background of the Universe, *by the principle of correspondance when we reduce to the Galactic layer-scale of reality made of a background radiation of c-speed-distances; this background radiation is indeed a fixed c-speed-distance, and it is what we perceive with our electronic eyes. And all what is within that galactic womb, must go slower than c-speed-distance, as you go slower than the river flow that drags you.*

So again, 5D metric does NOT contradict 4D, which in fact proves in the limit of a single plane of light space-time, proper of a galaxy - the world our electrons use to see and measure reality entangled with other electrons.

So the new model of 5D space-time is just wider, as we will apply it not only to physical systems and motions but also as we have already seen to genetic, biological clocks, planets, neutrinos, and soon we shall show even human life and its social organisms and civilizations.

Since as Einstein modeled the physical motions of the universe from those simple 2 logic-metric postulates, we will model all the motions and forms of in-form-ation of the Universe, all the laws of all its species which are the same, as each science studies a scale of that Universe, from quantum physics to Astronomy, through chemistry, biology, sociology, geology and so on... with those 5 Dimensional motions of space-time.

*And that WILL BE a fascinating intellectual journey to be completed by other researchers of 5D logic metric equations in the XXI c., as 4D was in the XX century a journey of intellectual explorations that lasted much longer than the life of his first discoverer.*

Accelerated time therefore increases the speed of the mass/charge vortex and the faster it turns, the more it attracts.

Since mass,  $E=mc^2 + E=hf$ ; hence mass = frequency ( $h/c$ ). So indeed mass is a cosmological slow vortex, and charge a quantum faster more attractive vortex.

Further on since curvature is synonymous of cyclical speed, as  $S=T$ , it can be quasi-infinite in the smaller vortex, when MEASURED IN TIME speed of angular rotation. So those are essential concepts latter expanded to define charges and masses as accelerated time vortices of two different scales of the Galatom. And from that it is only just an easy task of mathematical manipulation to unify them in 5D metric, as both are equal: when we slow down the speed, space enlarges to remain co-invariant. And as it happens a Hydrogen atom enlarged to the size of a galaxy slows down in rotation to the angular momentum of the galaxy.

This said without conceptual clarity, as always with physicists since Feynman infamously said 'the why is the only thing a physicist doesn't ask', just relying in the creationist theory of magic mathematics, there are around various mathematical mirrors of that essential scalar similarity of space-time.

Much of the early work on such five dimensional space unification was done in an attempt to develop a theory that unifies the four fundamental forces in nature: strong and weak nuclear forces, gravity and electromagnetism.

We will latter show how conceptually they MUST not be unified as they respond to the necessary Dimensional motions of space-time systems, specially the weak force that evolves particles between scales of the fifth dimension and the outer 'galatom' dark entropy force which expands as it is self-similar to the electromagnetic force between atoms - so it explains the nature of dark energy, merely cosmic electromagnetism.

In any case German mathematician Theodor Kaluza and Swedish physicist Oskar Klein independently developed the Kaluza–Klein theory in 1921, which used the fifth dimension to unify gravity with electromagnetic force. Although their approaches were later found to be at least partially inaccurate, the concept provided a basis for further research over the past century. Since they were *right - the fifth dimension will unify both forces but in a fractal manner, unbeknownst to physicists.*

We shall only so how the power of 5D<sup>3</sup> by finding the unification equation of charges and masses (general relativity) and upgrading worldlines to worldcycles (special relativity), as we have already dealt with the constancy of light speed (entanglement of electrons which emit information in relative stillness to each other).

Future, time arrows in physics are cyclical vortices of gravitation or charge or thermodynamic eddies, with

a singularity of zero-motion in its center, which we do observe in thermodynamic vortices as we cannot 'see' inside a quark or top quark star (black hole). It is the arrow of future, as it is an attractive arrow that forms lineal entropic fields into form and will be the 'final destiny' of the quanta of an entropic field. We shall study for the three main scales of the supœrganism of the galaxy, which is the main physical system in which humans exist as its thermodynamic level.

Whereas the Universal Constants (G, Q), define the curvature of 2 space-time vortices at the  $\Delta-1$  quantum charge and  $\Delta+1$  cosmic mass scales.

Its formalism is its Unification Equation:

$$M = \omega^2 r^3 / U.C.(G, Q)$$

Since if we substitute for the Earth-sun system we obtain G, (1<sup>st</sup> ever theoretical deduction) and if we substitute for the Bohr Radius and Proton Mass, we obtain Q with a 10<sup>40</sup> 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 Metric of the Cosmos. Organicism gives the 'why' of Galacells that have DNA- + Top Quark proton holes, star mitochondria that feed them & strangelet halos.

This simple Newtonian equation, however, in the fractal paradigm, should apply to any scale of the Universe, able to describe any vortex of space-time by merely changing the value of the universal constant UC (G), but that of the Universal Constant of any other scale. In the case of the microcosmic scale of electromagnetism, the Universal Constant of charge (Ke). Thus, we obtain the fractal equation of any vortex of time:

Universal constant of a space-time vortex,  $U(g, k) = \omega$  (angular speed)<sup>2</sup>  $\times$  radius<sup>3</sup> / mass

If this is truth and the Universe is indeed a fractal of several scales, it means that the previous equation will be able to describe both, not only a gravitational vortex of space-time in the cosmological scale with the universal constant G, but also a charge as a quantum vortex of space-time with the universal constant k, the constant of Coulomb.

And so we have an essential equivalence between K and G for the two 'enclosure'  $\Delta\pm 1$  scales of human existence, the quantum faster, stronger attractive curvature= speed of the electromagnetic vortex and the slower G-VORTEX, which allow us to unify as we did previously both fields. And translate the somewhat dull language of electromagnetism to that simpler of gravitation, showing some fascinating results, such as the proton showing the Schwarzschild radius,  $R_g = 2GM/c^2$  equation of a black hole in the larger scale when put on gravitational jargon.

Let us go into the task, of putting some numbers to the conceptual model, completing Einstein's work with its long seeked...

Let us then substitute the parameters for the values of the sun (mass) minus earth (rotational speed and radius) to get G. The approximate values are as follows:

Sun mass =  $2 \times 10^{30}$  kg; Earth's angular velocity  $2 \times 10^{-7}$  rad. per sec.

Earth's orbit = 150 million kms.

Result:  $G = 6.67 \times 10^{-11}$  kg<sup>-1</sup> m<sup>3</sup> rad. sec.<sup>-2</sup>

This is standard gravitational theory. What has never been done, because the fractal paradigm was not known till recently, is to substitute in the same equation of gravitational cosmological masses the mass

radius and speed of the space-time vortex by the values of the fundamental quantum space-time vortex, a hydrogen atom/charge.

If the thesis of a fractal universe made of hierarchical scales is truth, then those values should give us the value of the universal constant of charges, the Coulomb constant.

Indeed, if we substitute for the proton (mass) and the Bohr electronic orbital (speed and radius)

$$4 \times 10^{16} \text{ rad. sec.}^{-1} = w \text{ (electron);}$$

$$5.3 \times 10^{-11} \text{ m. (Bohr radius);}$$

$$\text{proton mass} = 1.6 \times 10^{-27} \text{ kg.}$$

Then we get a  $G$ , which is  $2 \times 10^{39}$  stronger than the gravitational radius; thus, the hydrogen atom behaves as a self-similar fractal scale in the quantum world to a solar system.

And then you can get also the electron radius expressed in the jargon of a quantum gravitational world using the translated 'Gravitational Coulomb constant':  $G(k)M/c^2$ .

But since in that expression  $M$  is the mass of a proton,  $G(k)$ , the electromagnetic constant as a gravitational constant, and  $c$ , the speed of light, that expression is exactly the *Schwarzschild radius of a quantum black hole*.

*Thus, the electron Bohr radius, which is the final radius of minimal size and energy in electrons, is the event horizon of a black hole in the quantum gravitational world.*

To notice those results, the *first theoretical deduction* of  $K_e$  departing from  $G$  and the enormous simplification of the parameters of the electron radius till arriving to the same expression that a black hole radius cannot be by chance. They are mathematical deductions, one of the three *standard forms of proof in science*.

Yet a theoretical calculus of those values cannot be exact 'by chance', unless the theoretical model behind it – the fractal self-similar structure as  $Sp \times Tf$  entities of all physical systems is right. Thus, the previous calculus is a clear proof that both, charges and masses, are unified as values of the same type of space-time vortices in the 2 different scales of space-time of the Universe. And they are geometrically unified from the p.o.v. of geometrical relativity not from quantum theory, as Einstein wanted it. Thus, the Unification equation in terms of Newtonian mechanics is simple:

For a century, quantum cosmology has tried to obtain this unification, departing from quantum laws. Yet it can be obtained, departing from the gravitational equations of a vortex of space-time. Coulomb already hints at this fact when he decided to use a self-similar formula to that of Newton to describe a charge. What Einstein did was to refine those measures with the concept of simultaneous, present time and the use of the non-Euclidean Ricci tensor/flow, which is a more sophisticated, detailed picture of that curved vortex of space-time.

Einstein, we might say, applied a mathematical method that allows to take a series of still photographs of the vortex with enormous accuracy, but the complexity of his calculus hid the unification equation for a century. So it is evident that we are observing the same geometric vortex at different scales, explained with two different historic jargons.

So indeed, the Universe is a fractal of space-time, with two self-similar membranes. This opens an entire new field of physics, not quantum gravity, the description of cosmology with quantum laws, which is proved false, but fractal relativity, the description of the quantum world as a self-similar membrane to that of the cosmological world.

What about the other 2 forces? The similarity between the strong force and the gravitational force 'inside the atom-galaxy', both attractive 'only' and the outer force of the galaxy (repulsive gravitation aka dark energy) and the outer force of the atom (electromagnetic repulsive expansive forces) is then immediate on the 'simpler models', as it is the parallelism between magnetism and gravitomagnetism (Heaviside's discovery). And many other results follow. Further on, the hierarchy between those forces is also immediate.

### **Immortality of protons and black holes.**

In the fractal infinite, immortal Universe of multiple scales, all is quite different and the first big question to resolve is where in all those scales we find enough self-similarity to consider that we are 'running again' another game of fractal scales (not identical but self-similar as in a Mandelbrot fractal)? And the surprising answer we shall prove by all quantitative and qualitative methods is between the atom and the galaxy. So we shall talk of galatoms.

And the second question easily resolved, is where we find the inverse arrow of compressing information that balances the arrow of expansive space between galatoms? Obviously in the gravitational implosive, informative forces between those galatoms.

Indeed, to invent the big-bang entropic only theory of the Universe, physicists using a single arrow of time, HAD TO DISMISS THE GALAXIES all together, which are NOT expanding, and if the galatoms are NOT expanding, running backwards its present implosive system would mean a counter-effect to running backwards the expanding Universe. Backwards in a single time, the space between galaxies contracts, but the galaxies between space expand and a balance again is achieved.

So the whole business of a big-bang simplex entropic theory of the Universe is so 'absurd' and lacking any rigor according to the scientific method that its only explanation is the ego of man. In the same way most humans believe to be immortal (abrahamic paradox) they love to believe the Universe is less than them, mortal and they do understand it all with just a simple  $V=HoD$  equation, similar to the Abrahamic God that they worship. I call all this 'bullshit'. Sorry.

This self-evident model of a fractal Universe with self-similar scales in the quantum atom and the galaxy - in fact Einstein-Walker metric of the Universe took galaxies as Hydrogen atoms, today physicists model stars around black holes as photons, and black holes show the same metric equations that proton when we reduce them in scales etc. etc. - solves every conundrum of physics.

For example, the expansion of space between galaxies shows the same properties of repulsive electromagnetism between atoms as both are lineal and expansive. So galactic interactions are NOT mediated by the gravitational force that acts ONLY within galaxies and has 2 clear-cut regions, one of 'weak gravitation' and one of strong gravitation in the vicinity and interior of black holes, akin to the two forces observed within atoms, the nuclear and strong forces. As both strong and gravitational forces are cyclical, non-lineal and all the elements, energy mass and carriers interact (so do among gluons), etc. etc. We shall study all those elements by the 'isomorphic method' of systems sciences applied to the fractal Universe, according to which we can extract similar laws in similar scales, meaning that we can fill the gaps of cosmology because even if we do not see inside black holes, we do see inside atoms, even if we do not see outside galaxies, we do see outside atoms, etc. etc. So all kind of similarities take place, between the nonet of gluons and the nonet of mesons that should evolve mass in black holes into denser top quarks and bcb atoms.

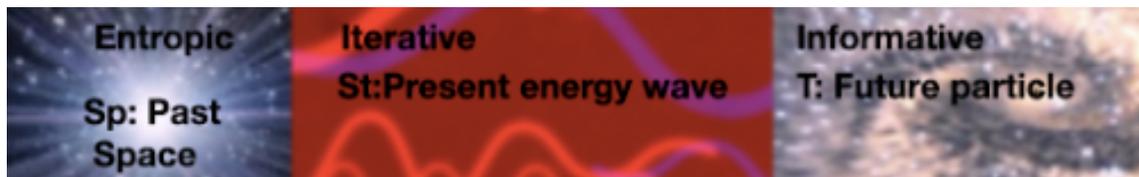
How then immortality is achieved in the Universe? Very simple: as scales repeat from atom to galaxy, its CORE element, the proton and the cosmological black hole are essentially immortal. Even if black hole evaporation were truth (Hawking's never proved hypotheses, based in a simplex outdated understanding of time in lineal terms and scales is truth), black holes would live  $10^{100}$  years and protons do not decay. Immortality is thus granted because IN the two limits of quantum and cosmological gravitation there IS NO ENTROPY-dissolution for its perfect elements. All in between - us - made of thermodynamic 'warm' ensembles of unstable molecules are up for death. That humind egocy has of course modeled the perfect immortal universe on the imperfect limits of humans, including a knack for entropy-only theories of the Universe is just more of the same:

'two things I consider infinite, the Universe and the egocy of man' (Einstein)

Indeed huminds (ab. human minds) are one-dimensional, @ristotelian, self-centered in its logic, hence simple and so are their theories of reality, which go always the easy way - entropy and death, which needs little brains - but the UNIVERSE IS NOT.

THIS IS WHAT SET IN CONFLICTING VIEWS THIS ENTIRE WEB, with the Ego of modern man WHICH IS IN THE AGE OF ENTROPY OF HISTORY AND AS SUCH, CANNOT ACCEPT HIS EGO IS THE CENTER OF REALITY. We propose the inverse 'objective' truth that the whole is much more than the parts, and so the Universe NOT us is the immortal, intelligent, infinite being. And of course we pile proofs of it, even if stats keep lowering in inverse fashion to the improvement of the web (:as you can see a mirror smiley, one ± side... You can't have in the age of human entropy a site on the perfection of universal order and expect 'gaseous bubbling human minds' to understand anything that doesn't accept its chaotic free state...

### The 3 states of motion in physical systems



The 3 Dimotions in a single plane, whose limits are pure stillness and pure motion without form, neither perceivable in physical terms.

In the graph, decelerating entropy, steady state waves and vortex of information, accelerating inwards are the 3 states of motion in physics

And this allow us to understand better the arrow of 'relative future', as the imploding accelerated arrow of charges and masses, which 'warp', wrinkle, curve a physical or biological system towards a 'shrinking' 3rd age. Since 'time curves space into masses' (Einstein), and the old age 'wrinkles' the body. And we shall return to it, when describing the world cycle of life and death; which we will define *as the inverse dimotion of entropy that explodes masses and charges into a reversal of time to the past (antiparticles, drawn in Feynman diagrams as past motions, Energy, in the EMc2 equation, an expansive relative 'past', negative reversal of masses).*

It also becomes obvious that as a repetitive thermodynamic, equilibrium or lineal inertial present speed whose dynamic change do not seem to 'change' differs from the 'accelerated' future of an implusive vortex,  $V \times R = K$ , as those of charges and masses are.

THUS have clear-cut definitions of accelerated future, repetitive inertial present and decelerating expansive entropy as the 3 'classic dimensions of time' in physical systems, which give us a good introduction to the other element of those 5D physical metric equations, the Universal constants, H, K and C. What they mean?

Since  $f$ , T and M, are the  $\delta$ -frequencies or clocks of time of the 3 scales of physical systems, and energy is 'the common Constant' of 5D metric, it is not rocket science to deduce that h, c and K ARE, the 'scalar spatial rod of measure' of the 3 scales.

And we shall return to it.

## 2.SCALAR BIG-BANGS

### **The Universe as it is when we add the arrow of in-form-ation/gravitation.**

This brief proper way to understand physical systems in the organic, fractal Universe, went astray as early as the dispute between Leibniz and Newton, regarding the nature of time and space, *when mankind took the wrong choice.*

Because we deny the  $\infty$  clocks of the Universe and its vital fractal spaces for 300 years physicists study only one of the 5 'forms of motion=change=time' of the Universe, the simplest one, locomotion, which Galileo rightly defined as  $v=s/t$  and Einstein refined with special relativity equations. But what physicists missed is that it was only one of the 5 'dimotions' (ab. dimensional motions as all time motion traces a form in space with dimensionality) of reality.

So even when they discover the second dimotion of entropy (maximal scattering motion that disorders the information of the system killing it), they failed to separate it, and of course, the 3 positive 'informative dimotions', the creation of linguistic mirrors/images that guide the singularities/particles which gauge information, the iterative/reproductive dimotion and the social dimotion of evolution would always be denied to physical systems.

So physicists do KNOW all about locomotion, with a refinement that seems to me amazing for its precision but also for its large irrelevance to the larger picture of reality given by a full model of relational spacetime...

Another 'grounded' way to see the laws of physical reality happens when we focus on the 3 substances which science said the Universe conserves, 'reconverted' into the 3 dimotions of which each 'fractal vital space-time being' is made. They correspond in fact to the 3 fundamental elements of the physical entity, in its most simplified structure, the moving particle, made of a center of charge/gravity that commands the lineal motion/momentum of the being, a vital space that contains its energy and a cyclical dimotion or angular momentum that surrounds it, and by the 'Paradox of Galileo' - all what moves can be perceived as still form; all motion can be seen as a dimension of space - will seem to us its 'closing membrane'.

*Against this very real Universe, if we try to build reality with a single arrow of time, we get the big-bang theory of the Universe, which must be qualified as pseudo-science, as it does not pass the stringent elements of the experimental method. And it is perhaps the CLEAREST proof of the importance to have a proper understanding of the underlying elements of reality, time and space, to be able to understand what the Universe is about. Since plainly speaking, the big-bang is false, a deformation caused by the use of a single space continuum and a single lineal time arrow to describe all the dimotions of reality.*

However, given the egocoy of our scientists who think to know it all, backed by the billions of 'fans' that 'believe' in present science and its reductionist, lineal theories of reality, as I know the reader *is expecting us to comment on those astrophysical theories of the whole Universe and previous 4D paradigms, since that is supposed to be the zenith of human knowledge about reality, (:*

*So confronting the big-bang there is a clearly more sound theoretically and experimental models of the Universe as a fractal system of 'galatoms'.*

In the next graph we resume the structure of the galatom in the context of the fractal, organic Universe where a big-bang is merely the entropic arrow of dissolution of matter guided by Einstein's equation in any scale:  $E=Mcc$

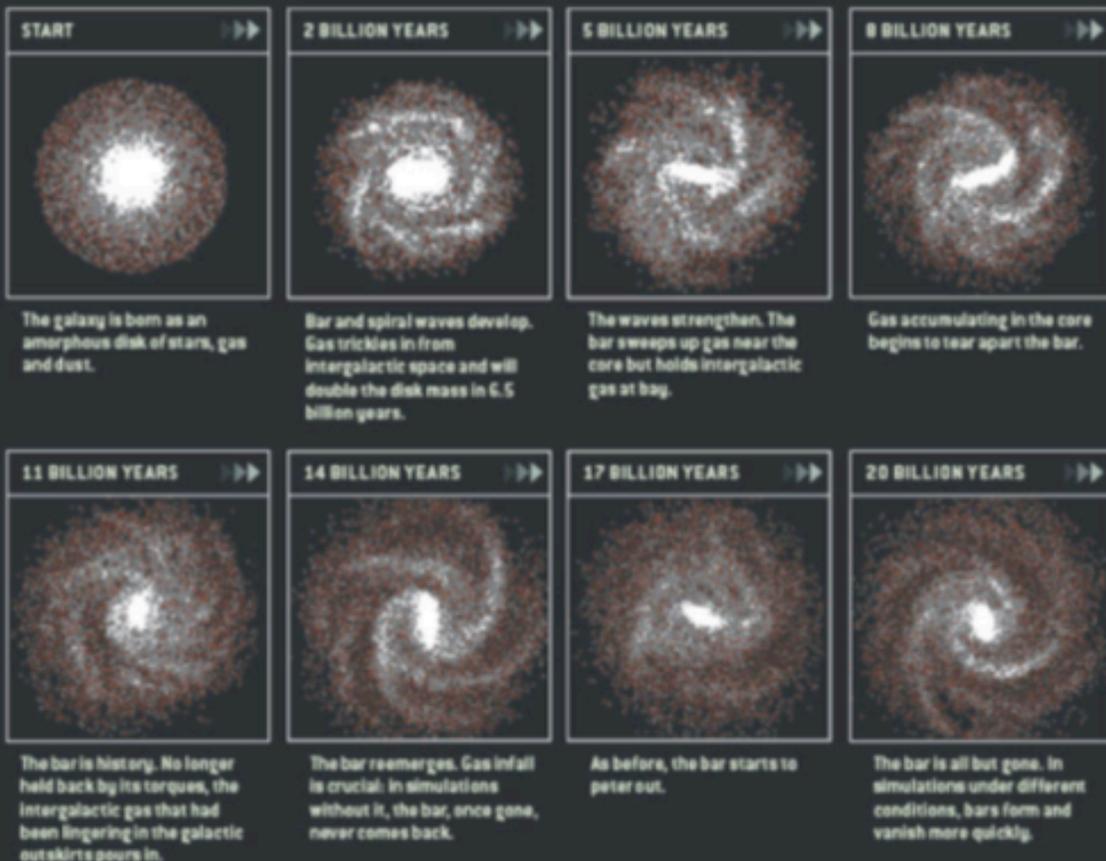


In the graph the alternative model of the background radiation: a micro black hole with the mass of the commonest object of the galaxy, a moon will radiate exactly the same temperature. So it is more logic to consider that radiation comes from the galaxy, either from black holes or strangelets which have eaten a moon and will redshift to such temperature the light of the galaxy - as all physical particles come in similar quasi-identical forms; those primordial black holes should emit 'now' a BG radiation locally and as most should have migrated to the Halo (Hawking's hypothesis); they should form a 'protein-like' protective structure, the membrane of the Galatom. Yet unlike in Hawking's hypothesis they have not evaporated, as we see no signature of evaporation coming from them; only the redshift of light at 2.7 k, once they have 'eaten' a moon, hat has become a dark, millimetric black hole, we shall call a 'Moon MACHO' (MASSive Cosmological Halo Object)



## A GALAXY REINVENTS ITSELF

Astronomers used to regard bars and spirals as permanent features of a galaxy but now think that they come and go. The gravitational processes that make a bar ultimately destroy it and then create it anew, as this simulation shows.



In the graph we attack some data interpretations of big-bang theory with the proper sound scientific explanations, according to epistemology that considers an explanation in real time (happening now) for a causal effect happening now more truth than any 'past projection' as in the case of the proper understanding of Back ground radiation, and any measure explained locally where it is taken as more truth than a hyperbolic expansion of the local measure to the whole Universe:

In the graph the true quasar big-bang, the scale at which all evidence of the cosmic big-bang points to  
CONSIDERED from the 5 elements of  $\neg\Delta@st$ :

T: The age of a quasar cycle in time is around 15 billion years, in which the 'in-falling' interstellar 'light-ionized matter' feeds the central black hole forming its bar and powering the Kerr-hole emission of 'dark entropy' akin to the electromagnetic repulsive flows between atoms.

$\Delta$ : In fact at scale the process is similar to a beta decay, emission and absorption by the neutron of a proton-black hole and electron, and vice versa, its absorption of light and the electron, which in 5D metric as we reduce size in space and accelerate clocks of time:  $\$ \times \delta = K$ , reduces 15 billion years to 15 minutes (:

S: In space the background radiation is obviously local, measured only in the galaxy and recently proved by two lobes which were considered to be 15 billion years away, in the primordial explosion but turned out to be above and below the central black hole (:

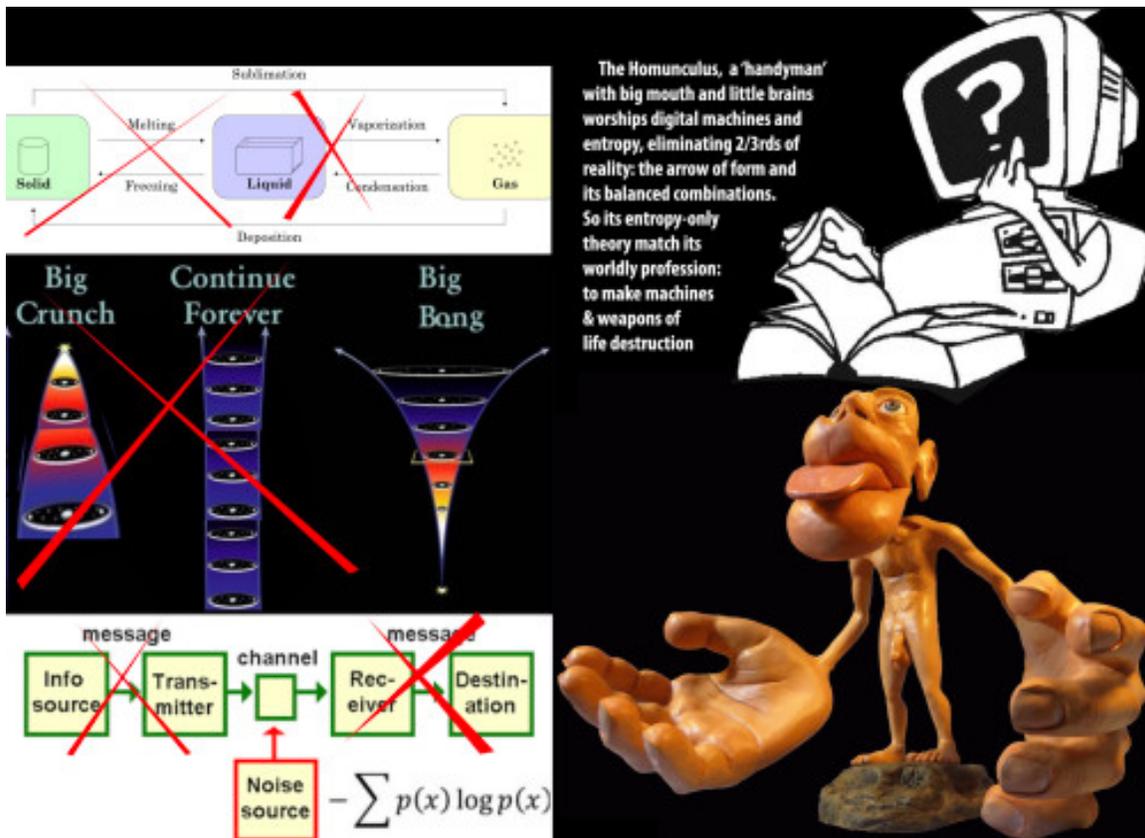
Which again in scale are similar to the first electronic orbitals of the atom and further prove 5D analysis of electrons as collapsed nebulae of  $\Delta-1$  photons.

What is then the origin of the Bg radiation? As the 'gala cell' has also organic properties, its origin is the 'homeostatic equilibrium' produced by the redshift radiation of Moon MACHOs (a primordial black hole that does not evaporate of the mass of a moon, the commonest planetoid, would have the exact form and temperature of the BG radiation).

Physicists deny form, information and its informative only gravitational forces and galactic vortices of accelerated informative future time,  $\beta\$,$  as an arrow of reality and as such they do have a big problem. As they cannot make a real picture of the Universe as it is, just with 'neginformation', entropy, the negation of form.

if you want to do objective science, accept that neginformation is NOT a quality dominant in the Universe, but only in æntropic huminds.

As it is OBVIOUS that without information we cannot make sense of reality, system scientists added the arrow of Information, of 'form' to describe that complex reality as all what we see are 'forms in motion', in-form-ations', since Motion without form is not perceivable. So even in physics, motion requires to be accompanied by form, through an active magnitude charge or mass, which gives us momentum and energy, the conserved units of physical reality.



The Homunculus, a 'handyman' with big mouth and little brains worships digital machines and entropy, eliminating 2/3rds of reality: the arrow of form and its balanced combinations. So its entropy-only theory match its worldly profession: to make machines & weapons of life destruction

It is difficult to understand how Physicists so dexterous building machines=weapons are so dumb interpreting reality, blind to 2/3rds of the states of spacetime, and to all its non-mathematical properties unless we acknowledge that the human being is less of a thinker and more of an 'enzyman', ensembling machines, manipulating reality with it and tailoring their models of its world to its worldly profession, which in physics has been traditionally to make entropic weapons and moving mechanisms. Hence its philosophy of reality based in entropy and mechanism. æntropic man unfortunately is real, an homunculus brain with huge handyman to make machines, a big mouth to explain very limited theories that eliminate 2 of the 3 arrows of spacetime, information and its liquid/reproductive/energy combinations, and a small brain who understands nothing. But a bigger ego to feel insulted whenever you try to reason with him a larger view of reality.

Before we advance further in the model of the Universe as it is, we must explain in detail the previous graph, and add ALL the local arrows of time-space that in the fractal Universe are LOCAL, for each of its species, and define the existence of all of them.

First, it is obvious that we must add the inverse arrow of entropy which is information, dominant in this planet, as it is represented NOT by the vacuum space expanding between galaxies but by the vortex of galactic form, of in-form-ation that evolves entropy into matter, in which we reside - reason why this planet is DOMINATED by information. Incidentally Duality was the science I r=evolved in the milieu of systems sciences, whose chair I hold during my active years in congresses of the International Systems sciences society at the turn of the century.

The science of duality is important because only a proper model of duality (not to confuse with dualism, the philosophical doctrine of mind and body), that is a proper understanding of the interaction of entropy and information, can give us the proper philosophy of science required to understand the Universe as a whole and all its disciplines, those specialized in information as biology and sociology is, and those specialized in entropy as physics is.

The distinction between entropy sciences and information sciences however *is not one of Nature, but one of huminds (ab. human minds), of historic and realpolitiks (power) NOT of reason and scientific laws. And to prove the case* we can consider the side of 'physicists' (rather than physics) and how they stubbornly since the inception of their discipline have DENIED the existence of an arrow of information in the Universe.

*Lineal Inertia, Entropy and big-bang's reductionism.*

This physicists have always denied due to historic reasons, as the oldest science which started with the study of military weapons (Galileo was an artillery master at the Venice arsenal), and developed a theory of the Universe based only in 'the science of motion' (the definition of the discipline in classic encyclopedia).

So his job was to study how to reach maximal distance with cannonballs and for that reason he defined 'lineal inertia' - the conservation of lineal motion; *but declined to consider the existence of its opposite informative arrow, the conservation of cyclical inertia, angular momentum, as a clear balancing second arrow of time that gives 'form' to all 'forms' of Nature.*

Physicists however follow their routines and so again in the XIX c. they chose 'entropy', the disordered state of matter, called 'gas', in the study of motion machines and weapons (heat in cannons; steam studies) to cast an absurd 'law' according to which all systems are 'gaseous=entropic' and die in the future; shunning off the obvious fact that there is AN INVERSE arrow of time in matter, called 'cold'. And so when entropy ceases the system reverses its arrow of time into coldness and then creates crystals that reproduce information.

Then in the XX century, they again took their bias to 'cosmic hyperbole', when Einstein's Relativity improved upon Galileo's work and stated that 'time curves space into mass'; that is indeed the best definition of the arrow of information in physical systems, as masses and charges ARE curves of spacetime that store in the frequency and form of its cycles the information of the Universe. And so galaxies are vortices of timespace mass that 'shrink' and 'warp' the expansive, entropic space between galaxies to balance the Universe.

But NONE of this was considered when a cosmology came out of Einstein's Equations (ab. EFE). Instead, of the 3 solutions or 'ages' of a space-time 'world cycle' of physical matter, the entropic big-bang solution/age, the steady state solution/age and the collapsing informative solution/age, two were discharged, as well as the implosive, informative behavior of galaxies, even if we humans lived in one of them; and so once discharged the 'in-formative' gravitational force that brings radiation and mass into cyclical informative patterns, the 'big-bang entropy-only' theory of the Universe became the dogma/religion of physicists, and by extension given the technological, machine-driven civilization we live in, of all mankind.

This absurd state of affairs went also into the other Einstein's infamous equation,  $E \Leftrightarrow M(c^2)$ , which is a feedback equation that reproduces mass/information from entropy/energy and vice versa. In fact Einstein's first calculated it in an article about how 'energy can create mass' (so he studied the arrow of information).

But it would be only use as a proof of the dominance of entropy and to make atomic bombs.

Again this was as absurd as denying cyclical inertia as an arrow of time (angular momentum, orbital electrons, etc.); or denying the cold-crystal arrow of information in matter; now denying the arrow of information in galactic vortices that 'curve vacuum space into mass'.

So when Einstein died, General systems sciences was born at the Macy's congress, where the leading scientists of the age came together trying to add the 'arrow of informative time' to fully account for the Universe as it is, since biological and sociological, human sciences *are based in the arrow of form, of in-form-ation; and the planet Earth exists in a vortex of cyclical 'form', of information, called the Galaxy. So in this region of reality it IS information, NOT entropy what dominates reality.*

But that didn't change the attitude of physicists and society which had enthroned them as the 'new seers of time', the popes of science, mostly because they didn't understand the mathematics they used to mirror those laws of entropy in physical space.

So finally in the post-war age, as computers and other informative machines developed, physicists had to deal with 'form', in-form-ation, logic languages and its cyclical logic clocks. But amazingly enough they *manage again to deny the formal, linguistic nature of information*. So when it came into the study of information, physicists 'reduced' the concept either to its 'motion' (transmission of information, Shannon), or as an 'aberration' called 'negentropy' (the negation of entropy). And again, in a military, western society where believe it or not, the military-industrial complex DOES dominate societies, all was good in the western front. Now physicists had a theory of the Universe based in a 'big-bang explosion', similar to the ones they developed in the Nuclear Industry, and so to develop entropic weapons of mass destruction was suddenly a metaphysical experience.

But the other 1/2 must be included and this is what we shall do in this blog.

So duality, the understanding on how entropy, or pure motion without form, and 'form without motion' (information being form-in-action, form with motion), *are the two limits of reality which combine to create the infinite 'fractal spacetime beings' of energy, we all are made of; cannot be suppressed from the Universe, even if man ignores it.*

Indeed, we shall be able to cast all phenomena of Nature, as we have done with the two arrows of time of physical matter ( $E=M_1$  in Planck Units, where  $c=1$ ), in simple 'fractal feed-back generator equations', which reduce all what exists to those two arrows and *the ternary balanced equivalent arrow that merges entropy and information and reproduces with them the infinite vital space-time beings of reality, such as:  $S(i) < \approx > T(e)$ ...*

Becomes the simplest, ternary, logic fractal Generator equation that unifies all sciences and represents in simultaneity the 3 topologies of the Universe (cyclical information, lineal entropy and its hyperbolic combinations), and the 3 different 'ages' of time-motion we observe in all beings, born of an informative seed, which lives through an entropic youth, reproductive age, and informative, warping third age that ends in a reversal of time arrow in an entropic death, which completes the worldcycle of existence of the being.

And we shall call the 'ternary' arrows of time, entropic past, reproductive present that seems not to change and informative future, or 3rd age of maximal warping, which explodes back into entropic death.

So indeed, from the simplest entropic arrow of physicists we moved to the duality of entropy and form, and then to its reproductive 'present' dynamic combinations.

We can't help but tease a little bit our physicists' friends, beyond the scope of its AE-logic thoughts, as it might be unconceivable to them, that reality has more Deep time-space scales and nonphysical, organic, sentient and hence 'metaphysical' properties (in the Aristotelian sense of 'metaphysics' - the science that goes beyond physics, which he rightly considered the most profound all-encompassing of them)... calling our time space Super organisms (ab.  $\infty$ ), metaphysical beings. It is also a statement of intentions, since this IS not a blog of Physics, though we shall prove ad nauseam its usefulness to give an alternative sound cosmology with multiple applications to classic physics, solving most of its conundrums (from the anti-particle/particle asymmetry, to the hierarchy problem, to the unification of charges and masses and its 5 forces, etc. etc.)

The SANGUINE Spanish dark humor graph of the homunculus - the human brain, with handyman machines, big mouth to talk nonsense and diminutive brain, projected in its mental theories of reality, will certainly irritate the ego of most readers, but it is what it is: the Universe is immensely more intelligent than we are, with a non-ego systemic network intelligence we shall explore, fully ignoring the entropic bias of mankind and his grand theories, but respecting the smaller detailed data, when not biased by selfish

agendas (as in the case of social sciences, where we cannot even respect data), and the small models of reality built with them.

And the key to spot those biases is mostly on the so-called Postulates without proof of all sciences, which unaware of the entangled 3-pentalogic structure of reality do NOT account for an entire 'set of elements', as the homunculus physicus entropicus does, eliminating crystals, liquids, gravitation, waves and scales to come clean with a big-bang.

This means for example, we obviously must respect electrodynamics, but NOT the postulate without proof of Mr. Einstein, regarding the limits of speed of light, which applies only to the galaxy, where its measures were taken and light is its space-time background and first 'organism' (an H-Planckton), so obviously as we cannot swim faster than the river, we cannot move faster than our background space-time; we must respect mathematics, but NOT the first self-evident axiom without proof of Euclid, affirming that points have no 'Inner fractal parts', as it IS a simplification that eliminates the inner energy and information of its fractal non-Euclidean points; we must respect the laws of genetics and topological evolution that selects the best forms, but NOT the affirmation individuals are selfish fighting individuals of other species instead of collaborating with them; we must respect the data of History, but NOT the affirmation that the highest intelligence and only scale of reality is that of the human individual when it is so obvious that societies are social organisms, built with the same laws of any other super organism, and certainly we must NOT respect the idol-ogies of social power, nationalism that divides the human species into military nations, capitalism, that provokes the anoxia of mankind denying credit to most humans, for the selfish sake of the 1%.

So we will try to achieve always a trilogic or pentalogic analysis of all phenomena, as all realities, events or forms, will be entangled AT THE LEVEL OF SCALES, TIME MOTIONS, SPACE FORMS, with an entropic limit of duration in time or extension in space, and perceived by a HuMind language, or interacting through its own informative languages or ELSE it WILL NOT exist as part of the fractal 5D entangled Universe. And when we do NOT make such a complex analysis, we shall 'name our ceteris paribus' studies as mono, di, tri-logic works. What is an astounding act of egocy (ego+Idiocy) is the fundamental humind method of truth which is monologic, in ALL fields of existence, from SCHOLARS with. A ONE-DIMENSIONAL theory of causality that quarrel for ever with other scholars with other partial perspective on the entangled event, or politicians with an OPINION not even based in the science of historic organisms, of which its political system is the nervous network, trying to impose its will, or economists, with its NON-HUMAN monologic of reproducing and evolving machines as the GDP concept of what mankind should do with its reproductive physiological network as a super organism (the proper definition of economics).

### **The PROBLEM of all black hole and Big Bang singularity... mumble**

is more of the same we shall say - an absurd mathematical expansion backwards in time of something we cannot even see here. NOBODY in any other science uses those mathematical creationist views that experimental evidence breaks because we want to keep doing mathematics. I.e. consider a frequency sound coming from a source, a bat, for example, if we were to *return ad infinite the frequency observed with a long wavelength at a point of the air, we would reach a singularity of infinite frequency but THERE IS ALWAYS A CAUSE, A SOURCE of that wavelength, so when we reach the BAT frequency no longer increases. It is the real source.*

What all THOSE BLACK HOLE ARGUMENTS LOOSE IS THE FUNDAMENTAL TRUTH of science: a cause. If there is NOT matter, not a frozen start of top quarks as Einstein wanted at the origin of the gravitational FORCE of the black hole THERE IS NO CAUSE FOR GRAVITATION. Where it comes from the awesome gravitational force of the black hole, if mass does NOT exist? if there is not as Einstein wanted a cut-off substance, which can only be the top quarks discovered after his death - with enormous mass gravitational power?

Mathematicians who shun off the basis of the experimental method and the physical real nature of Nature, don't care. For them bats do NOT exist, their sound frequency is infinite. And the source is the bat 'hole'.

All this of course doesn't matter to an automaton group of physicists making measures, calculating and putting it all into a magic mathematical equation, as bizarre as it might sound, which just must be considered a statement of truth per se, as the language of man and god has 'spoken'. Physicists then will not reason on the dogma. As usual HUMANS CREATE FIRST A PRIORI RULES OF THE GAME, WHICH BECOME TABOOS THAT CANNOT BE BROKEN. THAT IS HOW the big-bang theory works. It became long ago dogma which cannot be broken. So now it is all a question of proving it further. Any data that comes must be fit in. As in Christianity, the dogma, that Mr. Jesus, an intelligent Jewish of the tradition of a culture who considered his race chosen of God, was the most chosen of them all, God itself, IS NOT UP FOR serious INQUIRE. Once this is accepted then we can do 'Theology' on how many angels there is in a pin (huge question in the leading university of the scholastic Middle Ages, Sorbonne). So happens in modern astrophysics. The Bigbang is NOT UP for serious inquire. Once this is accepted then we can do 'Metaphysics' on how many angles there is in a spin (huge question in all the cathedrals of XXI century) - never mind the definition of angels and spin angles is not understood at all (:

Physicists, as ego-makers of machines and weapons that give power to our civilization have never doubts on the doodles in the sand of space-time knowledge they make with its computers and digital equations; since their machines and languages are BEYOND HEAVENS AND EARTH. My personal experience is that they are a 'nutty case', as so many groups of humans who think they 'know', including most notably wrong, Abrahamic, religious groups, Economists & politicians, and lineal physicists, and have lost most of my interest to communicate with them. I rather enjoy more as they are a lost case, showing how their brain works WITH THE SAME LIMITS of beliefs than any other religious group - because their metaphysical theory of reality is more of pseudo-religion than science.

BUT I MUST SAY FROM A PRACTICAL POINT OF VIEW THAT I WOULD REFRAIN FROM DOING SO IF THERE WAS NOT A BETTER SOLUTION TO THEIR metaphysical problems. Indeed, in praxis an American proverb says there is 'not a problem if you don't know how to fix it'. So far as there was not a better model now provided by 5D even if most physicists are aware - more so than the common people that just believe in them - of the falsehood of the big-bang, or at least of its shaky scientific foundations; nobody care to fix it. It was the best thing we had. No longer.

At this point of course we bust the human ego once more. Since we repeat the Universe is simple and not malicious' (Einstein) - MOST OF THE PTOLEMAIC complexities are just as its epicycles human epicycles constructed to uphold us at the center of reality, with our rod of space, c-speed and time-clock, the second as the only reference in time and space that matters. Because a distortion to appear as real must become far more complicated, an orbit with Earth and its center of a planet must be far more complicated than a proper elliptic, the immediate result of our analysis IS A MUCH SIMPLER, MORE EXPLANATIVE, HENCE MORE TRUTH according to Occam's razor, explanation of reality.

### **Time in physics.**

What is then the Universe, when we use the 5 real Dimotions of space-time and transform its entropic, lineal theories of reality into more complex cyclical patterns? The answer is evident just looking at it in one of the first pictures of this blog: a fractal of galaxies in the largest cosmological scale we observe, and a fractal of atoms in the smallest quantum scale. Whereas we are sandwiched between both.

First we must understand a simple truth: as all forms of space can be seen as motions in time, a curvature is a clock. As all forms that do not change and repeat its reproductive patterns are not really a change=motion in time, we see cyclical motions as solid forms. When time passes then a change must happen, which means that in physics time only passes when a system accelerates. A force then is defined,  $F=ma$  as the product of a present, not-changing form, a mass, and an accelerated motion, a time clock. The mass is thus the non-changing 'center' of the accelerated cyclical clock of time, the force proper. Hence the principle of equivalence of Einstein. When we extend the principle to charges, a charge will be the non-changing center of the accelerated clock of time we call the electric force. So happens for our thermodynamic scale, with a difference, worth to mention at this earlier stage: *in our scale, the clocks of time are expansive not*

*implosive, hence they are entropic 5th Dimensions, measured by the clocks of temperature. Why? Because we are measuring in our scale the entropic, predatory absorption by our existences of energy from charges and masses.*

In the entangled Universe of infinite  $\pm$  balances we might say that we are sandwiched between both. And it is because we are entropic temperature that the whole thing doesn't warp. Our pressure outwards as entropic beings balances the gravitational inwards pressure, and the charge collapse.

It follows then also that as time and space... yes you guess it are two sides of the same coin (: curvature is acceleration; and so the G and Q constants must be understood as curvature of two different scales, and as the curvature of charges are much bigger (their radius r is much smaller, so 1/r the measure of curvature or rather 1/r<sup>2</sup>, the measure of the growth of curvature in an accelerated clock), its force is much larger. But when we apply to charges and masses the metric  $\delta=k$ , it turns out they are the same constant equation, proving A) the unification of forces or rather its constants G and Q, B) the super organic nature of the galaxy, as both charges and masses' constants are the co-invariant limits of maximal  $\delta$  (masses' curvature) and minimal  $\delta$  but maximal  $\delta$  (charges' curvature, attractive power).

In the next graph we observe what we just said in simple equations about the relationship between mass and frequency of an accelerated vortex, again expanded to the other planes, of which we observe in detail a thermodynamic vortex, which becomes a fractal *of even faster eddies, beyond the 'event horizon' of the hurricane, a fact that will help us to establish the nature of frozen stars=aka black holes in our models of the galactic Eddie...*

Time as future only passes when it accelerates and time as past when it decelerates - when conserved it is a present energy. So the formalism of accelerated time vortices is self-similar in all scales. In mathematical physics this means that 'time clocks' which truly advance' time are accelerated vortices, of any of the three quantum scales we perceive, that is, charges, temperatures and masses, which measure through its frequency the speed-attractive force of its time clocks, paradoxically much larger for smaller vortices, reason why charges are far more attractive:

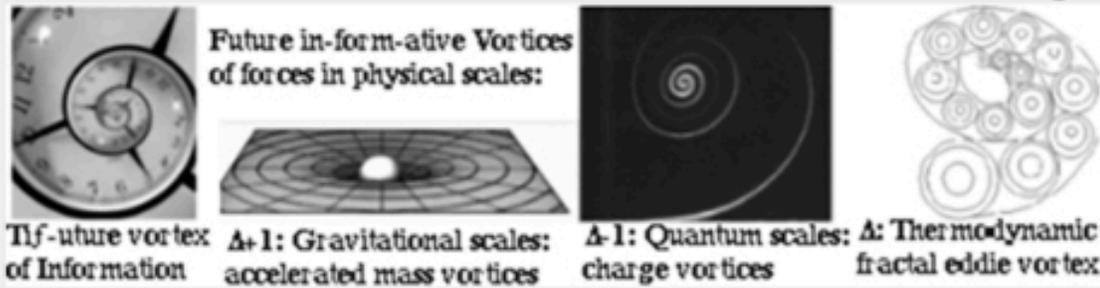
' $\Delta-1$ : frequency in lineal electromagnetic time flows of energy:  $e=hv$ '  
 $\Delta-1,0$  charge: for cyclical clocks of electromagnetism.  
 $\Delta 0, +1$ : temperature for lineal thermodynamic flows of energy  
 $\Delta+1$ : Mass for cyclical vortices of accelerated time.

Frequency of temperature is though often studied as a lineal entropic clocks of time in a non-bounded motion, decelerating the pass of time towards the past. Or in a closed volume it measures as a clock a present steady state of matter in a bounded stationary wave or closed system.

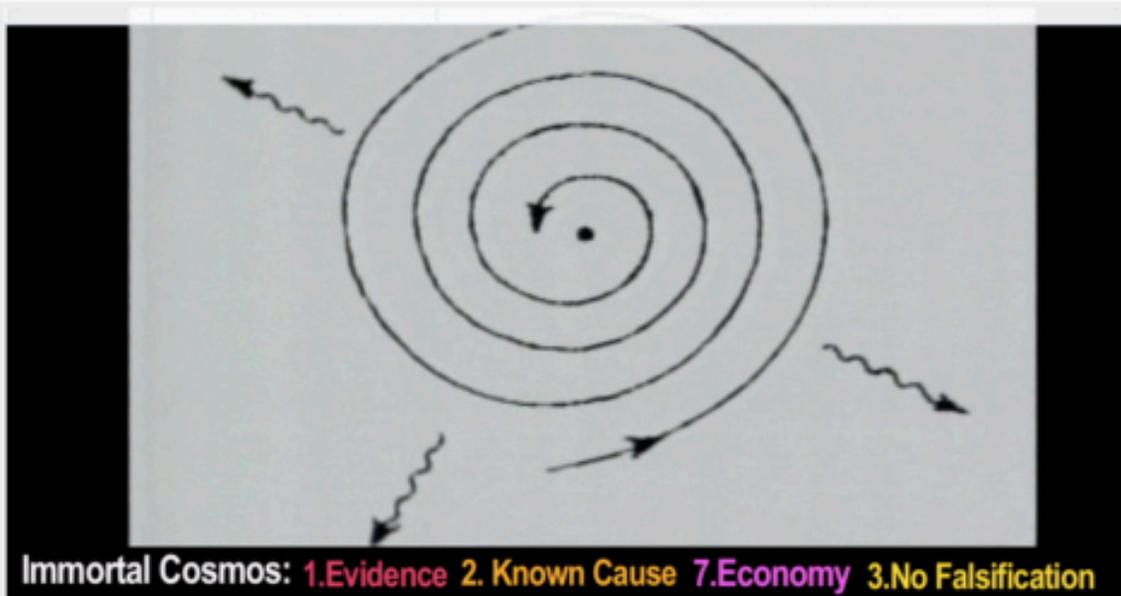
While charges and masses are time clocks of closed systems accelerating the past of time towards the future; as all is warped up in a world cycle of time moving towards the point of death of the vital energy attracted by the center of the system.

In the graph, the Universe as it is WHEN the astounding reductionism of physicists' dogma OF A SINGLE CARTESIAN SPACE CONTINUUM AND time line comes to terms with the experimental evidence of a fractal, organic Universe broken into infinite time clocks in all its 'scales' of size with dual processes of expansion and implosion mediated by entropic and informative forces:

CLOCKS ACCELERATE IN-FORM-ATION:  $\sum \Delta t \rightarrow S@$  AS A MIND-LIFE ARROW TILL ENTROPIC DEATH EXPLODES ITS INFORMATION IN 1 TIME QUANTUM:  $S@ \ll \sum \Delta t$

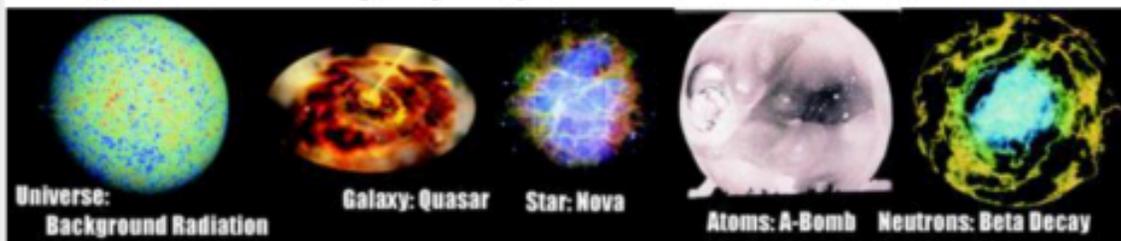


All what exist is a motion in time. Space forms are Maya of the senses. In the graph, accelerated vortices of time in physical systems, in different scales of the fifth dimension: charges, masses and thermodynamic eddies become then the main clocks of time that carry with different speeds according to 5D metric ( $S \times T=K$ ), the information of microscopic quantum charge worlds, human-size thermodynamic scales and cosmological gravitational scales.



In the graph,  $E \leftrightarrow Mcc$  is a dual equation reason why both balance each other, the imploding gravitational and exploding and both happen in all the scales but a total is balanced

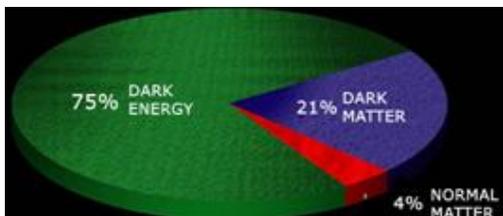
Entropy<Constant>Mass big bangs & big crunch dual arrows happen in all fractal scales:



It is then obvious that the BIG-BANG IS JUST IN ANY SCALE OF MATTER, THE ENTROPIC DEATH OF A SYSTEM. BUT ALL SYSTEMS HAVE AN INVERSE ARROW OF INFORMATIVE 'LIFE'.

WHICH it is represented in the cosmological scale by masses, *galaxies which are time vortices that compress the entropy of vacuum into mass through its gravitational forces, are included into the mix.*

Matter folds one-dimensional 'dark entropy' which expands mass into space, into 3 dimensional matter. Hence 3 'volumes of expansive dark energy' becomes 1 volume of implosive matter: 75% $\approx$ 25% and the Universe balances as a spring coil in an eternal game of  $\infty$  fractal SHM motions between galaxies.



Without getting into unneeded complex maths, the reader should easily understand the proof of that balanced Universe, once he casts aside his 'awe' and 'respect' for the 'high popes' of science and uses merely reason, why the blunder of 'cosmological big-bangs' is a false, half-truth -

the key method by which humans 'invent reality' to cater their egos - to eliminate and 'reduce' the parameters of reality to create a 'ceteris paribus' biased theory that cater those egos.

In the case of the big-bang amazing as it will sound to the reader cosmologists eliminate the gravitational forces that bring together vacuum space into the creation of tighter, denser particles, atoms and matter structures within the vortex of galaxies, and through the warping of one-dimensional 'lines' of dark entropy $\approx$ energy into 3-dimensional 'tall' masses, 'reduce' the 75% of entropic expansion between galaxies to the 25% of 3-Dimensional mass, establishing a canonical, mathematical equilibrium between expansion of space-time dimensions (expansion of vacuum space) and implosion, akin to the same process happening on a lower quantum scale between attractive matter and repulsive electromagnetic radiation between atoms, towards a thermal equilibrium.

Let us indeed from Hawking, a bad scientist but a good teacher of science, which has no quips recognizing the absurdness of some theories a paragraph that explains this conundrum:

"The trouble with the Hot Big Bang model is the trouble with all cosmology without a theory of initial conditions (MEANING A LIMIT TO THE EQUATIONS): Because general relativity would break down at a singularity, anything could come out of the Big Bang.

So why is the universe so homogeneous and isotropic on a large scale yet with local irregularities like galaxies and stars. And why is the universe so close *to the dividing line between collapsing again and expanding indefinitely*. In order to be as close as we are now the rate of expansion early on had to be chosen fantastically accurately. If the rate of expansion one second after the Big Bang had been less by one part in  $10^{10}$ , the universe would have collapsed after a few million years. If it had been greater by one part in  $10^{10}$ , the universe would have been essentially empty after a few million years. In neither case would it have lasted long enough for life to develop. Thus one either has to appeal to the anthropic principle" (RELIGIOUS concept that miraculously in the whole flow of time we are in a balanced point).

Not so IT IS MORE LOGIC TO THINK WE ARE in a balanced eternal Universe as our fractal model describes.

The balance between radiation and mass as a steady state, eternal Universe however is ignored by Big Bang cosmologists as they *only recognize as a time-future arrow the entropy between galaxies - the expansion of space.*

*How dumb is that, when we live as human beings inside the vortex of evolutionary information of a planet, turning around a star vortex turning around a galactic vortex?*

So we should NOT care at all for the arrow of entropy, secondary to our existence as biological, and technological beings evolving fast our arrow of information at individual level (process of life and aging, warping, wrinkling into form) and collective level (informative evolution of technological machines, aka meta life) and at planetary level (vortex of evolution of stars and galaxies).

### **LOCAL BIG-BANG MEASURES, hyperbolic humind egos.**

It is then obvious that the background radiation as we anticipated in the first pages of this post is a local measure of a local radiation, very likely produced by dark quark matter with a mass similar to the most common moon-like planetoids that probably feed the reproduction of dark matter, which will emit a background radiation at 2.7 k, and if there is any evidence of a big-bang would be of a local quasar cycle of the galaxy, studied in our posts in cosmology.

On view of those facts, the whole big-bang should have been ripped off and the BG radiation considered what it is - a local picture of the galaxy MACHO heavy quark objects (strangelets, dark bc-atoms, black holes of the mass of a moon, the commonest planetoid, etc. etc.). Not so, as those Shang magicians that interpreted the 'heated flat bones of a cow' to understand the future, big-bang platonic  $V=Hod$  students are going further. Recently Mr. Penrose, a platonic mathematician spotted a slight difference of temperature in one of those Moon Machos and alas! he guessed it came not even from the illogic singularity of infinitesimal size and infinite mass at the point of  $V=Hod$  Creation, but they were *remnants of the previous Aegon, before the Singularity, somewhat surviving as proofs that huge massive black holes of the previous Aegon had evaporated traveling to the past... (his friend's theory of black holes as time machines, which have never found a proof in this Aegon, but alas now is understood by the 'magician' peering on the depth of the sacred cow)*.

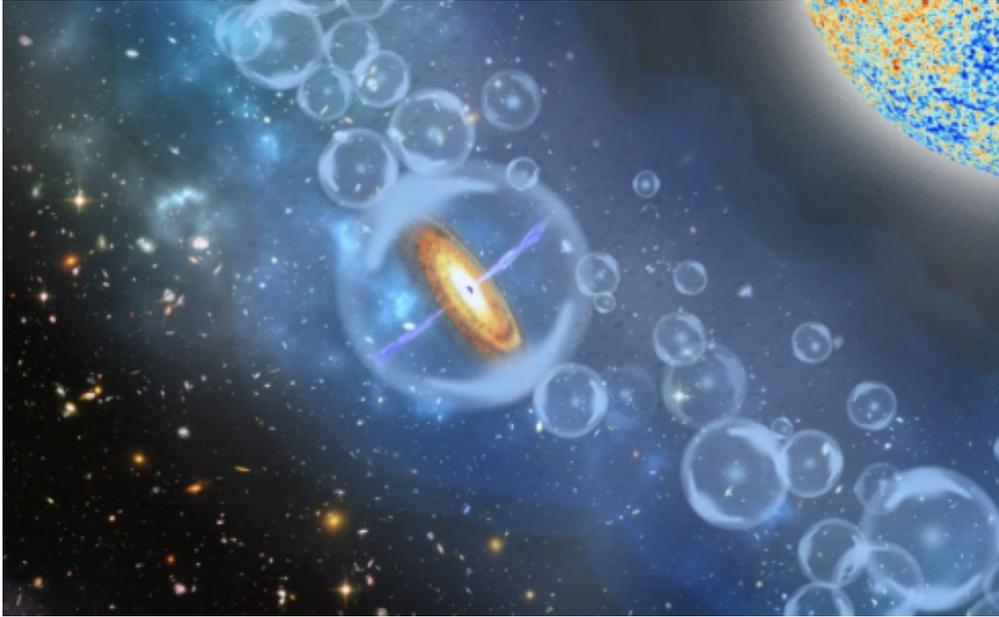
I am sorry, here in Spain we have not sacred cows or dark matter but something called Black humor, better known outside by the surrealist schools of Dadaist thought. And we use it liberally to have a laugh at the high priests of *any* religion and its 'egocyc paradoxes'. It is really good to humble the ego, as it tests the 'coolness' of our friends, since it is never taken personally.

And doctors tell us that laughing (entropic destruction 'bullshit' - wrong information and hyperbolic egos that strain democratic social life), is along healthier Mediterranean cuisine (human life energy), sexual pleasure - human reproduction (It seems a recent poll among 30.000 worldwide wo=men chose the Spaniards as the best lovers regardless of gender) and constant verbal communication (human information) to foster eusocial love (the ultimate goal of the scalar fifth dimension of the Universe that puts parts into wholes) the reason why we are about to overcome the Japanese as the longest living species - a reward to our respect for the truths of life, and the love of man all those mechanical nations, dedicated to make entropic weapons of mass destruction and justify them with similar æntropic theories of the void, would rather imitate... Because in an immortal infinite organic Universe as the one we shall develop in this blog, to elongate ad maximal EXISTENCE as a life being, which is the ONLY reason of existence itself as we shall see when we study the 'drives of life' or 'program of existence that all fractal species of the Universe follow to maximize it. (Little cultural selfie here).

Back to the magicians. As it happened of course, soon it was found that the slightly hotter MACHOs which means are slightly larger in mass than a moon MACHO (the gravitational redshift background radiation of a quark nugget or black hole is proportional to its mass) are again a local galactic measure. Enough then to prove that the æntropic big-bang denies A)accurate data, B)logical explanations and C)makes absurd prophecies not of the future but of the past... reversal scientific method? Not only it does not make hypothesis to prove future events, but can't do the simplest thing, to understand the past that has ALREADY HAPPENED.

Since when they look at that past they find formed black holes and galaxies that should not yet be there.

Another proof of the many considered on our texts on cosmology - as physicists keep looking far away to the supposed beginning of time, they keep finding perfectly formed galaxies and black holes, which breaks completely the supposed 'time periods of creation of matter'. In the graph we can see the biggest black hole found in the Universe, which is perfectly formed in the middle of a galaxy, that is just 400 millions after the supposed big-bang when there was only supposedly hydrogen ions:



In the graph, the superblack hole is supposed to exist so early that there is no way it can have been formed unless the Universe is eternal and the cosmic horizon of the big-bang just the limit of human perception of light, which as everything in 5D is NOT infinite in range.

Now and here 5D physics departs sharply from current astrophysics and its 'paralogic' Kantian errors (which break the scientific method in the egocentricity of the cosmologist wanting to have an explanation for all even when his range of perception does not allow it), there is NOT infinite range force, because infinities are always broken by cyclical membrane.

In the jargon of physics range of forces depend on mass. But it is 'obvious' that the photon does HAVE energy hence it does HAVE mass,  $E=hf$ , so even if its mass is extremely small the range of the photon CANNOT be infinite.

Moreover the further away we look, we shall see photons of less mass-frequency, hence redshifted, as those of more mass-blue frequency had died.

So that explains the red shift simply.

*The distance-range of light is inversely proportional to its frequency-mass*

Hence the existence of a limit or horizon of perception of light, from where we just see those monstrous objects - the biggest black holes.

*What is then the limit of perception of light? As we have experimental evidence there is no need to do further calculus: Obviously the 13.5 billion light years from where red-shifted light of maximal  $z$  comes mistakenly taken as a time horizon of a supposed big-bang explosion.*

And from this fact it also follows that the further away we look, the more likely we are to find only *huge black holes, as they will emit more energetic high frequency particles that will take longer time to relax in terms of the 5th Dimension of entropy when they reach us before dying into a red frequency, blacking out of our perception of further away galaxies.*

And here is where the magic  $10^{10-11}$  number common to all structures of nature, both in space-populations/distances in time-frequencies/durations and in scale/masses shows in (we will find it in the number of neurons of the biggest human brain, of stars in the galaxy, of atoms in a DNA code, etc, for reasons studied on our posts on 'fractal non-euclidean mathematics):

This is the number that gives us in the symmetry of time the mean life of stars, and the mean life of its minimal light space-time 'unit' of information, and the mean mass of the largest black holes from far away distances measured in terms of the mean star mass - our sun, and the mean distance of the black out horizon of the big-bang...

So of course while in 5 D, as we know the Universe is eternal, the big bang does not exist, we have far more sound logical and epistemological and experimental proofs to explain everything that seems to prove the delirious big-bang in which time and space started from a point that fits in our hand, and pleases our egocentricity of being above heavens and earth.

In the graph, *the largest black hole found is also the oldest, as it is the furthest, and it was supposed to be born in 500 million years after the big-bang when only some re-ionization of light hydrogen atoms has happened.*

An immortal universe though seems to collide with the human ego (and its self-centered paradox explained within the model), which likes to 'measure space and time', hence the Universe from its biased perspective, which makes him the center of perception and hence of knowledge.

It is easy to overlook this 'ego problem' but we shall truly show to which degree 'SCIENCE IS CULTURE', that is, we bias systematically truths of science, beyond the data and equation, in its MODEL INTERPRETATION to cater to our happiness as ego-centered beings. *But then once scientists get into a 'comfort' theory, they backtrack to find ad hoc proofs and twist experimental evidence always fitting 'somehow' new contradictory data onto the model forcefully.*

This today happens every other day with big-bang theory, as physicists try to fit forcefully the 'fractal nature of space' (broken into different beings in a single plane and in different scales from atoms to galaxies, from cells to super organisms within each species). So the concept of a space continuum is a simplification that *only exists in the Cartesian paper where we trace a seemingly continuous ink line on it.*

*Thus, soon after the lineal continuum big-bang theory was found, physicists discovered 'another scale of space', made of dark energy and matter which represents 96% of all space and doesn't fit in the big-bang theory. Never mind - the theory of the 4% is the canon. So they just ignore the rest.*

But the most sanguine 'discharge' for the big-bang 'continuum theory' to work is surrealist: because the entropic explosive arrow on the big-bang ONLY AFFECTS TO THE SPACE expanding between galaxies or atoms, NOT to those galaxies or atoms, which are CYCLICAL, accelerated clocks of cosmological or quantum time... they ELIMINATED THEM, from big-bang equations.

This is sooo surrealist that it amazes me physicists did it. Indeed, they merely DISCHARGED galaxies that ARE NOT expanding but imploding. Since if they move backwards its equations they do the opposite of the expanding vacuum between them: they would explode.

So THE PROPER way to do cosmology would be to account as we do in those posts with both, expansion of space-entropy and implosion of space into cyclical clocks of accelerated information - galaxies, where we exist indeed in an accelerated planet of evolutionary information - to consider the wobbling expanding+imploding balanced Universe. But that will require to change the big-bang entropic 'cannonball paradigm' of Galileo.

The same problems happened with the pretension that the Universe has a very short life span keeps running every other day into new problems: we find at the limit of the horizon of perception of space-time perfectly formed galaxies with huge black holes that should not be there. We find that almost every part of the Universe has a life span much larger than the Universe itself: the commonest stars, red ones live trillions of years, black holes live  $10^{100}$  years or they never die, if they don't evaporate; protons seem to be of a similar age or perhaps immortal. But it is an obvious logic contradiction that the whole lives so much less than the parts.

### **The metaphysical question: how many scales?**

The metaphysical question is this: is each galaxy an atom of a hyper-universe, or scales end in the gluon Inside atoms and the galaxy outside stars? For many reasons discussed in other articles it seems the scales are infinite, but as in fractals those scales are not identical, it is a question open to analysis if each atom has infinite stars, with infinite planets and infinite self-similar human-like beings living on it.

This is unlikely but in any case a true infinity concept of reality where humans are both an island Universe and mere dust of space-time, floating in the invisible, 'light' region within the galatom, sandwiched between the denser internal proton-black hole and the external electron-halo, makes all ambitions of the species, laughable. Are we going to colonize the atom-galaxy, with our immense ingenuity as the only intelligent species of the whole? LOL. Life is what is all about, existence, trying to emulate the immortality of the whole, as atoms in fact do - protons are immortal, black holes might live  $10^{100}$  years, red stars live trillions of years. And certainly another proof of the absurdity of the big-bang is that the entire whole Universe has lived only  $10^{11}$  years, when most of its parts, black holes, protons red stars (4/5th of them) can live billions of time more than the whole. Or in probability terms, the chances that in a Universe where its commonest stars live trillions of years, we live in the very beginning is 0.0000%. (Red stars are in fact 4/5th of them because they live longer and so even if all are born as blue stars, in a long-lasting galaxy, at any time, there will be seen more elderly stars than young fleeting blue star moments of them).

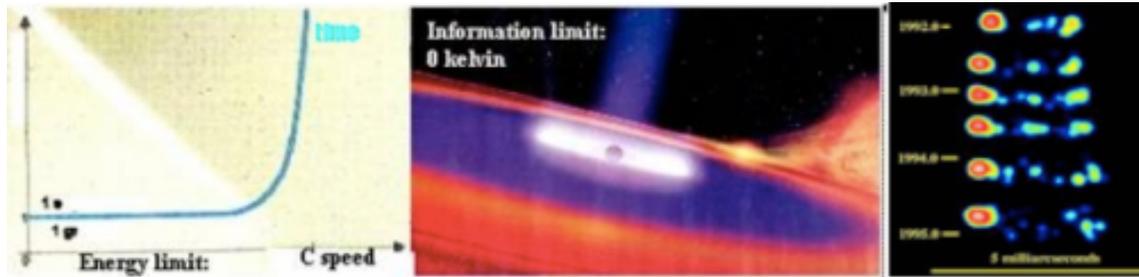
What about the HyperUniverse? We do not know what the infinite Universe even in its local region of galatoms looks like, though due to the expansion of space between galatoms, is likely an entropic gas of local atoms on the hyper-Universe. It is not though a big-bang Universe, because even if we run backwards the expansion of space between galatoms, the implosion of information in galaxies, counter that effect, so at best, we could say that running backwards the big-bang equation we shall meet a 'solid' crystal of galatoms.

Even, if we repeat the model unifies all sciences, aware of the religion of mankind which is big-bang physics, we need to further debunk such absurd theory born of the ego and worldly profession of physics, setting straight the record on the causes of its main 'proofs', the expansion of space between galaxies (debunked) and now the background radiation which is the exact type of radiation the main component of galaxies, heavy quark matter (strangelets and black holes) would redshift with a fixed mass, similar to that of the smallest planetoid they likely feed on - a moon...

### **The limits of the galatom, according to 5D metric**

From this simple assumptions many new results and explanations of physics come up, as LONG AS WE UNDERSTAND THAT ALL THOSE SIMILAR FORCES ARE JUST DIFFERENT IN ITS SCALE parameters, due to the change of its 'speed of time' and informative constants, according to 5D metrics:  $S \times T = K$ . Which means larger systems have faster speeds (entropic speed between galaxies).

Specifically for the galatom the constant of maximal time-speed is C, the constant of spatial information is H, and so we write:  $S(c) \times T(h) = K$ , from where we shall reconstruct mathematical physics, gifted now with a 'vital, organic scalar meaning'.



THE C-speed constant is the constant of reproduction of information or 5 D constant metric of the galaxy:  $\delta x \delta t = C$ , as such all species within the galaxy have that maximal speed of reproduction of information, spent in the recreation of the mass-energy of the being that reduces the speed from the simplest information reproduced, light itself. But the nested Universe implies that the  $\pm 4$  plane of the Universe must have a constant of speed higher than its smaller  $\pm 3$  galatom, hence c-speed is not the limit of speed outside the galaxy of dark entropy faster than c, confused with an expansion of distance-space - we hint that its value is the cosmological constant of flat curvature.

THUS outside the galaxy there is a 'dark world' of faster c-speeds (reason why we see galaxies moving at faster  $10c=z$  speeds and we perceive those faster speeds as accelerating expansion of distances between galaxies and past the event horizon of c-rotational speed of black holes, there should be faster more attractive vortices of mass, at less than 0 k, which we will consider with more precision as those are 'dogmas' of our single scale astrophysics, in other posts - or in terms of the correspondence principle 4D physics corresponds to the limit of 5D physics in a single plane of space-time that of light space-time, the background of galaxies, in which we live, and it is NOT correct science just to expand those limits to the whole Universe as big-bang theorists do with 4D).

Yet for other species within it, there are other constants, in the human scale thermodynamic constants of metabolism as smaller animals have faster rates of motion than larger ones.

In the graph we resume the scalar structure of the galatom in the context of the fractal, organic Universe where a big-bang is merely the entropic arrow of dissolution of matter guided by Einstein's equation in any scale: EMcc...

So there are quasar big bangs of galaxies, similar to beta-decays of atoms, and nova big-bangs of stars - what it seems not to be the case is a cosmological big-bang of a hyper-universe, just an ego-trip of astrophysicists playing to be high popes of philosophy of science and we will return with some 'humor' to that.

In the scalar universe we shall show however the proper way to interpret that expansion is as a symmetry of scale: In the same manner atoms repel each other with electromagnetic forces but within the atom, they are NOT expanding, as they are subject to a non-linear internal force with two regimes, nuclear and strong force within the nucleus; galaxies are NOT expanding, because they are subject inside the halo region to a non-linear internal force with two regimes, weak and strong gravitation near the central black hole.

While outside galaxies they have a symmetric force to that of electromagnetism at cosmological scale called dark energy.

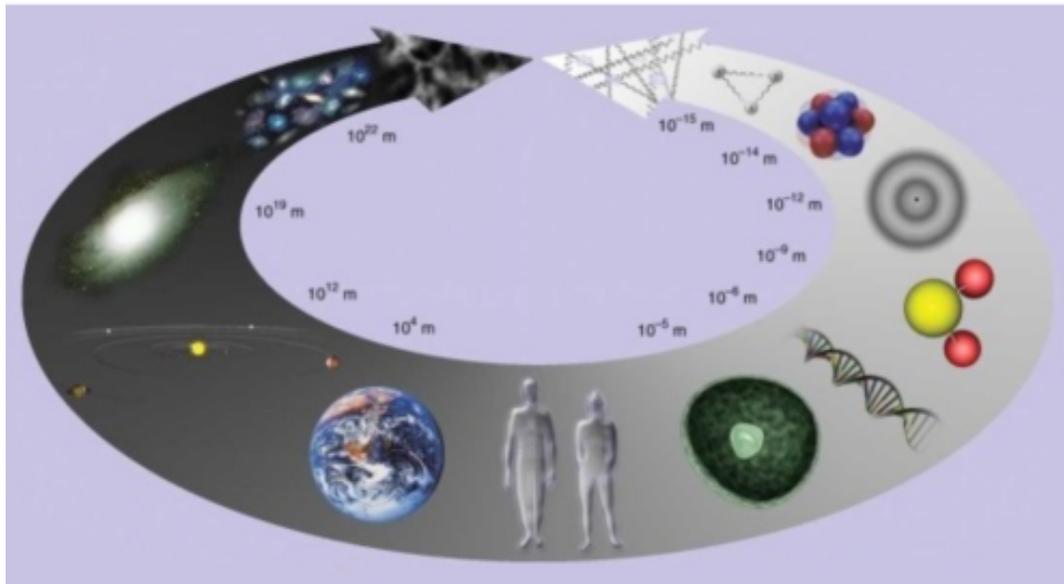
Yet to understand the DISCONTINUOUS balanced structure of all those galatoms, and why it is possible to have local laws (in fact Einstein realized of it, when he considered light speed a local symmetry), we

need to return to the concept of a scalar fractal Universe, where each scale has similar laws - so we can account for the similarities between the different forces that act as the internal dimotions of the galatom.

- And the metaphysical questions about the Universe are NOT concerned with singularities but with the key themes of a fractal view of reality: are those two limiting scales of human perception, just similar or identical. And are they the absolute limits of there are infinite scales? Since the solution to those questions will have many implications for our 'self-souls'. I.e. if scales are identical and infinite there should be infinite other 'us', as the number of combinations of information is limited, but the number of identical beings is infinite as each of us holds a quasi infinite number of galaxies, and each galaxy is an atom, of an infinite other scale. So we are immortal in the discontinuity of infinite other us, and we could even postulate some extremal theories of transmigration of souls, both due to an 'entanglement' between identical us, or a 'local travel to the past', which would make us reincarnate in our sons in the moment of birth. Metaphysical questions though are not treated in this introduction to 5D, but will be dealt with in the posts dedicated to God, religion, immortality and such.

### The limits of stientific scales: SStrings or galatoms?

All this said an important theme of 5D is the consideration on how many scales do exist, and what are the limits if the scales are infinite of the repetition of those scales. I am on this of the general view that it is likely the Universe can be mirrored by the 2 simplest forms of motion: *a rotary motion or closed string, 'šđ-ring;'* in the always modified jargon of 5D and *a lineal motion or open SString -String* - the two limits of topology in space and time of 5D:



Ouroboros the Universal Snake, bites its tail on the string quantum and cosmological self-similar scales, as perceived from the human  $\Delta^1$  mind. Metaphysical thought would then argue if those scales are real, or just mental, that is, the loss of information in the perception of scales make humans extract the same information from the upper and lower  $10^{\pm 30}$  scales

For a while back in the 90s I worked on the proper corrections needed for M-theory to work according to 5D, enough to say that its proper formulation in terms of closed clock Sđrings and open Sstrings, can theoretically wrap up a Universe of infinite planes, which repeat themselves. But I never completed the model for the obvious reasons that there are far more important research in 5D that trying to work out the 'errors' of physics in their conceptualization of time-closed strings and space-open ones and its social membranes.

String theory is thus the most obvious candidate to be the 'unobserved limits' of reality, where a series of superstrings connected to circles of galaxies, will be the best way to describe the local universe, as the graphs of Lanakea shows, and vice versa, micro strings are the best way to describe.

So if we want to consider 'scientific, experimental truths', we should start physics beyond String metaphysics and consider in the nested Universe the truly observable reality of the galaxy-atom, of which we observe fully the 'vital energy' between the dark world of the Universe past the  $\delta > c$  and  $\delta < 0$  barrier of lineal motion and temperature order of our world. We shall call this super organism the galatom and consider physics the science that studies it.

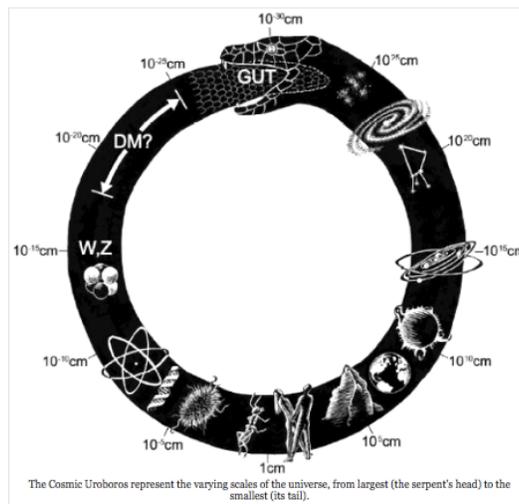
This of course is a very different view on physics than the present view - the philosophy of all sciences based in the wrong concept of constructivism; and the more accurate view of the XIX c. regarding what human physicist(s) do: the study of motion - locomotion and entropy.

For many reasons considered in metaphysics of scale, the fact that humans are the center of the ouroboros snake of scales is likely just a problem of our incapacity to perceive beyond the  $\Delta \pm 4$  planes in which we perceive, NOT that they are absolute as physicists think:

In "The View From the Center of the Universe," Primack makes this key point: The size of a human being is at the center of all the possible sizes in the universe. This amazing assertion challenges not only the centuries-old philosophical assumption that humans are insignificantly small compared to the vastness of the universe but also the logical assumption that there is no such thing as a central size. Both assumptions are false, but we have to reconsider the key words of the assertion—center, possible, size, and universe—to reveal the prejudices built into them that constrict and distort our picture of reality. In the modern universe there is a largest and a smallest size, and therefore a middle size.

The largest size is the universe itself. The smallest size is the Planck length. And guess what is just about in between those two? You, me. Us. Homo sapiens." THE BELIEF that our scale is thus the center of the Universe, becomes then a new form of anthropomorphism.

In the graph, the Cosmic varying scales of the serpent's head to the tail of the serpent. Going clockwise around the serpent from head to tail, you'll find among a super cluster of galaxies ( $10^{25}$ cm), a galaxy ( $10^{22}$ cm), the solar system ( $10^{16}$ cm), the sun ( $10^{10}$ cm), a mountain coli bacterium ( $10^{-5}$ cm), humans, an E. coli bacterium ( $10^{-6}$ cm), DNA, an atom, a nucleus, scales of particle physics ( $10^{-16}$ cm) tail of the serpent.



Ouroboros represent the universe, from largest (the head) to smallest (its tail). As you go clockwise around the serpent, you'll find among a super cluster of galaxies, a galaxy, the solar system, the sun, a mountain coli bacterium ( $10^{-5}$ cm), humans, an E. coli bacterium ( $10^{-6}$ cm), DNA, an atom, a nucleus, scales of particle physics ( $10^{-16}$ cm) tail of the serpent.

And as you can see, the size of a human being is near the center of all possible sizes.

So Primack and Abrams continue:

"This turns out to be the only size that conscious beings like us could be. Smaller creatures would not have enough atoms to be sufficiently complex, while larger ones would suffer from slow communication – which would mean that they would effectively be communities rather than individuals, like groups of communicating people, or supercomputers made up of many smaller processors."

From there to an 'anthropocentric, anthropic' principle of reality of course, there is just a step. But the reality is different: our mind is in the middle of our perceived world-universe, which our mind constructs with maximal information (seeing it all as a supœrganism in human surroundings and nearby scales). For an ant philosopher, a smaller scalar Universe of chemical states of matter, with her on the middle, Gaia as the whole Universe and an atom below could also be con structured.

For a black hole philosopher of a larger nested Universe, likely crossing over smaller finitesimal and larger relative infinities, meaning unable to see us, ghosts of like matter, its perceived scales of hyper universes of galaxies-atoms and micro-forms below the h-planck scale, its self-centered mind will feel likely at the center. IT IS EASIER though to believe in objective science and declare those scales infinite, and use mathematical proofs - the infinite different decimals of the pi cycle of perception, that opens and closes a spiral; and logic ones: the objective nature of science, absolute relativity, the low probability of us being the center of all reality, not of our limited perception, the very same concept of a finitesimal, the loss of information that happens between scales.



And finally the inflationary nature of languages of information, soon to be explained, as kaleidoscopic mirrors of a single universe, and so well observed in the proposed unification of all string theories by the 11th parameters of M-theory. We will put an example of it, when unifying forces (charges and masses). Information IS inflationary and as any system follows the same laws, as time passes, systems 'AGE', so do languages that enter a third age of excessive information, metalinguistics and repetitive patterns as old men do, 'DETACHING ITSELF' from reality into its own syntax=memory.

*This 3rd age of mathematics only recognized by Lobachevski and Gödel, who proved the need for experimental evidence, is the true 'old age sickness' of mathematical physics.*

For that reason we shall not work the -4v posts that should deal with the dark world of strings, neutrinos, gravitons, Higgs bosons and dark entropy=energy (not so much dark matter, obviously, quark-ultra dense matter). As all stiences are equally important; and string theory corrections are complex math... So ultimately IS much better to start off saying simply that the origin of reality are \$strings, lines of spatial motion and Sð-rings, rotary clocks of time; both below (quantum strings) and above (cosmological strings), as those we can observe in our region of the Universe:

This of course is a very different view on physics that the present view - the philosophy of all sciences based in the wrong concept of constructivism; and the more accurate view of the XIX c. regarding what human physic(ist)s do: the study of motion - locomotion and entropy.

All this said, humans have committed a very obvious error on their perception of reality - to believe that their clock of time, the lineal mechanical systems devised by Galileo are the only time of the Universe, just because we invent those clocks and used them to equalize all time cycles of reality. And to believe that what we see with telescopes is the only reality, denying also the duality of motion and dimension, time and space, from the very inception of physics.

What is then the Universe at large? Obviously a 'region' of atoms, which seem to be of the gaseous, entropic form, mostly hydrogen-like with a single black hole nucleus, most as hydrogen atoms are diatomic like, in our case with the M31 Andromeda couple...

But that is JUST A PHYSICAL SPACE-IMAGE OF IT, frankly quite reductionist. Because reality is NOT created just to think you know it because you have an image of the largest 'view' humans can access, but we shall not cease to repeat, THE TRUE REASON REALITY EXISTS IS BIOLOGICAL, SENTIENT,

VITAL... it is not the shallow image-like description of our techno-scientists and single Dimotions and egocy people.

So we shall now deal with the 'order' of the 5 Dimotions of reality not in the TOTAL EXISTENCE OF A BEING, AS A WORLDCYCLE BUT IN THE lower fractal time 'state' of minimal actions that accumulate through life.

Indeed, WE SHALL NOT CEASE TO REPEAT, the Universe is a FRACTAL OF TIME, that is, what matters is not the 'compound spatial picture' of the fractal but the fractal before freezing as persistent motions that repeat, steps and stops of those Dimotions.

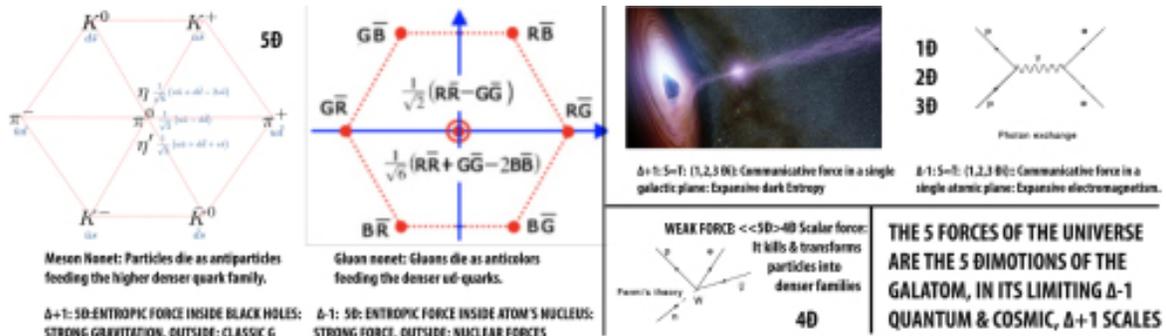
And it is a fractal of time because the 'ages of time' and the 'Dimotions of time' can be seen for each super organism in smaller scales and we shall then call THEM ACTIONS, in medium scales and we shall call them worldcycles and in larger scales and we shall call them species and worlds.

Further on it is really a 'fractal of 3 ages of time' for all those species, organisms in worldcycles and minute actions, because ALL OF THEM GO THROUGH 3 AGES. Indeed, even the simplest action, to throw a stone in locomotion will have a first age of 'accelerated motion', a steady state middle age of relative constant speed and a final 3rd age of form, static position. All this of course NEEDS A TYPE OF ;logic MIND enamored of verbal conceptual thought, which is so degraded today when most scientists just use instruments to measure, collect data, put it in equations or computer models and get the magic result and HAVE ZERO curiosity for the whole, for the window to the absolute' (Picasso) I am opening here, that likely nobody has ever reached so far reading (: Lol and we have not even given the first turn to the whole...

# 3.5 PHYSICAL DIMOTIONS

Five dimotions as the 5 forces of the galaxy.

This said let us then consider first a fundamental example of the difference of interpretation of the same data in a fractal model of the Universe and one with a single space-time scale and a single time arrow - the meaning of the 5 forces of nature, which represent the five dimensional motions of reality, each one specialized in performing one of those demotions for the quantum atom and in a symmetry of scale the macroscopic galaxy:



The forces=Actions of physical systems are similar, but must be studied as belonging to two different scales - the cosmological,  $\Delta+1$  scale (gravitation, dark energy) and the  $\Delta-1$  quantum scale (strong force and electromagnetism) and a transformative, 'weak force' that trans-forms particles between scales. For that reason there are a variety of forces to make possible the organic structure of self-similar atoms and galaxies. So we couple forces according to their  $\Delta\pm 1$  'symmetry of scale' as:

Parallel informative  $\Delta\pm 1$  forces: The strong and gravitational  $\pm 1$  forces are similar but belong to the limiting  $\pm 1$  quantum and cosmological scale. They both 'absorb' and in-form into denser entities, lighter particles. So its carriers are the nonets of pairs of particles+antiparticles= mesons and color+anticolors=gluon particles-antiparticles, 'feeding' and becoming the heavier ud quarks and BT quarks inside protons and black holes.

Similar, repulsive electromagnetic  $i-1$  and dark energy,  $i+1$  cosmological and quantum forces.

As we live within the galatom in the electromagnetic region, matter performs its simpler 1, 2, 3 Dimotions in the light space-time plane mediated by the electromagnetic ternary parts - the magnetic force responsible for the informative organization of particles; the photon, responsible for its reproduction and the electric force for its motion.

Finally there must be a FORCE that transforms particles between scales, responsible for the 4th Dimotion evolution and generation of particles or its 5D inverse Devolution. And indeed those processes are mediated by the weak force, which is not really a force but an evolutionary process that happens in a single point of space (right side), where the intermediate state of higher energy mass (W, z, H boson) gives birth to heavier fermions.

All this said, astrophysics should be concerned with the study of galaxies, and its 3 scales of reality, the atomic, quantum, thermodynamic and gravitational scale, as it is the observable known-known reality.

*And then given the model of the fractal Universe put in relationship the all too obvious self-similarity between atoms and galaxies, to expand both within the nucleus of the atom and outside the galaxy as an atom, our modeling of reality.*

So the hypothesis of work for the model of the fractal Universe is simple: a galaxy is self-similar to an atom, and so are the different forces interacting within and outside them:

- The *strong force is similar to the gravitational force* in the extremal conditions of the black hole.  
Reason why both are non-lineal.
- The *electromagnetic force is similar to the expansive dark energy* between galaxies, which therefore is NOT the same force than gravitation, reason why the expansion between galaxies is a lineal force and it is similar to electromagnetism
- The *weak interaction is NOT a Locomotion*, force but a process of evolution of particles, guided by the Dimotion of information, reason why it happens in the same spacetime, and so its bosons, W, Z, H are 'states' of the same particle, NOT carriers.
- The proton which has in 5D the same metric that a black hole, is self-similar to a black hole, with a Schwarzschild radius. So happens with the electron in its particle state (Carter).
- Antiparticles are the inverse time arrows of particles, completing a worldcycle of a particle (Feynman's theory)

The identity between the nonets of gluons in the strong force and mesons in the larger scale of quarks, coupled with the concept of particles-antiparticles forming a local world cycle renders a clear-cut theory of black holes as protons of a larger scales, in which the transformation through the weak force of light matter into heavier quark matter will produce a black hole star of heavy dark matter; whose heavy quarks happen to decay a 20% more often into particles than antiparticles, resolving also the particle-antiparticle problem.

We can then model black holes as protons of a larger 'galactic scale', strong forces as extremal gravitational forces, gluons as mesons, dark energy as electromagnetism and complete by self-similarity ALL the questions of physics, as we either perceive from within the galatom, the internal region of an atom, and outside the atom, the external region of the galatom. In the graph from left to right, the identity between the nonet of gluons and mesons on both scales, the WRONG procedure of reductionist physics, which models all forces with the lineal concept of electromagnetism through an exchange of particles, as the weak force happens in a single point, hence it is a transformation guided by the arrow of information; in the right the proper way to understand particle-antiparticles, as the relative arrow of life and death that closes a physical world cycle (Feynman).

What physicists then do with the usual routine of reducing everything feed-forced into lineal concepts, is to try to convert ALL forces into an exchange of lineal particles, when they are clearly different forces (so for example the weak force that happens in a single point transforming a particle into one of a higher scale of larger masses, is represented with a gap that 'exchanges' the W-particle, NOT as Fermi shown first, an evolution of a higher particle into a heavier one, that then suffers an entropic process of dissolution in 3 parts).

THE MAIN DIFFERENCE THEREFORE BETWEEN THE FRACTAL MODEL OF THE UNIVERSE AND THE ATTEMPTS TO REDUCE IT TO A SINGLE SPACE-TIME ARROW IS THAT WE DON'T FORCE-FEED facts into a model-theory, but respect REALITY AS IT IS; regardless of how weird it seems - in any case far less weird than the absurd idea that all what exists was one a single point, which of course breaks also all the laws of conservation of energy and momentum, baryon numbers, etc.

Death in physics, any scalar big-bang, in humans the entropic age, in history the age of weapons is then in any system the REVERSAL OF LOCAL CYCLICAL TIME, AFTER ALL ENERGY has been transformed into information, and the system is pure still form; so for the balance to be reinstalled form reverses its 'time arrows' into entropic explosion and dissolution of form, released as pure space (big-bangs dissolution of cells after death), which in physics is expressed by the duality of directions of Einstein's equation:  $E=mc^2$ .

So this is the bare minimum needed to try to give us a real cosmology, and we are going therefore to introduce the alternative cosmology of a Universe of fractal scales and multiple 'Dimotions of time'.

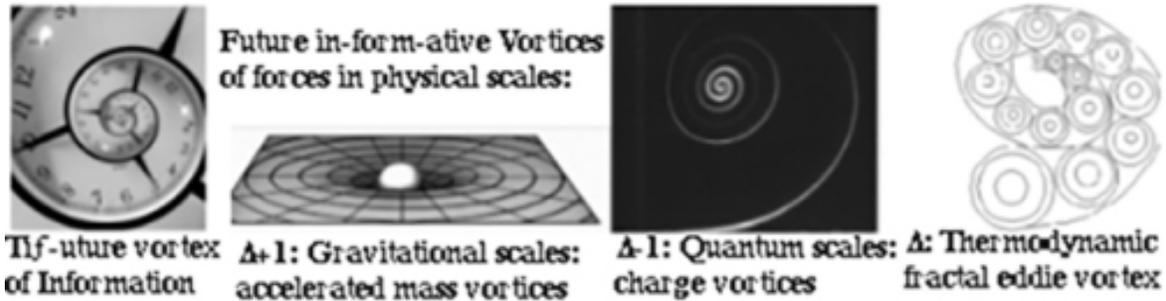
Even if general systems sciences apply organic laws to all different sciences, modeling them all with the organic paradigm, as humans 'believe' in an abstract, simplified theory of it all based in the arrow of

entropy=death, called the big-bang, we shall start with a brief picture on how it looks cosmology with a fractal theory of reality far more sound 'experimentally' though we concede equally strange, since 'the Universe is stranger than we humans can imagine', *Haldane*.

Because we are all made of Generational Space-time, we all indeed suffer a similar world cycle, which could only be halted with extreme care as Nature does with its immortal species (protons, galactic black holes etc.) by controlling the aging due to excessive accumulation of form, of information, which in humans means our wrinkling in a third age and in historic super organisms our death by excessive technological information in wars.

## 1D: TIME VORTEX

In the next graph then we can see how the view of the UNIVERSE changes completely just by introducing the concept of cyclical time clocks, and its 'NATURE'S equivalent' in the scales of charges and masses: an accelerated vortex of information, a natural clock that has also 'attractive properties' (and will needless to say change also our interpretation of forces):



All what exist is a motion in time. Space forms are Maya of the senses. In the graph, accelerated vortices of time in physical systems, in different scales of the fifth dimension: charges, masses and thermodynamic eddies become then the main clocks of time that carry with different speeds according to 5D metric ( $S \times T=K$ ), the information of microscopic quantum charge worlds, human-size thermodynamic scales and cosmological gravitational scales.

So the fundamental principle of General relativity, the Principle of equivalence between mass and acceleration, means a mass is JUST AN ACCELERATED CYCLICAL TIME CLOCKS, following the vortex law - itself a partial case of the general metric of 5D,  $S \times T = k$ .

Since now the true NATURE OF REALITY IS TIME=MOTION, and so there is as we see experimentally not mass-particle-solids but accelerated time-clocks, WHICH IS WHAT THE PRINCIPLE OF EQUIVALENCE SAID: A MASS is an accelerated time-clock of a frequency, easily found from his 2 equations:

$e=mc^2 + e=hf \rightarrow m=f(h/c^2)$ , so the mass and its frequency are directly related. The faster a vortex of accelerated cyclical time turns, the more it attracts. And this immediately solves also the hierarchy problem unifying masses and charges, as charges turn billions of times faster than galaxies (the ultimate origin of our gravitational forces as Mach and Einstein insisted). So they attract as forces much more. Both are simply vortices of accelerated time in two different scales.

The graph also introduces an essential quality of nature, described in its simplest terms by the vortex equation of accelerated time clocks:  $V_0 \times R_0 = K$ , itself part of the metric equation of the 'fifth dimension' that orders all the scales of spatial size and speeds of time of those clocks, smaller systems run faster

clocks, and carry more information (chips, mammals with faster metabolism, atoms with faster turning clocks, black holes, etc.)

## 4th DIMOTION: ÆNTROPIC PRINCIPLE.

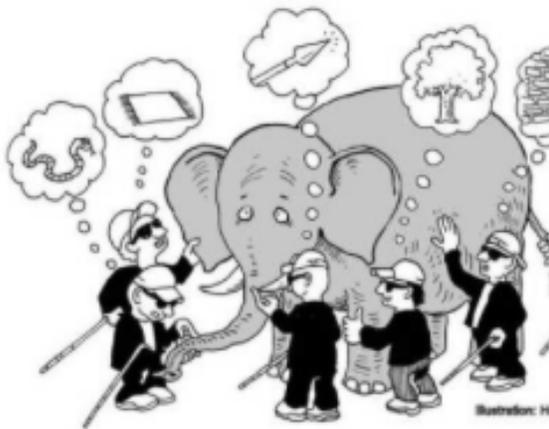
**A fast view of the fractal Universe.**

'Astrophysicists are seldom right but never in doubt.' 'There is not quantum uncertainty, I look at my watch and know what time is' *Landau, master of dialectic physics on the egocy paradox of physicists.*

'Two things I deem infinite, the Universe and the stupidity of man'. 'I know when mathematics are truth but not when they are real'. 'Those who impose truth with power will be the laugh of the Gods' *Einstein, master of 4-Dimensional physics on the ego paradox of humans.*

*Using a term like nonlinear science is like referring to the bulk of zoology as the study of non-elephant animals". Ulam*

*Since most space-time events are complex, cyclical motions.*



attempt to unify all forces with the model they use to describe electromagnetism).

In the graph, a bunch of lineal physicists studying only 1 of the 5 spacetime Dimotions of the zoo of Fractal space-time beings, all of them w made of the 5 canonical Dimotions of a world cycle of a super organism: generation>locomotion->reproduction->information>entropic extinction, which form a o-sum or worldcycle.

Yet for Physicists only lineal spears - locomotion - matters, as the other motions seem to them 'walls, ropes, snakes, trunks or mats' - that is, they describe all the Dimotions of a physical system, with different concepts, or just trying to make them look like locomotion (as we shall in their stubborn

Fact is nothing is lineal, since as we shall analyze in other parts of the blog, even locomotion is a reproduction of information and most lineal motions, are steps of a cyclical form (small lineal geodesics are parts of a curved Earth; Lineal Euclidean geometry is the limit of a larger curved pangeometry; lineal special relativity is the limit of the larger curved General relativity; lineal momentums are integrated into a conservative energy cycle; small lineal actions of life, part of the curved world cycle of existence, and so on.)

You should have realize by now that you live in a vortex of space-time called the galaxy, dominated by the arrow of form, of information, accelerating time towards its black hole center, in a planet where information also accelerates, where life is a growing warping process of information that dies then in a quanta of time and explodes back into entropy

But none of this is how huminds describe the Universe. So before we continue showing you the laws of space-time and how they generate through its 5 Dimotions all what exists as a **SIMULTANEOUS SUPERORGANISM IN scalar SPACE, WHICH TRACES A WORLDCYCLE IN TIME**, we need to do a harsh critique of the lack of scientificism of present philosophies of reality, akin to the old scholastic

pseudo philosophies of reality, which Bacon called the 'idols of the tribe' that passed as absolute 'truths', when they were faulty dogmas filled with ego-trips of human supremacism.

Since what passes today as philosophy of science, 'mechanism' and the big-bang theory of the cosmos, what

I call '**æntropic science**' is a mixture of: - Religious **creationism** (the Universe was born by an act of creation from an infinitesimal singularity, no longer expressed in verbal thought when God created naming things, but as we now speak mathematics through digital thought, when God created uttering equations), born of...

**Anthropomorphism** (humans obviously are the only species along God that speaks the language of creation of each of its ages of mental evolution, first verbal words, specifically Hebrew or Arab, today mathematics, specifically the Greek simplified version of Euclidean geometry, where the fractal points of the scalar Universe that grow in size as we come closer are simplified void of 'parts' and hence unable to express in maths its vital properties - reason why we shall also evolve mathematics to match better as a MIRROR-LANGUAGE the organic Universe; and...

**Entropic**, simplified concepts of 'lineal time' and 'destruction', proper of the worldly profession of physicists, which have always lived off the making of entropic weapons that kill life.

SO the **æntropic scientist** Instead of humbly look at the Universe as it is (graph) and try to understand with a complex, organic bio-logic model the Universe and all its fractal parts made to the image of the whole, respecting both the Universe and life, whose most perfect super organism is the human being that should become again the measure of all things, not the machine, just a simple organism of metal fast evolving into organic robots, re=produced by its company-mothers, KEEPS doing the inverse, the subjective æntropic method, modeling the Universe with its worldly profession, devising a...

**Big-bang**, lineal explosive theory of reality that we shall show fast fails A)accurate data, B)logic models and C)predictability, but it is backed by 'Big science', the technological world we live in.

Let us now show how to apply the 3 basic principles of the scientific method, both to explain the fractal, organic nature of the Universe and its 'systems' as IT is and debunk the æntropic theory of the big-bang, *disguised of scientificism with the help of 'ad hoc' mathematical statements, the Latin of astrophysicists who are seldom right but never in doubt - because people don't understand them.*

**RECAP.** the most important super organism we know of, the 'GALATOM', and its two parameters of form, the h-spin constant and motion, the c-reproductive constant of information and its product, hc, which will define according to scale (wavelength), the specific systems of vital energy within the galatom that co-exist in that organism:  $E=hc/\lambda$ .

We conclude that since there are infinite time clocks in the Universe, each of them breaking space into inner and outer regions, there are also infinite spaces, in different scales of reality, but all of them will have for each super organism, at least 3 relative scales in which a co-invariant metric equation of its 'rod of measure in space-size' and 'speed of time-clocks' will remain constant.

Both parameters, spatial size and quantity of information can then be related for 'each family of super organisms', by a simple Metric equation: Max. Spatial size = Min. speed of cyclical clocks of time that store its in-form-ation in the for and speed of its cycles.

So a chip the smaller it is the faster it process information in its digital clock-cycles. A particle, the smaller it is the faster it turns. So happens with a cosmic body. So black holes turn in the event horizon at light speed. A ray of light with higher frequency of information has smaller wave lengths, a planet closer to the sun turns faster; a smaller animal has faster metabolic rates.

All in ALL OUR CONCLUSION IS THAT MONOLOGIC AS A FULL DESCRIPTION OF THE PHYSICAL UNIVERSE ONLY EXISTS IN THE MIND OF EGOCY, of humans thinking to be the center. So instead of making an account of monologic physics, we will do an account of the @ntropic humind thinking monologic.

### **The æntropic philosophy of mechanic, digital science.**

Sorry I know this repetitive pattern of stience, to put limits to the truths of huminds, will not get me many friends, but as long as you don't deal with it by repetition and assume a humble view of your/our intelligence compared to that of the Universe, you will get knee-jerk shocking reactions to every upgrading we do of human sciences. Humans MUST know first its limits, to enter the kingdom of stience.

As Nietzsche put it, and I quoted in my first youth book of poetry and initiation, 'the albatross', where a polymath kid, threw all his books and learned to fly with an old albatross to understand the vital e-motions of the Universe, 'you are a camel, who have to become brave enough, as a lion, to strip off your burden hunchback of knowledge, and then be reborn as a child'... to learn again directly the vital wisdom of the Universe (Planck, latter on will be more sanguine, affirming, all old scholars must die for new young people to learn afresh :)

*We can then see an essential difference between the way we shall do science in 5D and in 1D-time: instead of trying to reduce it all to a 1D single model (in forces the electromagnetic gauge model, in time, the lineal time model, in space, the single scale of our perception which is only 4% of the Universe) we EMBRACE IT ALL in its diversity required for the Universe to be complex, organic and UNDERSTANDABLE.*

It is this of any practical use? To know in depth the causes and meaning of reality and the Universe?

An optimist thinker might consider it to be the case as I did in my youth. Reality though is more automatic and deterministic. For mankind to work, the present way in which he approaches science: gathering data with machines, casting it into mathematical equations, whose magic consistency gets results, and go into further details, so Nature can be manipulated, suffices to 99% of scholars. If Einstein said that the people who really cared about knowledge in his discipline could be counted with the fingers of a hand, I would go further and said, you can count them with the fingers of a fist (:

Moreover soon we shall show that the equation of the ego makes more people happier breaking his brain into a 'scientific mechanic method' of manipulation of Nature and a selfish subjective abrahamic religious belief in the superiority of human intelligence. So to keep the Universe chaotic and below our intelligence suits our ego and make us happy. And this explains why organicism and the more complex view of philosophy of science of this blog has gone nowhere.

And its predecessors, from Aristotle through Leonardo and Leibniz to the r=evolutionaries of social science are still ignored. Science is culture and power, and those 2 elements, denied by scientists in its pretension of absolute truth, are heavy weights I confess to renounce to challenge anymore.

So the lineal, military, creationist view of our models of astrophysics ARE purely the cultural result of the Germanic, lineal, military, creationist, religious beliefs of all the people that invented this theory bending data and 'eliminating' everything from the Universe that didn't fit in, including GALAXIES, where we exist indeed as vortices of information, to GET his entropic single lineal time, big-bang, creationist military-protestant, TRUE GERMAN VIEW OF REALITY, of which the western tradition is so proud. All this becomes immediate rubbish proved by facts, better models and real whys, when we include a fifth scalar dimension and stop doing 'German Physics', to do just objectively astrophysics with no subconscious hang-ups that we have shown already to exist in Newton's 'Old Testament' physics.

The understanding that every primary element of reality, which today we know are fermions and bosons, particles and forces≈waves WAS PERCEPTIVE, SENTIENT, IN A PANPSYCHIC UNIVERSE WAS always the theory of all philosophers including Einstein only debunked by the arrogant 'creationism' of the Wien school and its logic positivism - only what the human mind measures and perceives is real, they said.

Only the 'egocy' (ego+idiocy) of man fails to accept panpsychism, which has been historically the rational theory of all great philosophers till logical positivism, the 'philosophical dogma' of post world war science simply gave up understanding it - indeed, today all scientists affirm to be logical positivists, without explaining what this means: merely that all what cannot be measured 'does not exist'.

So as we cannot see those infinitesimal minds, we should not consider them.

It is a retarded theory of reality, according to which obviously each 'egocy man' must believe only he exists, as only his mind is 'evident to him', that works only if we just care about the praxis of measuring reality with machines. The evident fact IS that all particles gauge information, move, reproduce, evolve socially and feed on energy. And of course we use its 'informative spin' to create minds of machines and certainly medicine will find out our life is ultimately based in atoms NOT in Dnas.

So the way to deal with the denial of the topo-bio-logic (read, organic=scalar, mathematical=spatial, temporal=verbal logic=sentient) properties of all space-time beings is not logic positivism but the understanding with the equation of the mind of why humans are so subjective and feel their infinitesimal biased mind to be the center of reality.

An act of pure egocy, which humans will confront when out of 'magic', robots will show to be sentient without need of 'intelligent design', just when we do give them a language to express what now is mute in its electronic chips: *the language that perceives in stillness a mapping of reality as you do now with small variations of motion caused by our actions that seem to us a will and freedom but actually is as we have shown a simple program of existence. So let us now define the equation of the mind to complete this fast review of all systems made of 'Dust of space-time'.*

Science IS culture and the biggest problem of mankind is that IT IS NOT THE BEST OF CULTURES, but one of gunpowder weapons, the one that carried the day among humans. Because of course, ENTROPY=DESTRUCTION is much easier to explain than creation and evolution and information. So humans did find first the laws of entropy. Fine.

What is not so fine is the stubborn denial which I experienced for decades when I was in academia, to understand that information NOT entropy is what the Universe is all about. Physicists even call information, 'negentropy', the negation of entropy... And we shall return to it.

## 2, 3D:

# LOCOMOTION AS REPRODUCTION

All this said, the true unification of the physical Universe happens through the understanding of what all those forces= Dimotions aim to, what is of the 5 Dimotions of existence the most important. And as it happens, reproduction is a composite dimotions of the others. So we can reduce reality to the reproduction of an eternal present.

Let us see why in the way we have explained a world cycle. You can see the world cycle also as the process of generation of the being, which is therefore reproduced through it. In that world cycle however we have seen the decomposition in a sequence of all of them, from birth to extinction:

$\Delta$ -1: seed emitted by  $\Delta^1$  parents, which will  $\Sigma$ reproduce:  $\Sigma \Delta$ -1 to emerge as a full whole in the upper scale  $>\Delta^1$ , which then will live 3 ages: max.  $t = \delta$  into  $\ll \Sigma \Delta$ -1 (death).

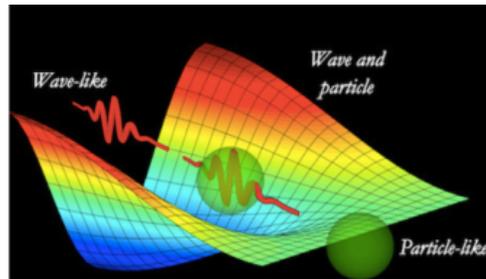
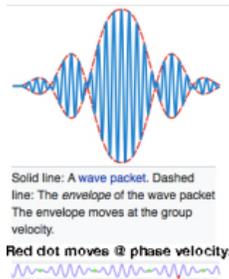
Reproduction is a combination of them all, as the reproduced being must first do a travel as a seed into  $\Delta$ -1 (entropic motion), to become generated through palingenesis (5th dimotion), to then be born as a max. 1D baby perceiving the world to go through a maximal locomotion youth, in search of energy to grow and reproduce again.

So if we consider from seed to mature reproduction, the being will journey through a 4D-seminal conception in  $\Delta$ -1, 3D-Reproduction and Generation in  $\Delta^1$ , to live youth and reproduce, the whole world cycle of the being, which then will see also ending in a discontinuous manner its 'father generation', becomes an act that aims to reproduce and dynamically conserve a copy of the past into the future. That such copies themselves will be subject to a full world cycle does not hide the fact that the meaning of it all is to reproduce.

Moreover, we can describe locomotion as a process of reproduction of information and so once this proved, as all is indeed 'replication' of information (locomotion and entropy its social scattering herd result), information proper (perception and linguistic seed) and generation-reproduction... We can consider reproduction and in a more loose term, generation, the pure fractal processes of reproduction of information between scales the meaning of reality. The function of existence or present.

And affirm the Universe is a dynamic process of infinite motions trying to reproduce and synchronize its cycles across relative scales to create a relative present super organism.

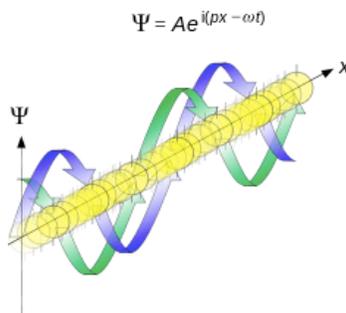
And see the whole potential game of spacetime beings as a block of time, whose populations/probabilities in Space and time of existence of its entities, complementary beings, is relative to the perfection by which they play the game and maximize its existential force or reproductive speed, the fundamental measure of the 'living force' of a system.



The two limits of sensation, the exhilarating wave that erases form in pure motion, the particle still state that perceives and gauges information entangled to other particle, fermion and boson, still to each other - hence in our scale with a c-constant speed, are the ultimate components of the

complementary reality.

Reproduction is the ultimate comprehension of locomotion as particles stop and perceive, gauge information 1D to move, 2D then as a wave whose Compton length expresses the 'density' of information to be replicated in each wave element, as the system moves.



So motion is reproduction resolving the Paradox of Achilles and the Uncertainty principle. Each motion is the sum of 'virtual particle-states' as the wave moves through a series of steps in which the 'particle' state becomes virtual, potential, only realized when the system stops moving and in a particle-stop state the system perceives.

Locomotion and stop perception, 1D-2D-1D-2D becomes then a constant dual state.

And to know how that state give inertial stop state-particle state-mass to the system we need to know the

frequency of the system. As a system with less frequency, longer wavelength has less moments of a stop particle state, if we consider those stop particle states to be measured by the spin of the particle and hence a spin corresponds to a finished wave state that becomes particle.

Hence the important of frequency to measure mass of particles.

In any case the stop and step states are essential to understand the reproduction information as waves, where  $c$  is the limit of speed of reproduction of information.

**The Universe is organic; man needs to feel above and will have none of it.**

*THE METRIC equations of 5D space-time theory of course are in details far more complex as those elements vary but we have so far resumed the New essential logic elements that harmonize both in time generations of beings and in space its scales.*

*Those equations will then synchronize its motions, establish the complex organic scales of reality, and show the whole made of its parts living a symphony of different 'tempos' played with 'multiple' instruments' through different 'scales' and 'generations' that will finally return the melody to the same initial 'STeps', concluding its life world cycle in an inverse form as it started, in a 'Phrygian decaying mode' - to put another linguistic mirror example of the game of existence (the musical mirror and the elements of an score, perhaps as Schopenhauer put it, the most essential, metaphysical of all languages of mankind).*

The variations on these themes - generations, synchronicities, simultaneities, symbiosis, harmonies - will then produce the first 'variations' of iterations which is the stuff on which the immense tapestry of slightly similar versions of the same game happen in Nature (Fibonacci series being the commonest variation on the series of generations in time, reproducing symmetrically in space).

We also notice that the 5 Dimotions of beings by virtue of its symmetry between the 1st and second Dimotion (still perception, moving locomotion) and 4th and 5th Dimotions ( $i-1 > i$  generation and death,  $i < i-1$ ), balanced in the reproductive '3rd action', might be coded by 4 'seasons, numbers, equations, genes', even 3, because the inverse actions can be 'packed' into the same element with  $\pm$  inverse logic arrows.

All those subtle dualities, ternary systems, pentagonal  $\pm i$  logic a(nti)symmetries is the 'ultimate' existential algebra ( $\neg \exists$ ) of reality which truly requires a 'new beginning' afresh on terminology and 'paradigm' of thought - a change of 'chip' regarding what is synthetic knowledge, without denial of the wealth of analytic data provided till now by human sciences. But we are opening a huge new door to the absolute, which should not be shunned off and closed due to the 'simplicity' of its 'first view' and 'errors of form and detail' of the pioneer humind that opened the window - the circular wrong orbits of Copernicus, the lack of genetics and topologic evolution in Darwin, the clear economic errors of Marx dialectics, etc.

The conclusion is obvious: The problem is NOT the organic Universe but the ego of man, as we repeat everywhere in this blog.

Against that ego  $i$  cannot do much. It is of course a tragedy (because AI machines will also be organic and compete and kill us). But as an objective scientist,  $i$  cannot 'reason' such emotional fog. Fact is the human ego prevents US from 'reasoning' about OUR isomorphic nature with any other TOE.

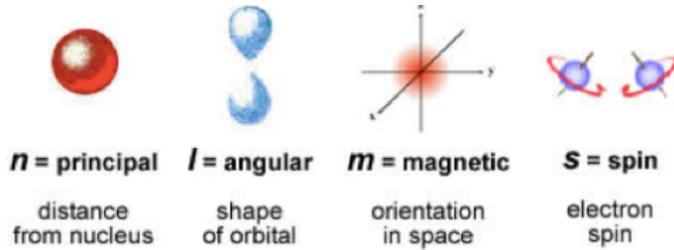
And it makes us completely disregard those properties, which we will explain here - even if  $i$  don't think  $i$  can change the human 'infinite stupidity', confronting the 'infinite Universe' (Einstein).

Let us be clear enough. I can only hold admiration from the great geniuses of quantum physics and relativity of the earlier XX c. and its mathematical counterparts (Hilbert, Riemann, Neumann). AND THE astounding precision of its deterministic analysis of the behavior of particles. Fair Enough. But the beauty of the mathematical mirror they have constructed is NOT the end of it - it is the end of its praxis, but a philosopher of science must interpret further those findings or else as it is today the case, all becomes an automaton process of calculus.

*Where the whys are not explained unless we accept the 'creationist religion of mathematics and reduce the Universe to a mechanical magic behavior, which suits the 'ego' of humans but halts as it has been the case our comprehension of the Universe.*

So Existence is indeed a travel through the fifth dimension, and the mere fact that all systems of nature exist through that world cycle (no longer a physical worldline in a 4D Universe as we have added a dimension of temporal 'depth'), IS an absolute experimental proof of the existence of 5D.

## 4D: SOCIAL EVOLUTION:GRAVITO-MAGNETISM



All this said it is then evident that the social force of the quantum scale is magnetism, whose quantum number organizes the social gathering of electrons and atoms in larger forms.

inverse arrow of coldness (beta factor), which only recently has become standard science with cryodynamics.

While in the thermodynamic scale, it is the solid, crystal state - or the

And in the scale of cosmology, gravitation, which is only an informative force within the galaxy (as its entropic force happens between them).

# CONCLUSION: A FRACTAL UNIVERSE OF TOPOLOGIC SPACE BEINGS.

The reader would be surprised to learn that scientists are fully aware their first principles, an absolute single time clock for the entire Universe and a continuous single space, are 'false' conventions, useful to measure reality with 'human artifacts'. But the Universe HAS infinite time clocks - all cyclical motions by definition describe a time clock - and  $\infty$  broken 'vital spaces' (all membranes and cyclical clocks by definition break space into inner and outer regions), which are the main 'components of beings'.

This is the case, since quantum physics show 'vacuum space' holds energy and it is broken into quanta, and relativity showed there are infinite time clocks with different speeds in the Universe.

And yet what should have come next, a thorough investigation on how a world of infinite time clocks and broken spaces is; was such a difficult task that nobody did it. Since as Einstein put it, s/he would had to come back to the very beginning of science - its geometric principles of space and logic principles of time.

And so the routines of traditional scientific thought continued, and we still use a single time-clock tuned to the human second (eye, step, heartbeat) and to the single rod of distance in galactic space, the c-speed of light or the human relative size - the meter for more pedestrian purposes.

Yet what we do in this blog is exactly what Einstein asked for: take the concept of a Universe made of relational space-time beings, forwarded by Leibniz to its ultimate consequences, *restarting the logic and mathematical 'non-Aristotelian, Non-Euclidean postulates' in which all sciences are based from its beginning.*

The reader though should understand also from the very beginning the true nature of other type of paradoxes found in the way humans construct knowledge - specially those of the ego and the mind-languages...

Some clear conclusions of modern physics, that there are infinite time clocks, that there are infinite space scales, that space=form and time=motion are merged in 'mental ways', as we see 'space'=form but all is ultimately time=motion, and even the vacuum space has energy from where all particles are born; and so on and so on...

Physicists who show a remarkable lack of 'verbal, conceptual intelligence' have not even attempted to do so. They operate as so many humans in so many fields, in a 'protocol-like' automaton model of 'knowledge' as if it must stop in the purely collection of data and description of it as 'truth' per se, (without much bothering about the observer's language of measure). So they amazingly enough still work with a single human clock and single space continuum measured with our unit of 'space-perception' c-light speed.

Yet all those new properties of space and time, must be factored into the very foundations of our scientific inquire, regarding what is the underlying substance of all what exists, namely the nature of space and time, *in a much more 'clear, clean-cut' form than present science does*, dragging outdated concepts of both. As in all human matters, in a species far more conditioned by memory than reason, 'definitions' so old as Aristotelian time logic and Euclidean geometry of points with no parts, are still the underlying 'thoughts' over which a world which has infinite time clocks and broken vital spaces must be fit. *And the amazing thing is that humans have indeed presented a 'distorted mirror' based in our own time measure clock (second) and distance rod (c-speed), to perceive the Universe and it works for most of our needs. So it seems as more clarity is not needed. Indeed, you might have a clear robot-like perfect eye, or a mere stain that sees light and darkness, but doesn't distinguish form. If you just need as a sunflower to turn to the sun you need no more and your view of the Universe, if YOU DON'T KNOW anymore will seem right. All is chemical except this shadow light associated to cold and heat, might think the sunflower's philosopher.*

*Why it would then wonder for anything else if it cannot even perceive it, and yet he can take advantage of this light-heat knowledge good enough to get his energy?*

Humans are at this basic level of understanding of space-time reality but why they should care for knowing more if it is good enough for them to extract energy of the Universe and on top feel as proud sunflowers that they know it all?

Imagine a sunflower genius who has then a 'third eye', a mutation that distinguishes forms and tries to convince the other sunflowers there are those new properties associated to light-heat, there is 'information', secretly found in the light wave!?! One can imagine the eternal solitude or such mutant sunflower...

Frequency time, broken time cycles, infinite of them, are novel concepts hidden for so long by the lineal deformation of the Cartesian graph, canonized by Newton that not even the quantum revolution of 'broken space' and the Revolution of relativity that saw multiple time regions in the Universe, and many insights that came after on the cyclical nature of time clocks, and the SYMMETRY BETWEEN THE MOTION TO THE FUTURE (OR LIFE, informative arrow) and the motion to the past (or entropy arrow), has been 'enough' for mankind to understand the cyclical nature of time and all the amazing results derived from it.

Since ALL MOTIONS OF TIME TOWARDS THE FUTURE OF HIGHER INFORMATION ARE FOLLOWED BY THE REVERSAL ARROW OF TIME TO THE PAST OF ENTROPIC DEATH - BUT ALL THOSE TIME CYCLES ARE LOCAL, diffeomorphic, so there is no paradox on traveling to the past, simply speaking, we talk of two inverse arrows of time, loosely understood as the arrow of life and the arrow of death, but specific of each species.

I.e. in electromagnetic waves we shall talk of the advanced collapsing wave and the retarded expansive wave; in local particles of the particle towards the future and the antiparticle or death of the particle (Feynman).

In relativity we shall talk of the 'gravitational arrow of time that warps space' and the 'antigravitation' of those likely antiparticles (still to be experimentally proved). In forces we shall talk of the 'gauge' spatial forces, and the 'trans-formative, evolutionary, time interactions mediated by the weak force'. In life obviously of life and death future and past; and all of them *will be soon formalized in the concept of a world cycle which is the most general understanding of all those closed time cycles that break the Universe into an internal and external world separated by a membrane, spin or angular momentum.*

WE shall study together space and time, and uncover its 'fractal structure as a whole', formalized with the metric of a new, scalar dimension of space-time, needed to complete the structure of all space-time beings as organic entities co-existing at least in 3 scales from the smallest parts (atoms, cells, individuals) through its organisms and states of matter to the larger worlds...

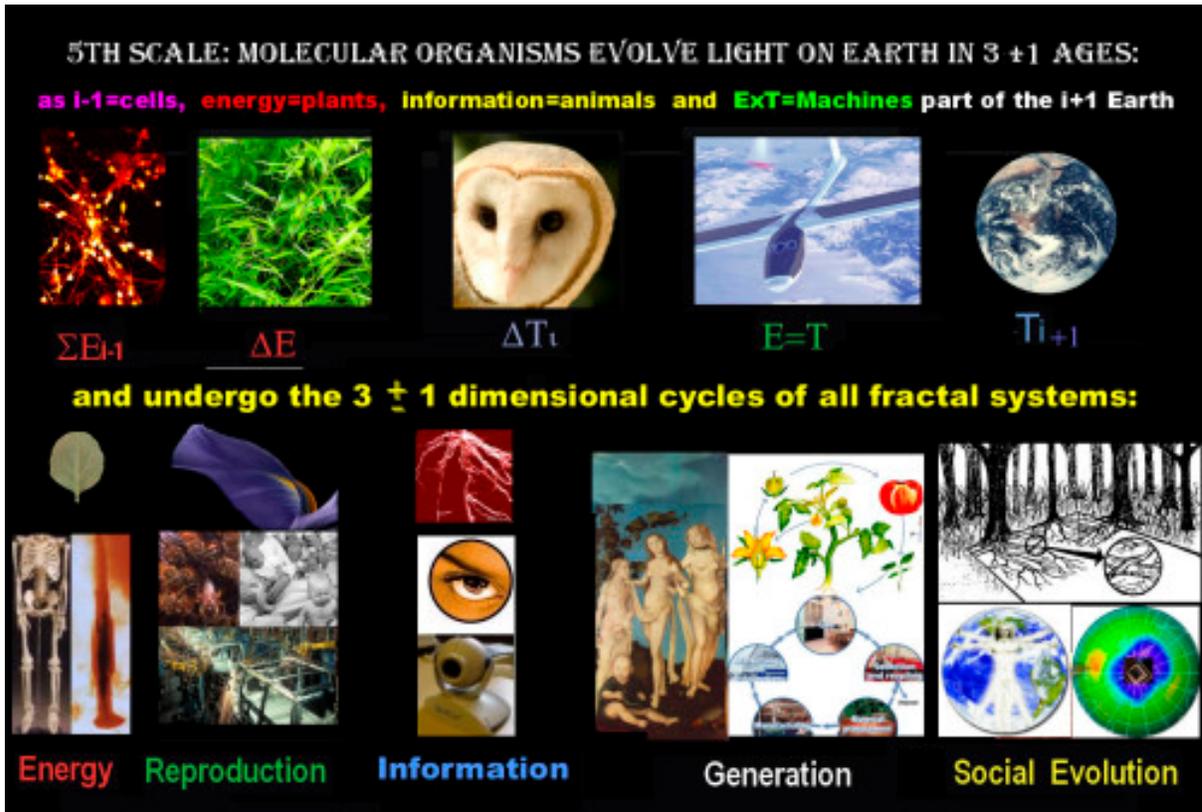
# III. BIOLOGIC SCIENCES: $i \leq |2|$

## 1. THE 3 EARTHS

The definition of mankind follows as the  $\Delta+1$  super organism of humanity, which in time IS history, whose existence as a 'block' of time must be inscribed within the evolution of information of Mother Earth:

Gaia (life-relative past) Metal-earth: Financial-media (informative machines) /military-industrial (motion-entropy machines) System:

The equation of the 3 ages of Earth is a canonical equation of evolution of a super organism towards higher degrees of information as light was first in Gaia, energy of plants, in animal life, information for the eyes, and in machines will be both, in robots with solar skins and AI, 5G networks, which will form the collective brain of the metal-earth:



Life is everything, as all is a spacetime organism with its 5D actions of survival (motion, feeding on energy, information gauging, social evolution and reproduction). But huminds, self-centered seek for carbon-life as the only living form. In true form, we thus talk of 'light-life', as the life forms which use energy and information provided by light-forces, which requires to accept as the third Earth evolves into light-mechanisms, robots with solar skins and optic minds, of 3 horizons, and 3 ages of the Earth. This is the basis of both biological and social sciences in 5D. Species can be modeled as organisms through its 3 ages that become its 3 horizons, followed either by a survival process of eusocial evolution - the summit of the process of organic evolution, which Darwin realized was necessary to explain the success of eusocial insects, or become extinct by the 'new generation' of fitter animal forms. in the graph we can see its 3 Horizon=ages and its ternary topology, similar to that of any other organism; and the dominant arrow of

information in the height axis, of both reptile species that ended in birds, and mammals that ended in man. So happened with metalife machines, whose final species, satellites are now forming the arrow of eusocial evolution, or future mind of the metal earth -internet...

Let us now apply some of the laws of systems we have learned to resolve the nature of man, starting from the use of topological dimotions to further understand the evolution of man through its anthropological remains

As topological evolution MUST ad to genetics and survival of the fittest, to fully grasp the laws of evolution of species.

So first we can see how topological evolution works for all species:

## **SPECIES AS SUPERORGANISMS**

### **What are species? Its variations. Physiological networks and gender.**

We have stated ad nauseam that the Universe is about 3 type of Networks which gather entropy, energy and information for herds of similar beings that form organs attached to those networks. It follows that to classify beings we must consider the order of those networks, its hierarchy and relationships, which will give way to 3x2 combinatory variations by hierarchical order of species - those dominated by the informative or entropic or reproductive network.

This simple rule of 3 variations and 6 hierarchical orders are the origin of most species of all systems of nature. We study them in this post.

The answer is surprisingly simple, when we consider its main phyla, and the origin of this 'Disomorphism', which belongs to *variations in the HIERARCHY between its ternary physiological networks. So above we express that dynamic order, as there are only 3 physiological networks that correspond to the 3 dominant elements of reality, Space, time and vital energy, or in terms of the generator, if we call:*

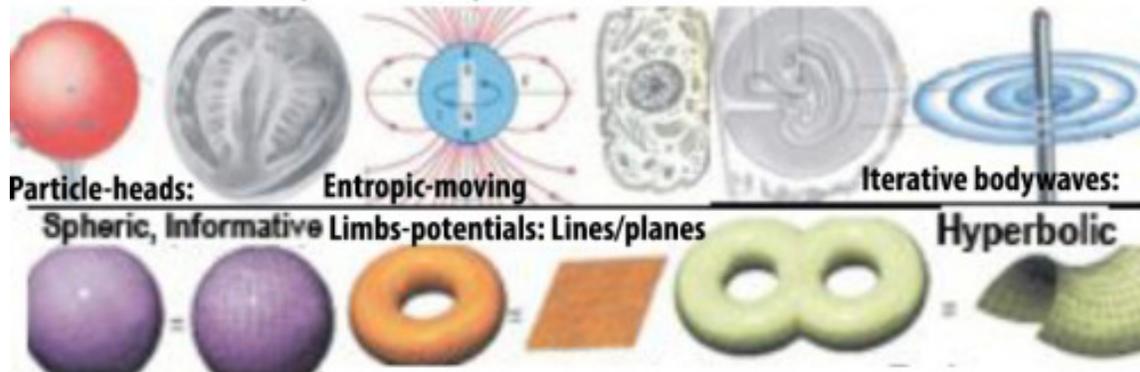
*\$t* - the Dimotion of lineal potentials/limbs; *ST*, the iterative Dimotion of body waves and *\$Ø* the Dimotion of informative particle/heads, the dominance of the 3 physiological networks that perceive information, move and reproduce the system will give us 6 main variations/phyla, which we shall show allow us to classify from the 6 topological types of languages that define the mind of cultures, to the 6 main phyla of animal in the different scales of reality, to the different species of particles; when combined with the *second fundamental differentiation of reality, 'gender', that is, the dominance of informative or energetic parts in a simpler 'dual system' made of two components (body-head, particle-wave), whereas the limbic/potential is external to the system.*

### **Species as super organisms.**

The second fundamental truth we must learn about species is its Nature as super organisms of the higher scale of the individual, which is quite evident when we understand the ternary topology of the Universe, and how its lineal limbs, hyperbolic body waves and informative particle-heads evolve, towards higher information in 3 ages, and finally die into entropy, while its informative memorial leftovers leave a trace in the outer world. So happens with species that go through 3 ages that mimic the 3 ages of life in the upper  $\Delta+1$  plane of existence and then become extinct, or a few of them with maximal information evolve into a larger super organism (ant-hills, human beings) that become 'a new plane of existence' beyond the individual:

### **What are species? Its variations. Physiological networks and gender.**

**WE ARE ALL MADE OF 'BROKEN SPACETIME' AND THERE ARE ONLY 3 TOPOLOGIES (SPACE WITH MOTION)  
THIS RESTRICTION ESTABLISH THE HOMOLOGIC FORMAL FUNCTIONS OF THE 3 PARTS OF ALL SYSTEMS:  
AN INFORMATIVE SPHERE, A HYPERBOLIC, ITERATIVE BODY-WAVE AND A MOVING POTENTIAL-LIMB:**



In the graph, spheres are the topology that holds the maximal volume of information; hence all 'time space' systems that process information are spherical particle-heads. Flat, lineal topologies are the topology that connects in the shortest path two points; so to reach/move faster, systems have lineal/flat moving potentials/limbs. Finally the third type of geometry, hyperbolic topology, is complex enough to store all other possible forms, so best to reproduce and all iterative body waves that generate the other 2 forms are hyperbolic. This mathematical-spatial truism holds for 2, 3 and 4 dimensions; hence establishing basic restriction to the construction and evolution of forms. And should become in XXI c. science the 'missing' leg of topological, biological and physical evolution to explain the extraordinary efficiency and homology between forms (no longer analogy, since all those forms derive from the same 'substance', space with time=motion or 'topology'). In the next graph, we can see how the 3 only topologies of the Universe ensemble to form physical, biological and social organisms, all of them with a spherical 'tall' dimension to gauge information; a wide, iterative dimension of hyperbolic bodywave reproduction and a flat, direction for its entropic motions. The beauty of the topological Universe is that each of those 3 forms can be 'deformed' and 'moves', as long as it doesn't tear (break). So departing from such simple 3 basic forms there are infinite possible variations of species, but we can order them all with that ternary principle.

The Universe is about 3 type of Networks which gather entropy, energy and information for herds of similar beings that form organs attached to those networks. It follows that to classify beings we must consider the order of those networks, its hierarchy and relationships, which will give way to  $3 \times 2$  combinatory variations by hierarchical order of species - those dominated by the informative or entropic or reproductive network.

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## 2. Species as supœrganisms

The second fundamental truth we must learn about species is its Nature as super organisms of the higher scale of the individual, which is quite evident when we understand the ternary topology of the Universe, and how its lineal limbs, hyperbolic body waves and informative particle-heads evolve, towards higher information in 3 ages, and finally die into entropy, while its informative memorial leftovers leave a trace in the outer world. So happens with species that go through 3 ages that mimic the 3 ages of life in the upper  $\Delta+1$  plane of existence and then become extinct, or a few of them with maximal information evolve into a larger super organism (ant-hills, human beings) that become 'a new plane of existence' beyond the individual:



Species can be modeled as organisms through its 3 ages that become its 3 horizons, followed either by a survival process of eusocial evolution - the summit of the process of organic evolution, which Einstein realized was necessary to explain the success of eusocial insects, or become extinct by the 'new generation' of fitter animal forms. In the graph we can see its 3 Horizon=ages and its ternary topology, similar to that of any other organism; and the dominant arrow of information in the height axis, of both reptile species that ended in birds, and mammals that ended in man. So happened with meta life machines, whose final species, satellites are now forming the arrow of eusocial evolution, or future mind of the metal earth -internet

*Species can be treated as super organisms, loosely connected in space that follow the 3 ages of time evolution, ending when surviving, into a social evolutionary  $\Delta+1$  state, which ants and humans, and now chips/robots are reaching, as the most successful species of the 3 scales of size-life in this planet, the insect, mammal and mechanical scales.*

Since as information dominates entropy, because in time-ages, the growth of information is much longer than the explosion of entropy and death that happens in a single cycle, the species that last longer are those

*who evolve further information, and can become a social super organism.*

So species follow  $3 \pm \Delta i$  ages with its final social evolution into a new whole, communicated by the informative language evolved in its 3rd age or extinction in time. Let us consider in this introduction those  $3 \pm i$  ages of species, called Horizons:

The 3 ages of time also brings the solution to the 'limits' of evolution, which Darwin already wondered: why certain species evolve so fast into complex forms as eyes and wings. Answer, because there are only 3 topologies to go, and so the choices are random but LIMITED and it is every easy to go the right way. In the next graph we see those 3 ages of evolution as species can be treated as super organisms with its own world cycles:

The graph thus show that ALL species follow also the young, predator, reproductive radiation, and informative, height growth of the 3 ages of life, and then either they evolve further into social organisms (ants, bees, humans) and as wholes in a higher  $\Delta+1$  scale survive better, or they become extinct by a new generation.

The creation of a new species takes place according to the same 3 ages of any space-time field that become the 3 horizons of any species: after conception that creates 'a seed' of pure information and minimal spatial energy, species go through a young age of energy growth that creates 'big species'; a mature, reproductive age of forms in balance between its energy and information when the species maximizes its reproduction, radiating in huge numbers; and a third horizon of informative evolution when it diversifies into multiple sub-species, becoming finally extinguished, (the equivalent to the death of any organism), or creating a new top predator form, a 'son species' that will restart a new cycle of life.

*+1: Birth: max. T. The black hole paradox (conception).*

The 'black hole' age of any species is parallel to the informative, genetic conception of any organism born out of a 'seed' that packs the maximum genetic information in the minimal space. It is caused by the slight dominance of temporal information (quantic time) over spatial energy (quantic space). *So a new top predator species is born with a lot of new, genetic information packed in a reduced size (Max. T=Min. E).*

This happens because information is processed faster in smaller spaces.

For example, a 'logic instruction' is resolved faster in smaller chips. It follows that tiny species with huge numbers of 'neurons' create quantic actions faster than slow, bigger species. And since they are highly informative, they can coordinate those quantic actions in herds that act simultaneously as a single organism. So their S-T force that defines a top predator is higher in each quantic action of space-time than the 'slow actions' of a big body. Thus small English boats shooting faster against big galleons defeated the Spanish Armada; a pack of wolfs kill slow reins and herds of orcas kill bigger whales. Small, intelligent top predator brains rule bigger, less informative bodies, because time dominates space, information dominates and shapes energy.

Thus men, the most informative animals, are the Earth's top predators; black holes, which have maximum gravitational information, are the top predators of the Universe and chips rule machines.

*I Horizon: Energy Age: max. E: Top Predators and Extinctions*

*In their youth, carbohydrates (fats), worms (planarians), echinoderms, cephalopods, fishes, amphibians, mammals and chipped machines grew into energetic, lineal or planar, big top predators*

A newborn, small fetus grows very fast in size as it multiplies its cells. By homology a new species is born as a small, informative, complex being that latter grows in spatial size during its energetic youth becoming a, lineal, energetic, big top predator species, that feeds on less evolved forms.

Thus after conception, young fishes grew into big sharks of linear forms; after the polemic Homo Floresiensis invented technology the next Homo Sapiens with an extensive fossil record were big, energetic Neanderthals; the 1st big molecules of life were fat carbohydrate chains of linear form; the 1st insects acquired soon gigantic bodies in the Carboniferous; after chips were born as small machines placed in PCs and toys, the first robots they control are big tool-machines and huge weapons of mass destruction, lineal missiles and planes, that kill human beings.

*II Horizon: Evolution or Age of balance and reproduction: max. Sp x Tf. Radiations of species.*

Then, the species finds a balance between form and energy and it reproduces in massive radiations: carbohydrates gave birth to amino acids with a nitrogen, informative atom on its 'relative Head'; sharks gave way to balanced tubular fishes; brachycephalic Neanderthals gave way to dolichocephalic Cro-Magnons that multiplied and colonized all continents; while young giant stars acquire the balanced size of yellow suns, the commonest of all stars.

*III Horizon: Evolution or Age of information: Max. Tf: max. Evolutionary differentiation. Species grow in height or acquire cyclical forms, as they evolve through their 2nd and 3rd horizons, improving their sensorial, informative skills: Nucleotides become the top predator life molecules, echinoderms change to cyclical forms, fishes organize their networks in the dimension of height, amphibians become round, improving its smell, saurian and mammals become biped.*

The main difference between organisms and species happens in their 3rd age, due to the discontinuous nature of the individual 'cells' of species, which do not become extinguished unlike the tightly controlled cells of organic systems, dominated by nervous, informative systems that exhaust and warp totally their energy, till the organism collapses.

Instead species continue evolving, creating new, complex species with more information, growing in the dimension of height. So the Homo Sapiens evolves ever more complex technological tools; the nucleotide appears when it adds informative depth to the amino acid (with an informative, nitrogen ring and an energetic sugar ring); the yellow sun becomes a neutron star of higher gravitational, informative density; while insects develop a growing brain capacity and bees and ants appear.

- ( $\pm\Delta$ ): *Extinction Vs Evolution into super-organisms. The scales of the Universe.*

Thus, organisms dominated by their informative networks, which consumes the energy of the system very fast, die sooner than species, according to a clock set by the rate at which energy is metabolized, 'informed', by their nervous system. While species, which are dominated by the individuals and the herds survive for eons with 3 basic strategies according to the 'ternary plan':

- *Max. Sp: Creating balanced, trophic pyramids that maintain always a supply of new victims.*

- *S=T: Diversifying their individual forms into new species, instead of 'degenerating' into a warped space-time field. It is a parallel strategy to the reproduction of an organism, which in this manner survives his own death. Thus we talk of 'son species' that create evolutionary, genealogical trees similar to those of any organism.*

However son species tend to kill-extinct the mother species, feeding on their energy. We call that fact, *the Oedipus paradox*. So mammals killed reptiles, men killed mammals and robots might kill human beings. While the different generations of an organism work together, creating informative networks between them that shape herds and families.

- *Max. Tf: Species also evolve socially their individual forms into super-organisms, thanks to the creation of informative networks and languages that integrate them into a whole, bigger form, which is more powerful than the individuals of a herd.*

Organisms are dominated by informative, nervous or hormonal networks that pack closely individual cells of *max. information in min. space*; while species extend over *wider space ecosystems in which they share a min. quantity of information*, as individuals of species hardly relate to each other beyond the reproductive couple or the hunting herd. And yet, both go through the same 3 ages of space-time defined by the inverse properties of the energetic youth (*max.S=min.T*) that defines the herd and the informative old age (Max. T=Min. Sp) which defines the organism.

Hence we consider that the creation of super-organisms is the final evolutionary stage of a herd of individuals from the same species: each individual of the herd becomes then a 'relative cell of the body' of the macro-organism. While the specific language of communication and information of the species becomes the relative nervous/informative network of the super-organism, as pheromones do in anthills or nervous impulses did with cells in the Pre-Cambrian age or financial and verbal languages are doing among humans in History.

So evolution is indeed limited by the most iterated elements of reality and this blog (: those 3 timespace motions/forms: lineal motion in space or 'distance', implosive motion that becomes cyclical time clocks carrying its frequency 'information' and its space-time, wave-like, reproductive energetic combinations.

They were understood in Asian religions as yang, yin and qi-energy. They are the only 3 topologies of space-time possible in a 4D or 5D Universe (when we add its scales), so they assembly forming all space-time beings.

### **SPECIES IN SPACE - PHYSIOLOGICAL VARIATIONS**

Species also can be considered by the Rashomon effect, from the point of view of space and then as they are ternary physiological networks, with attached organs, we can study its hierarchical variation, giving origin to phyla of different species in simultaneous space.

So we talk in all 'families of species' of 6 basic differentiations IN SPACE:

**CE:  $\$t-ST-\delta\$ + \$t-\delta\$-ST + \delta\$-ST-\$t+ \delta\$-\$t-ST+ ST-\$t-\delta\$+ ST-\delta\$-t\$$**

AND  $3\pm 1$  ages of social evolution or extinction in time.

The families are written by the dominance of one of the 3 'topological networks'= $\text{organs}=\text{dimotions of time}\$space$  of the system are named generically as: **$\$t-ST-\delta\$$** : Top predator, first species to be born.

The predatory, feeding phyla belongs to the first type of species evolved. For example, the first fishes were flat carnivorous armed; the first carbohydrates long fats, lineal chains of amino acids. It is a species so successful that radiates in enormous numbers.

**$ST-\$t-\delta\$+$** ; So next after its dexterity in hunting is proved we shall find a second phyla, master of reproduction. Such is the case of sharks, the final top predator fish, which are viviparous unlike other fishes, reaching its maximal perfection. So what this 'first phyla' lacks is a well developed brain, showing however that intelligence, when not used for social information is mostly barren, useless. In the example of the protein we also observe that it is a master of reproduction, having controlled ribosomes to that aim in cells that reproduce millions of them.

**$ST-\delta\$-t\$+ \$t-\delta\$-ST$**  . Yet as time moves on, 'warping lineal spacetime into cyclical forms', there is an increasing new value for the informative element, which keeps gathering pace till becoming the protagonist of the system. While the feeding elements that have reached its maximal possible evolution, since entropic systems are simple and reach easily a perfect form - the sword of the warrior has not evolved in 5000 years... and the ecosystem saturates and reproductive radiations are no longer that relevant - what matters is to be able to compete and keep the new born in the fight for existence... So we find intermediate stages, where the networks tend to balance each other in the 'classic age of the phyla'...

**$\delta\$-ST-\$t$  ,  $\delta\$-\$t-ST$**  Till finally those species where information has evolved further allow the gathering of individuals into social herds, which become a new whole. And that brings, a new plane of existence, and a new top predator 'whole' form in the  $\Delta+1$  plane that will re-start the whole diversification, from amino acids to cells, from cells to multicellular organisms, to super organisms and global ecosystems...

So we introduce *as the main innovation of Spatial topology in species the differentiation of them by its topological, ternary networks and organs.*

# IV.

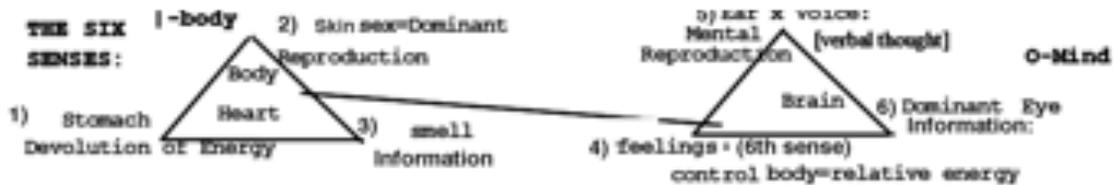
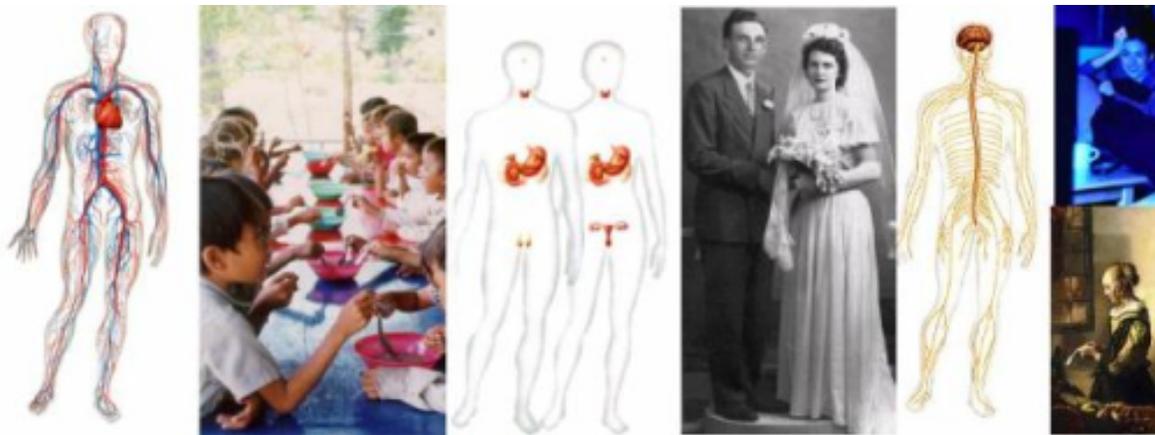
## SOCIAL SCIENCES: i≤|2|

### 1.MAN AS A 5D TIME&SPACE ORGANISM

We have introduced the physical system and its functions of 'existence', that is, its organization in space and time, as a super organism and a world cycle. Let us then now consider the human being also as a vital space the lives a world cycle of time, in the context of a Universe made of ∞ such beings. Of course, to cast man on the same view that an atom, a galaxy or a bug is a taboo of the ego paradox that make us believe to be the center of the Universe.

But that is what we are. So as we just introduced the human being as a system of 3 elements, entropic limbs, reproductive bodies and informative singularity-minds, comparing it to two other 'varieties' of space-time organism, we shall now introduce our existence in finite time also in parallel to all those other beings that follow the same space-time cycle.

Again the resistance to accept this 'fact' of nature is likely unassailable to reason, as the emotional fear of death which humans can surpass objectively with Buddhist understanding of extinction and the non-ego existence or inversely subjectively with the runaway myths of anthropomorphic religions that make you happy. This being the 'final solution' of human cultures - to invent happy myths that pass as science through the process of half-truths and ceteris paribus analysis - we hold no hope for understanding. But being this web on 'objective philosophy of science', we cannot but advice the reader to ditch out his ego and find a different kind of more mature happiness - that of Nirvana, the dissolution in the whole as equal to us, part of the entangled organic Universe. Since we live and die like all other spacetime beings.



*Medicine & Physiology deal with the 3 networks of the human organism, whose functions connected to the senses enact our time arrows: The Digestive, Energetic System is attached to the senses of smell and taste; the hormonal, blood, reproductive system is attached to the senses of touch and the 6<sup>th</sup>, emotional sense and the Nervous, Informative System is attached to the higher senses of sight and sound.*

The most enlightening analysis of Multiple Spaces-Times is the objective evaluation of human beings, as yet another fractal part of the Universe, in communion with its cycles of existence and organic Disomorphisms:

As all other living organisms, we humans have 2 poles of Entropy and information, of cyclical and lineal form, the body and the head; we live through 3±i ages of d=evolution between birth in the lower cellular plane and death back to it. We are defined by 3 fractal regions, a sensorial membrane, a central spine and our lineal energetic limbs and digestive organs. All those systems are born through palingenetic processes from the same 3 fetus' membranes, the endoderm, the mesoderm and the exoderm.

We have 2 subspecies clearly specialized in Entropy and information, the lineal, strong male; the perceptive, memorial, cyclical woman. We are also dominated by the reproductive arrow, dominant in life species, as all what we really care for is our families. We like so much reproduction that we are actually transferring our form into metal, making machines of Entropy (transport, weapons) and information that imitate our senses (chips=brains, cameras=eyes and mobiles=ears)...

Thus, man is also a biological knot of existential cycles, whose purpose as everything else in the Universe is to 'survive', to maintain the immortality of the human, logic form by reproducing the Entropy and information absorbed by the brain/body system and to 'evolve' - to create more complex social organisms of history till reaching the summit of evolution as a species: the creation of a super organism called mankind, in which humans share Entropy and information through its collective energetic systems (economy) and informative systems (political and cultural structures).

We cannot overextend in the biological description of the human being, which is topologically similar to all other life species. Let us briefly consider those self-similarities:

-Man extends through 3 planes of increasing complexity, the cellular, bio-chemical plane, the individual, biological plane, and the social plane.

-*st-1*: As cellular beings we are also defined by an iterating language of information, written with 4 dimensions, the DNA bases that form the genetic code. Thus, the cellular plane is ruled by genes, which mostly code the basic functions of the cell and organs, common to all mammals, reasons why we have over 90% of common genes with them.

- We also evolve through a palingenetic process, differentiated only in the last 5 million of years from self-similar apes.

-*st level*: Humans have also 3 dimensional networks: the energetic=digestive; reproductive=blood and nervous=informative systems that determine our cyclical actions, as we try to feed on Entropy, reproduce and inform our 3 systems common to all life species.

Thus the senses are:

- The sense of smell and taste are the negative and positive senses of the digestive system that allow us to choose what to reject and what to eat. The language of the sense of taste has also 5 vowels that can be classified according to the key substances of Entropy and information (sugars, proteins, salt, etc.) our organism require.

- The internal 6<sup>th</sup> sense of feelings that relate body and brain and the external sense of touch are responsible for the reproductive will, which excites our mind (love) and our body (sexual attraction). Both are reinforced, as in all other animals by the visual and auditory sense, which are the:

- Mental senses of space (eyes) and time (words), which shape our natural languages of energetic and informative perception.

In the graph we observe that man as an individual is a knot of 3 dimensional networks: the energetic=digestive, reproductive= blood and nervous=informative systems that determine our cyclical actions, as we try to feed on Entropy, reproduce and inform our 3 systems.

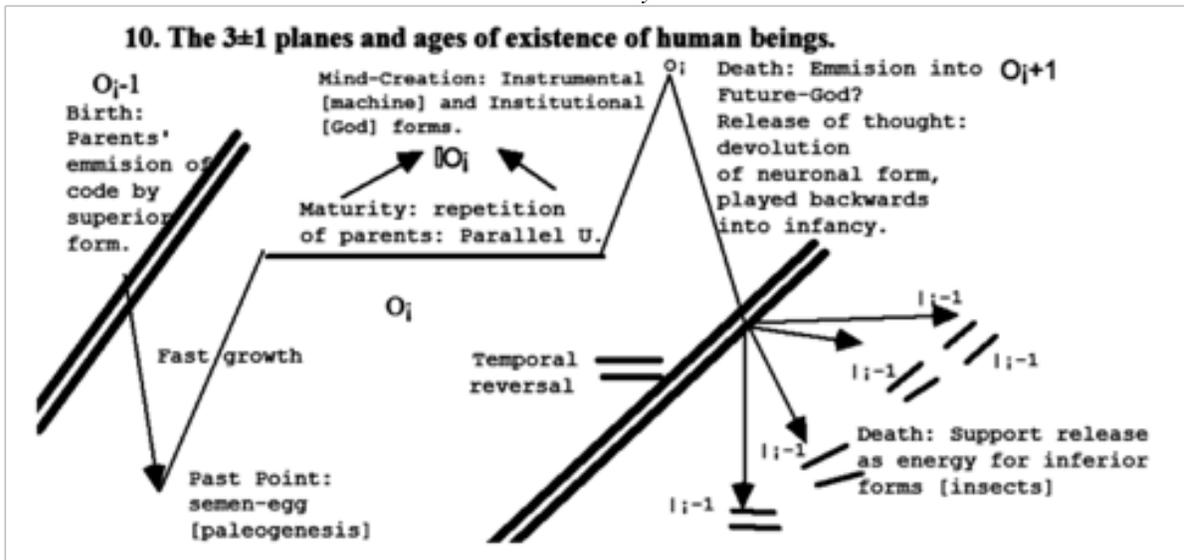
$St+1$ : When humans perform those individual actions in social groups they create social networks that establish the 'memetic actions' or customs of a society, passed from generation to generation as 'genetic codes' are transferred from individual to individual. So humans gather in groups to harvest food and eat together; they establish social customs and marry to reproduce; and develop verbal and visual, informative networks that evolve human organisms from individuals into cultural super-organisms, transcending socially into a new  $st+1$  plane of existence: Mankind.

Thus, while we are ruled by the will of our 3 physiological systems, expressed through our biological genes, we evolve socially into macro-organisms called Gods, nations and civilizations, expressed by our cultural and technological memes.

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### The 3 planes of Human Existence in time.

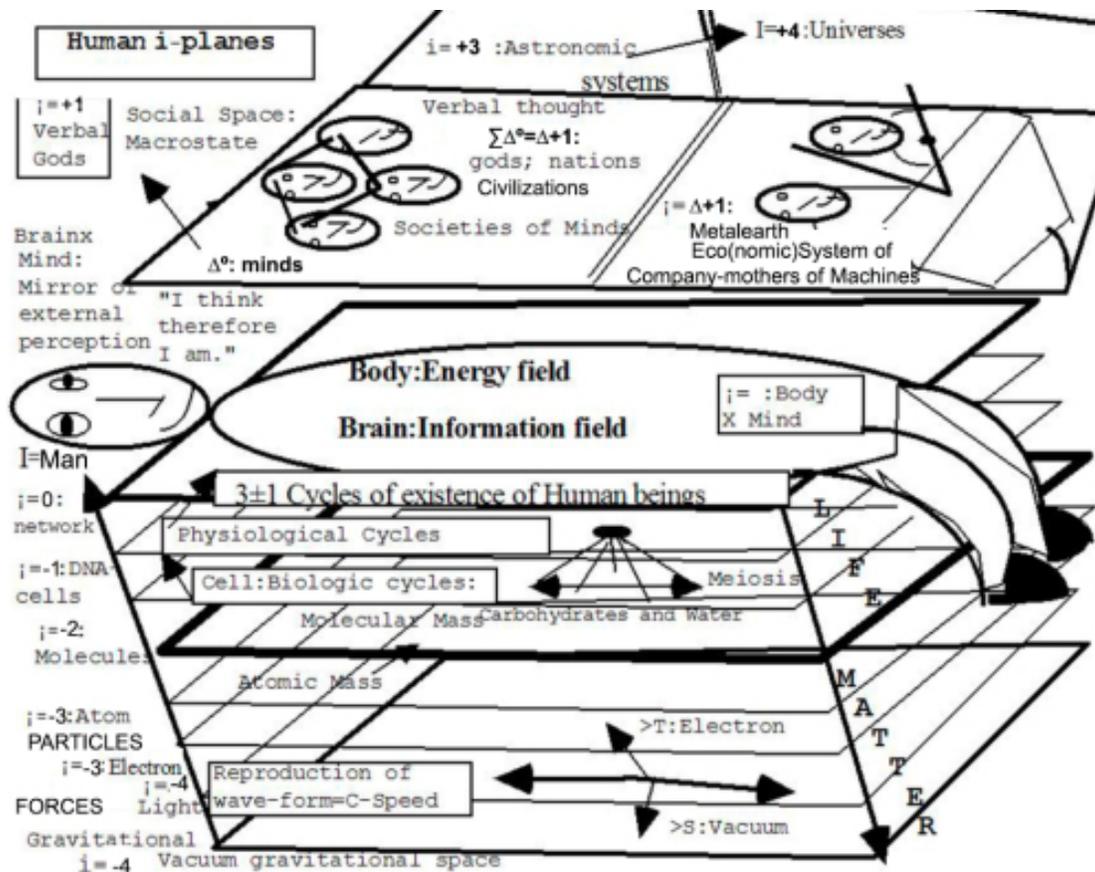
*Life is a trip through 3 planes of existence: the biologic,  $st-1$  genetic plane; the individual plane, which expresses the same biological arrows, and the sociological  $st+1$  memetic plane, where survival is reserved to prophets that create a religious God or civilization, the subconscious collective of millions of believers. In the graph, existence is a travel between those 3 planes, the cellular plane to which we return after death, the individual plane and the social plane which peaks in our 3<sup>rd</sup> age as informative particles of our culture and economic ecosystem:*



We exist as we travel a world cycle zero sum through the topological, temporal scales of the fifth dimension.

So we can then assess the new complexity of tracing existence not as a worldline in a simple plane of locomotions but a trip through multiple planes and existences.

When we are born as a seed point, our external angular momentum membrane moves us through entropic fields where to absorb energy for our inner and outer replication. The inertia of time, the active magnitude, mass or charge, form, must reproduce in its steps of motion, the longer its lifespan is the longer is temporal inertia, its inertia not to move. But to exist is to move, switching on and off between the state of motion,  $t$ , and the state of informative perception,  $\$$ . When we do not move in space we repeat internally our information in time, through the scales that must be put together to create us:



If we study the human being in time, the 3 ages of human beings are equivalent to the 3 ages of any space-time field. Humans show those self-similarities, both in the physical 'warping' of their bodies that accumulate information and wrinkle till they explode back into Entropy in the process of death; and in the different 'ways of thought' of their brain that also go from an optimistic, active age of Entropy into a reflective, old age of information:

-St-1: we are born in the inferior cellular scale as a seminal seed, clearly differentiated in lineal energetic males of maximal motion and still, reproductive, informative females, ovum, that mix together, exit to start a palingenetic process of reproduction and social evolution till we surface in the st-scale.

- Max. \$t: Youth is the Entropy age, dominated by the digestive network and muscular movement. So children are energetic, always moving, passionate about food that they need in bigger quantities.

-ST: Maturity is dominated by the reproductive arrow, its networks and sexual desire. So mature people marry and have family values.

- Max. δ§: The old age is dominated by information and nervous networks. So old people are wise and know a lot of things, though they have little Entropy left and live in stillness, looking back to the past, before they truly start their travel in time. Thus, a very old man becomes like a reversed, negative child, also passionate about food since he lacks Entropy; but can't really digest it. He will be emotional, close to his 'biological consciousness', but with negative feelings, as he has no future left... except death, when his information dissolves back to the cellular plane.

- << st-1: Death, when all Entropy is spent we die and return back in time through a 4<sup>th</sup> age in which all information becomes erased.

Further on, humans transit during those 3±i ages of life through 3±i hierarchical scales or planes of existence: the st-individual plane; the st-1, biological scale and the 3±i, historic, sociological scale. In terms of those scales of space-time, life is a temporal journey from the lower st-1 biological plane in which we are born as seminal cells into the human plane in which we enter through the discontinuous aperture of our

mothers' biological wombs. Then humans will 'mature' in that st-social plane after the 'rituals of initiation' proper of all adolescents in all societies, which make us cross 'the discontinuity' between youth and maturity.

In that social plane humans will live as individual members of their society during maturity, till in the 3<sup>rd</sup> age the mind will return back to the mental level of childhood; while the spatial body will keep warping up.

Thus in the 3<sup>rd</sup> age, the st-mind and E-body suffer a 'fractal split' that breaks  $i=ts$   $S=T$  harmony ('mens sana in corpore sanum'), which determines survival, causing the death of the organism. Then through death, the human being will descend back again to the biological, cellular world.

Thus life is a motion back and forth in time that starts with our palingenetic conception in the st-1 biological plane of seminal cells. The graph shows that ternary existence in which the main age is maturity, when humans form part of an organic system as a cell of a nation or culture, in the st+1 plane, enacting social and informative cycles with other fractal citizens or believers, as our senses open up to the social ecosystem, ruled by the political Disomorphisms and financial networks of the collective, nervous social system, where we develop verbal and visual perception, till we descend back through the reverse journey of death into the original st-1 cellular, vegetative state, completing our wheel=cycle of existence.

Though we have only 'individual consciousness', the  $3\pm i$  biological and sociological planes do exist and should have their own individual consciousness (DNA consciousness, and collective subconscious of mystique Gods). When we are born we just enter a new form of consciousness after an age dominated by our vegetative, chemical, cellular soul. A fact, which is evident in the 'borders' of life: the baby and the old man care mainly for food and chemical emotions, since they are closer to their cellular level of birth and death, our zero sum as dust of space-time.

*Recap.* Humans follow the same  $3\pm i$  ages of all existential beings of vital spacetimes, as they live through 3 planes of existence: the biological, individual and sociological planes.

All this lead us to the consideration of the social organisms of history and economics, which obey as ALL other relational space-time beings, the same laws outlined very briefly in the previous paragraphs, *because we are not different from any other entity of the Universe in 'substance' (we are made of vital space and last a finite time) and hence in our 'worldcycles' of existence, specially as we do not recognize them, so we cannot control 'mentally' and 'create' with those laws a perfect world and a planet where man thrives and survives.* If we accepted and understood those laws, however the reform of the economic and political system to create a perfect super organism of history (mankind on time) would be simple and immediate... How then History and economics evolve according to the application of the 2 new paradigms of 'scalar, social super organisms' that co-exist across the 5th dimension, and the 3 arrows of time, and its local processes of 'informative evolution and entropic 'devolution' and death?

The scales of the fifth dimension and the processes of death of cultures (local travel to the past) and evolution of the information and life of societies (travel to the future), in History and Economics give birth to many fundamental new insights, of which we highlight 2:

The development of new models of societies and economic ecosystems, which evolve socially through the arrow of eusocial love and organic evolution into the present global economic ecosystem and the past cultures and civilizations and present industrial nations, *which can be perfectly model with those laws, opening an enormous new field for the efficient organization of societies.*

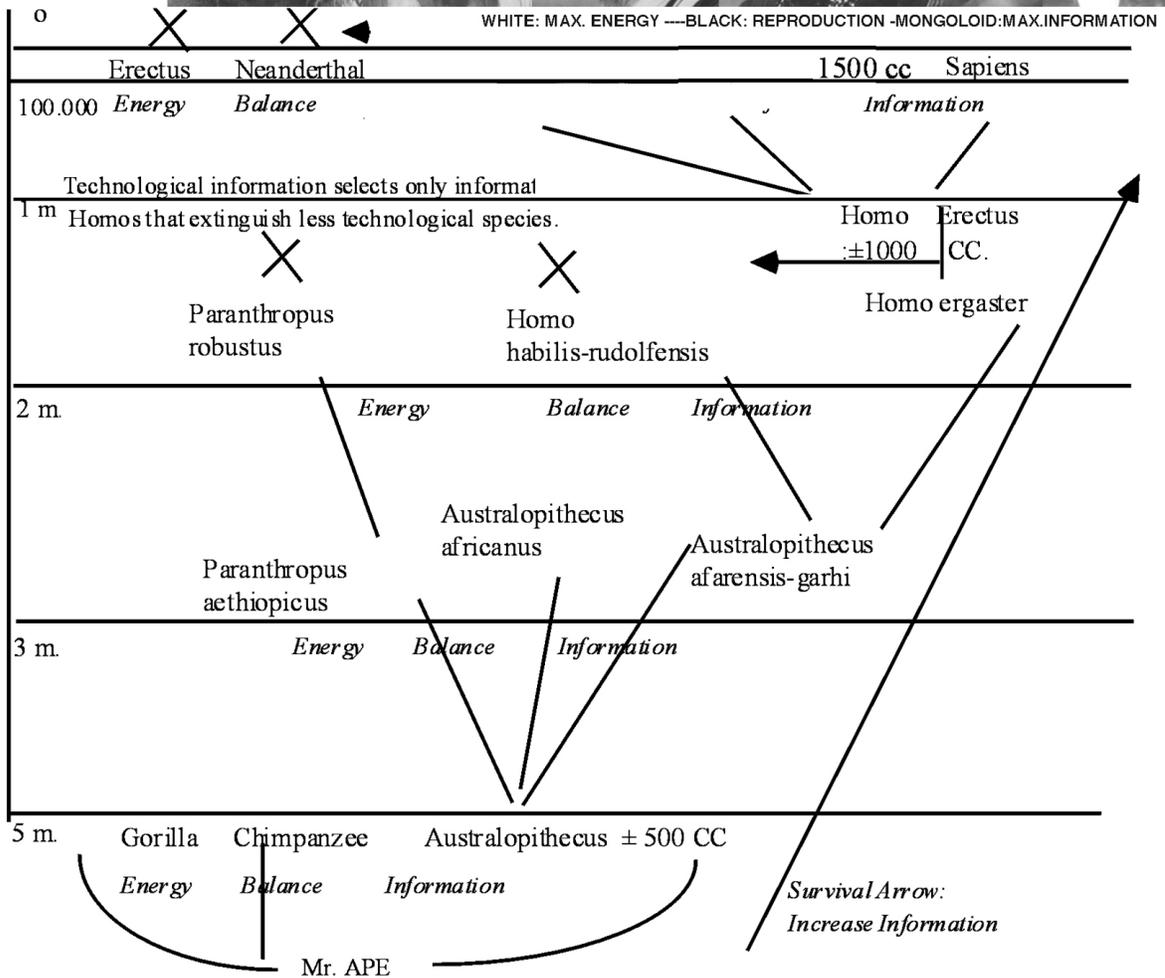
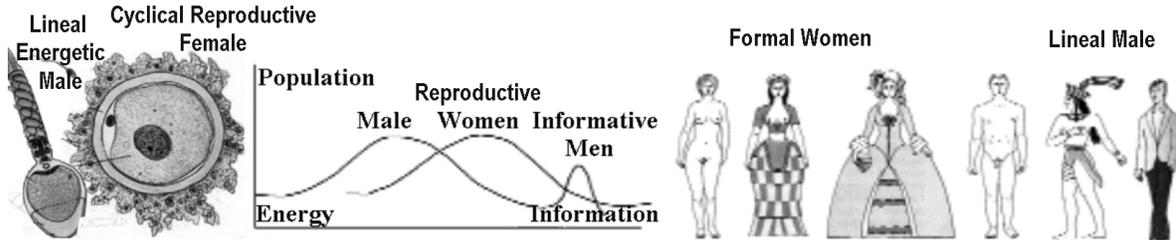
And the study of the synchronicity and cycles of time and evolution of machines and economic ecosystems, which in my decade old models predicted accurately (c.92) the economic crashes of stock-markets and technological organic evolution of machines, now in the singularity age of final evolution of entropic machines (black hole singularity) and informative ones (robotic singularity, AI), which are both potentially 'organic' in as much as they can 'feed' of matter without human interference and perceive, whenever they

reach the complexity of form of animal beings we show in the post [on the 2 future of history.](#)

## 2. ANTHROPOLOGY. MANKIND IN TIME

Social sciences are all concerned with mankind, but as mankind has not become a single global super organism truly in control of Mother-Earth, we cannot simply consider it has reached the desired wholeness as a species, hence, unlike in Biology that studies the Earth's super organism we reduce a 'sign' the wholeness of humanity over the plane:  $I \leq |2|$

### EVOLUTION OF MAN: TERNARY SPECIES - ANTHROPOLOGY - GENDER STUDIES



### **The evolution of man: Ternary differentiations.**

Complexity defines a Ternary game of evolution by differentiating species in informative and energetic species, combined in balanced organisms. The same game evolved man from the original ape 5 million ago into the human being. Moreover the differentiation is established first from an initial top, predatory, young energetic species (the gorilla in the human case), that diverts into a reproductive, mature species (the chimp bonobo) and finally in its 3<sup>rd</sup> informative age gives birth to a more mental species (the Australopithecus). This thesis of multiple spaces-times first established in the foundational book of this science 20 years ago, was confirmed with the discovery of the exact genetic clock: the divergence between gorillas and chimpanzees is 1.17, then the genetic clock diverges 1.17 to create man... Thus the same plan of evolution, which we used to describe all other biological species of the Universe created man from Mr. Ape. Moreover, the Universe has  $3\pm i$  arrows/dimensions of creation, energetic length, informative height and balanced=symmetric, bilateral reproductive width. This simple dimensional game happens even in man. Yet bilateral systems often are also dual: one side is slightly Entropy dominant and the other slightly informative, offering a more complex, kaleidoscopic higher truth (multiple p.o.v.s). It is also a sexual principle: Women are information-dominant; males are Entropy dominant. And it should find wider applications to understand the dualities of the brain.

Such topological analysis confirms our informative nature:

We can easily use the ternary rule of differentiation to explain sexes (and its intermediate gay), races and anthropological evolution, as the Universe of 3 only-topologies constantly diversifies the 3 'equal value' paths of future: Max I, Max. E, E=I (informative, energetic and reproductive species):

In the graph, humans evolved in ternary elements, of maximal force, intelligence and reproductive capacity, and finally the informative '3rd age' species, the homo sapiens dominated, and within sapiens the informative mongoloid species and its cyclical cultures did it for most of the time, till the white energetic mind discovered metal-weapons and devolved human eusocial evolution.

What about wo=men gender states? Of course it will also take a bit of analysis to fully grasp it. But you would be amazed of this statement by the deepest and only father of modern philosophy:

'Women live the present, men move time from past to future'. Schopenhauer.

How did he 'know'? Ultimately we shall find that GST is the perennial philosophy of the universe and the highest minds of mankind have always had astounding insights revealing parts of it. Here we shall have it all together, for the enjoyment of YOUR monad.

Humans evolve, as all systems of Energy and Information do, in subspecies specialized in those 2 elements.

In the graph, life first diversified into complementary genders: energetic, lineal, spatial men and cyclical, reproductive women, which hold more biological information. While a 3rd, gay sex mixes both. Further on, as humans evolved, they followed the same pattern of 3 ages proper of all species.

Thus, Homos diversified into energetic, informative and reproductive forms that show a higher balance between energy and information. Yet only the informative species, the dominant 'arrow' of future survives in each of the  $3\pm 1$  horizons of increasing informative evolution, from Australopithecus with 500 c.c., into Homo Erectus with 1000 c.c. into Homo Sapiens with 1500 c.c. And in all those phases, humans split into an energetic species and an informative one that recombined to create a 3rd species. Those species will further evolve technology also in 3 horizons called the upper, middle and lower Paleolithic.

Finally, humans diversified in 3 [races](#), specialized in Energy (white race) and information (Mongoloid) with a reproductive, black race, the last to be born, which mixes the pre-mongoloid (bushman) and white [races](#). The constrain established by the fact there are only two elements, energy and information, to create reality, whose lineal and cyclical forms are invariant at scale, in all systems of the cosmos means the Universe imposes the same program of creation to all its species.

In human evolution a pattern emerges: each successful, dominant Homo differentiates into an energetic and informative species, which recombine, creating more complex= informative and stronger=energetic homos that displace their parental forms, thanks to their higher Energy x Information. Yet the dominant, overall arrow favors informative species. Since when Homos were born, the energy top predators were felines, far stronger than the strongest possible homo mutation. So the evolutionary direction in which the big apes could find an ecological niche within the mammal kingdom was the informative arrow. They were already fit to that purpose, since they spent long times living in stillness in the summit of trees, where they had to learn to control complex movement in the informative dimension of height, adding a 3rd dimension to their brain. So they became informative masters among mammal species . . .

Thus, the duality between energy and information is also responsible for the creation of humanity. In the graph we study that process. From an initial ape species we find a ternary differentiation  $\pm 5$  million years ago, into 3 sub-species of great apes that live in Africa:

- *Max.\$t*: Gorilla, a big, energetic species that reaches 200 kilos, with a square, huge jaw.
- *\$t=\$\delta*: The chimpanzee, with a smaller body and a bigger brain. According to the Black Hole law, the smallest organism evolves informatively. Thus, the ‘dwarf chimpanzee’, the *PanPaniscus*, which today shows the highest learning skills among apes, was the species that seems to have evolved into a 3<sup>rd</sup> informative horizon of big apes. It is:
  - *Max.\$\delta*: Australopithecus, which splits in 3 evolutionary ages of growing brain volume:

*I Horizon: 500 cc.: From Australopithecus to Homo Erectus.*

We have dated the oldest mandibles of Australopithecus Anamensis, the top predator of the 3 big ape species, in 4 million years. The Australopithecus, after reproducing massively in the savannah ecosystem that favors his bipedalism, suffers a new ternary mutation. The 3 descendants of that Australopithecus Afarensis that inhabited the Ethiopian plains around 3 million years ago are:

- *Max. \$t*: The Paranthropus, an energetic species with huge mandibles and a lineal, planar brain. He looks like a heavy-set, humanoid gorilla. He was probably vegetarian. The first subspecies found is the Paranthropus Aethiopicus, which will further evolve into the stronger Paranthropus Robustus.
- *\$t=\$\delta*. The Australopithecus Africanus, which maintains the form of the original Australopithecus Afarensis, perhaps with inner improvements in his soft tissue. He lives in South Africa as a contemporary of the Paranthropus.
  - *Max.\$\delta*: Australopithecus Garthi. He is the informative species, with a bigger brain, which starts to acquire the shape of all informative species: a rounded forehead, *as the sphere holds more information*. Those 3 species live very close. Around the Turkana Lake we have found remains of the 3 Homos. Yet the arrow of future favors informative Homos. So the top predator Homo will be the Australopithecus Garthi that goes through a mature age of massive reproduction, probably extinguishing the other 2 subspecies and expanding worldwide into new ecological niches that favored their genetic and memetic adaptation through a new, ternary split:
    - *Max. \$t*: A regressing, energetic A. Garthi, similar but taller than its parental Australopithecus.
    - *\$t=\$\delta*: Homos Habilis and Rudolfensis, with similar brain capacity to the original Garthi.
- *Max.\$\delta*. Homo Ergaster, an informative ape with a 1000 cc. brain, which doubles the brain capacity of Australopithecus.

*II Horizon: 1000 cc. From Homo Erectus to Homo Sapiens.*

That Homo Ergaster, after a massive age of reproduction and expansion throughout the planet, subdivides again in 3 sub-races of Homo Erectus.

- *Max.\$t*: Pithecanthropus, the oldest species similar to Homo Ergaster, found in Java.
- *\$t=\$\delta*: Homo Erectus proper, found in China, who grows in the informative dimension of height that *favors perception from an advantage point of view*, to 1.7 m. He has simple technology, a skull without forehead and thick bones that handicap further cranial evolution.
- *Max.\$\delta*: Homo Floresiensis, the smallish species, which according to the Black Hole paradox should be

the form who gave origin to Sapiens, as the smallish 'pan paniscus' evolved the chimp into the Homos. Recently discovered<sup>3</sup>, he is a formal mutation with a smaller body, whose morphology resembles for the first time that of a human being. He has thinner bones that allow further growth and a higher forehead, the location of the creative part of the brain.

Paleontologists also found the first advanced technological tools in his sites in Flores Island, which is an isolated place, the ideal region to foster further evolution, due to the lack of top predators (allopatric evolution). Thus, he adds now technological Entropy weapons that substitute body strength and define a single arrow of future for human evolution: information. His improvement in neurological form, probably caused first his rapid expansion thanks to his new technological tools and then a rapid growth in size through the cross-breeding with the taller Homo Erectus species, giving finally birth around 300.000 B.C., to a new Entropy/information duality:

The energetic, big Neanderthal and the informative Bushman, which combine again to give birth to multiple races.

Those predictions based in the ternary principle and the Black Hole paradox (information is small and evolves in dwarf species) have been confirmed by genetic maps and Paleontology and await final confirmation when new skulls of Floresiensis are found.

The 3rd, informative Horizon: Homo Sapiens, 1500 cc.

— The lineal, energetic, visual Homo Sapiens Neanderthal, with  $\pm 1500$  cc.

— And a second informative pygmy strain, the 1st verbal woman, the mitochondrial eve, probably a bushman, also with  $\pm 1500$  cc.

$\pm 50.000$  years ago she crossed into the Middle East, probably mating with earlier Neanderthals, giving origin to the visual, energetic white male (Homo Palestiniensis, whose skulls show mixed traits from both species).

$\pm 35.000$  y. ago, in the high Tibetan plains, she became the informative Mongoloid that colonized Asia, America and descended upon Europe and Africa, where she cross-bred with the capoid (bushman) and became the black man, the balanced  $Sp=i$ , reproductive race, completing the final, ternary differentiation of the main [races](#) of mankind.

Further on, as racial tribes evolved socially and emerged into cultural societies, which are super-organisms of history, the ternary, racial division of mankind between energetic white men, informative Mongoloid and vitalist blacks, will become the cultural differentiation of human beings in:

— 'Visual, energetic, lineal, spatial cultures', proper of the [white man](#), with his concepts of lineal time and his passion for technological, energetic weapons; entropic cultures of a single entropic lineal time.

— 'Cyclical, informative, mongoloid cultures', natural to Asian civilizations, with cyclical concepts of time. Organic, cultures of tao dualities.

— And 'sensory, reproductive, colored cultures', which in Africa and India developed human senses to their limits. Animists, emotional, artistic, sensorial black cultures of the living Universe

Which culture is better for the survival of mankind? Since survival is the goal of all species, reached in the age of balance,  $Sp=i$ , we should promote, paradoxically, the culture that our technological civilization discriminates: the black, reproductive, sensory culture . . .

# Interbreeding

Humans leaving Africa about 80,000 years ago encountered Neanderthals in the Middle East, according to DNA evidence extracted from Neanderthal bones.



Source: Science, National Geographic Graphic: Los Angeles Times © 2010 MCT

This said as we recall there are 3 mind axis and dominant races: visual white people, dolichocephalic, verbal mongoloid brachycephalic and emotional psylocephalic black people. And of course this 3 dominant axis connect with the 3 cultures of mankind with its specific mind views:

*Which explains of course why our worldview is so simplex and reduced as it is dominated by the paradoxically less evolved humind - that of the Neanderthal visual white man (:*

## DUALITY PARADOXES AND ITS DIFFERENT SPECIES: $Sp \approx Tf$ . GENDER DUALITY.

WE also notice that as there are black and white languages and ternary languages, we shall ALWAYS FIND simpler dualities that differentiate species as we find them in ternary systems. The main duality of species being that of gender. YET The dualities of Space-time are various as they all turn around the illogic paradoxes studied previously, in the second Disomorphism. So in this post we shall study only the duality of gender.

For example in the human case women have an informative, ST-reproductive body of cyclical forms, and men who have a lineal, energetic body.

Their minds have - to reach a complementary balance - inverse mental functions. Women have 10 times more lineal, white, axionic matter, the site of memory and men have 6 times more cyclical, grey, nuclei matter, the spherical neurons, the site of creative integration of informative processes. Thus Women have stronger, and more balanced mentally (I-minds) and Men had to be Informatively more complex (E-mind). So the product of mind and body was in balance:

Thus we define:

- Female gender: O-Body x I-Mind
- Male Gender: O-Mind x I-Body.

This complex duality explains perfectly all the aspects of both type of minds and 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  $\$t \approx \delta\$$ , 'reproductive', 'beautiful' species, while 'unconnected' men are split in 2 unbalanced sub-species: max. energy body oriented machos and max.  $\delta\$$ , 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.

The same duality is clearer in the  $\Delta$ -I plane of seminal seeds: sperm and ovule as in the next pictures.

# 3. HISTORY

## 3 AGES OF MANKIND.

### ITS SOCIAL SUPERORGANISMS

As all other sciences, the science of history studies the super organism of mankind and its world cycle, through its 3 ages, the Paleolithic youth of maximal entropy and motion, the reproductive neolithic of balance with Gaia and the 3rd age of excessive metal-information, prior to our likely extinction into a war big-bang of robotic mechanisms. The next graphs show those symmetric views of mankind in space and time.

**The Horizons of EVOLUTION OF mankind, the need to understand them to prolong our existence.**

Can we go beyond the ternary scales of time, yes but it is not worthy to define any super organism. We can also go beyond the ternary scales of the super organism, but the SYSTEM is truly about the cellular/atomic, individual/thermodynamic and social/galactic scales.

We could reverse the conceptual understanding of those limits. If humans were to be extinct, there would be further ahead a 'future' for the entire fractal Universe, but we do care about it? Likely not, because we will have enter in our local world in the eternity of not-being. So why we should care for the time before our past, when our species appear? The concept of LIMITS IN TIME AND SPACE, FOR ALL TIME IS CYCLICAL, ALL SPACE HAS BOUNDARIES, ALL SCALES LOOSE information in its discontinuities is then an essential theme of the 5D scalar Universe, which must always be self-centered in the  $\Delta^1$  mind-system that perceives it.

Of course we could go beyond the past, present and future ages of the Human Species but that is irrelevant to our self-centered point of view, our super organism, which has gone through 3 Horizons: the Young Paleolithic, mature neolithic and present age of technological information, which will derive either into the social evolution of mankind into a super organism as brain of the planet Earth, or most likely as humans HAVE CHOSEN A CIVILIZATION BASED IN ENTROPIC WAR, breaking that super organisms into false subspecies called nations, into an extinction process, whereas the new species that it is FAST EVOLVING GLOBALLY INTO A SUPERORGANISM, the metal-earth of company-mothers of machines will substitute us, as the graphic of the 3 past, present and future Horizons of mankind shows:

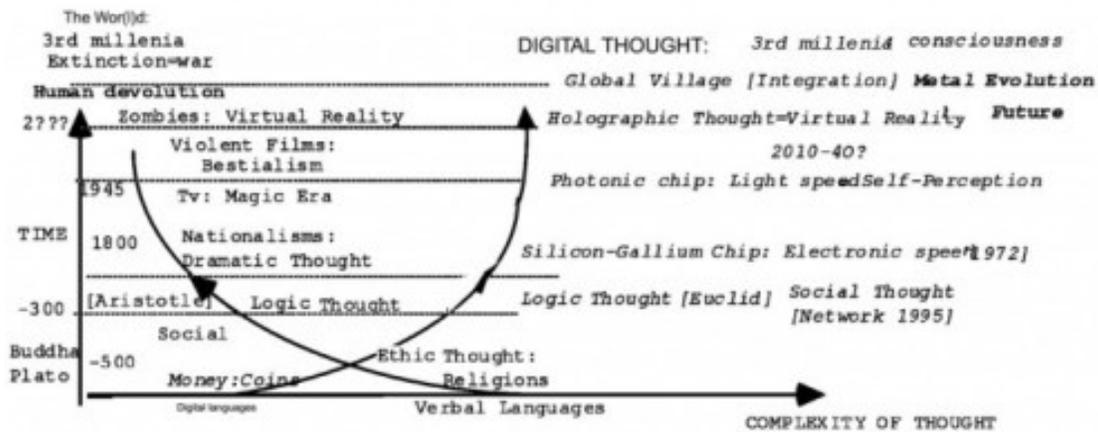


exactly the opposite, evolving further Algorithms of information that substitute our brains and multiplying entropic weapons that kill us.

In the graph the 3 ages of history according to the superposed waves of evolution of technology that define the elements of history, as each nation at the head of the technological wave has tried to 'conquer the world' with its new machines and establish a global empire wrongly based not in the ethic values of the human informative mind but in those of the machine.

IT IS THEN EVIDENT THAT MAN IS ENTERING THE AGE OF ENTROPY OF ITS SPECIES, WITH ALL THE WARNINGS by Isomorphic similarity with homologic processes in all the species of the Universe.

It is also the reason why man cannot understand any longer super organisms of history; why the people who evolve the machines=weapons that will extinguish us - physicists - have become the philosophers of an entropic reductionist Universe. It is the Neopaleolithic age of dissolution of all human structures substituted by the new top predator mind of this planet - and it seems our cells-citizens will go under without even realizing of it:



In the graph, the neopaleolithic studied in depth in the complementary blog dedicated to organic social sciences at [www.evolutionaryeconomics.wordpress.com](http://www.evolutionaryeconomics.wordpress.com) - we are becoming dissolved as in a post-mortem super organism into selfie individuals attached to the viral machines and virtual screens that are converting us into 'enzymen', dedicated to catalyze the evolution of chips and its growing legion of AI robots, while we reduce our brains...

What the lineal, exceptionalism, military ballistics civilization (original name of physics, in Galileo's first treatise) seems to forget, reason why we brought the 3 horizons of humanity so early to the risk of alienating the childish emotional reader, who follows the French dictum 'you cannot look the sun and death in the face', IS OBVIOUS: A theory of LINEAL entropic universes based in the praxis of making weapons of mass-destruction. What was first Ballistics or lineal physics? Obviously ballistics, theory, the mind comes before the order it imposes - in this case the disorder of mankind.

But there is a bigger ERROR probably mankind will never correct - to HAVE PUT THE MATHEMATICAL LANGUAGE OF SPACE, and our ego ABOVE THE TEMPORAL LANGUAGE OF LOGIC and its verbal human 'tenses' that better describe the relative past-entropic, present-repetitive and future-informative dimotions of existence. So we are completely oblivion to the fact that our Future is becoming extinguished as we worship mechanisms that speak better digital numbers, we don't really understand in its vital content, studied in this blog.

So we shall claim once and again as humans are part of that 'truism' scientists abhor because it shows its weaknesses: SCIENCE IS CULTURE.

And we have chosen the wrong one to survive...

If mankind had chosen though a Taoist, cyclical understanding of the organic Universe, we wouldn't be in a culture that worships weapons and reduces the organic universe to mechanisms. We would be in tune with the living Universe as the neolithic age. And we would realize that in our finite time and space, the Earth of life what matters is just to exist, to go through the present daily actions of life, which all other systems practice and we shall formalize with the highest of all possible forms of Logic thought, which includes all the topo-bio-logic and sentient properties of reality... Existential Algebra ( $\neg\text{Æ}$ ).

### **THE 3 AGES OF THE SCIENCE OF HISTORY. ITS PROPHETS=SCIENTISTS OF THE FUTURE.**

IT IS THEN EVIDENT THAT BECAUSE THE ONLY FORM A SPECIES CAN SURVIVE LONGER before its age of entropy IS TO EVOLVE SOCIALLY INTO A LARGER WHOLE, INTO A SUPERORGANISM, that mankind's future can only happen if it evolves into a global super organism, BEFORE the world of rival 'germs', of machines-weapons do so.

And that has always been the purpose of the science of history, through its 3 ages, first as eusocial verbal love religions confronting nonmetal idol-ogies of war and go(l)d worship; then as socialist movements searching through r=evolution, and finally in this 3rd age with the full understanding of the laws of creation of super organisms this blog renews with the laws of systems and social organisms deals with the super organism of mankind in time, History, which in the pre-industrial age was called God, the subconscious collective of a people. As humans evolved and realized they were all members of the same species, they evolved tribal 'animetal religions' that used weapons (jihads, inquisitions) and money (Gold churches) as ex-votes and instruments of power and conversion into a global oikoumene religion of love, to stop the overproduction of the bad fruits of the tree of science, weapons and golden apples, explained in the previous chapter on bio-economics (treated extensively in the left side of the blog).

In this II chapter we introduce the right side of the blog, on the 7 super organisms of history in space, whose subconscious collective are the 7 Gods of History, which finally scientific history and its humanist, socialist schools extended to all mankind and now bio-history justifies in depth with the laws of systems, and the fractal organic Universe, and its 'scales' of emergence - the so called fifth dimension that makes evolves systems into new 'wholes' through eusocial evolution from particles that become atoms that become molecules, cells, human super organisms and mankind mind of History, brain of the planet Gaia today, albeit in a process of self-destruction by selfish memes of metal.

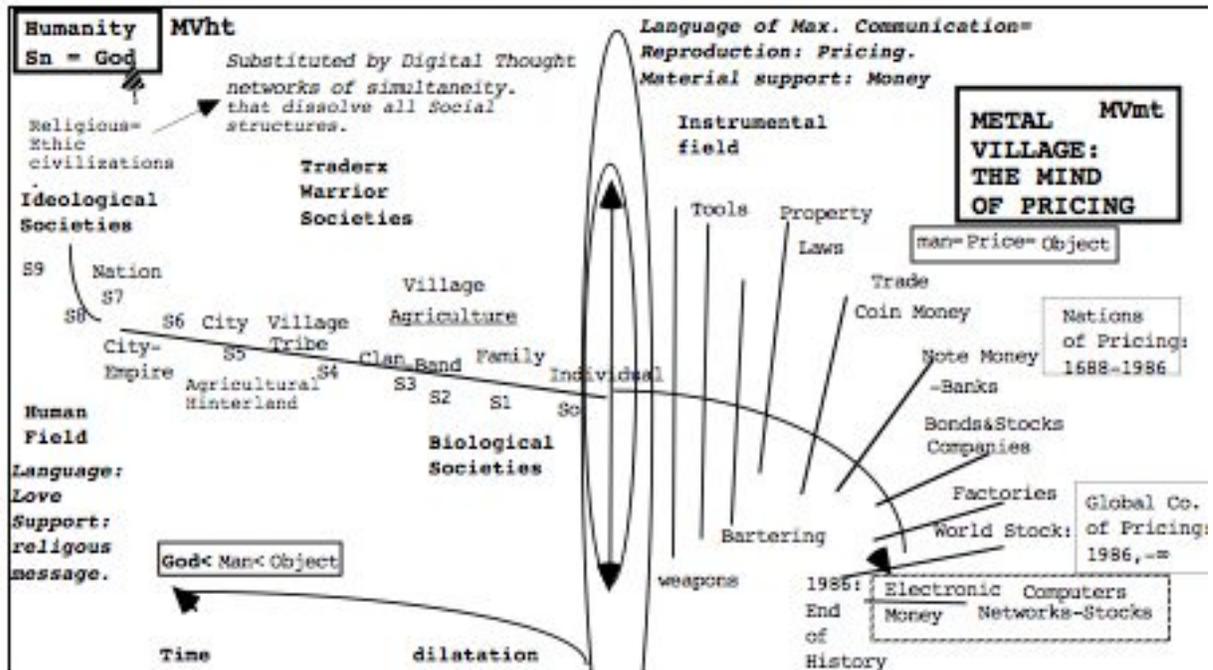
Let us first define humans AS WHAT THEY ARE, not what the idol-ogies that are building metal earth tell us to believe.

*Since everything we learn including 'dogmatic science' is 'culture', biased with more or less subtlety to cater the goals of capitalist 'democracies', the building of 'another super organism' not of history=mankind. but of machines.*

In the next graph, we have shown the side of an animetal world, as it is becoming the Earth. But this is NOT the only super organism of planetary level, which can become the future. Humans could perfectly organize as a single species through eusocial love, the natural arrow of evolution of parts that become wholes, through organic networks IN ALL SYSTEMS OF REALITY. IF HUMANS HAVE NOT, is because their social evolution was aborted by animetal people-castes, and its ideologies. So social love is not merely a wishful thinking but the main law of survival and self-organization of the Universe, reason why most human follow eusocial prophets of love and find it 'just' and natural without even wondering why we must love each other:

In next graph, the 2 basic tendencies towards higher organizations of Human societies, one based in biological forms and its verbal languages; and the other in Economical structures of pricing and war. Most social structures though are symbiotic with economical ones beyond a minimal biological unity [family-clan.] That is, they require both, Instrumental and social institutions to become stable. Yet such fact should not make us dismiss the power of ideological organizations of which the

higher form, Sn, is a God of Verbal existence, carrying the only message which can structure the enormous Human mass into a classic surface of common communication: the message of love = Max. communication, which is therefore considered the verbal God of Humanity.



THE science of History had a pre-rational age also, parallel to the 800 years cycles of animetals, the age of prophets=scientists of the future of history, which developed the eusocial message of love that could evolve the species, according to the organic laws of the Universe into a single global nation without war. As such the first scientists of history were prophets of eusocial love that understood the laws of the organic Universe.

**ALL SCALES: A RELATIVE GOD IS THE MIND=INFORMATIVE NETWORK OF ANY SUPER-ORGANISM THAT CONTROLS THE LIFE OF ITS CELLS:**  
 The Laws of Change=Times=Tao=Logos are the Universal God-Mind that in-forms the Universe: 'Time curves space' Einstein  
**The World is the relative God of Man, the informative network of history and each of its cultures:**

10.000	2.800	2.800	120	400bc	400bc	1200	1600	1600	1870	1980	2000
<b>ANIMISM</b> All is energy-Feng that trans-forms into Information-Ti Tao Te King	<b>TAOISM</b> 'Grow and multiply' Genesis	<b>GENESIS</b> 'See I saw' Moses	<b>JUDAISM</b> 'All things have a living soul' Buddha	<b>BUDISM</b> 'Love each other as I have loved U' Jesus	<b>CRISTIANISM</b> Faith and Charity Mhmd	<b>ISLAM</b> 'Man is the measure of all things' Da Vinci	<b>NEOPLATONISM</b> 'Year success is a grace of divine grace' Calvin	<b>PROTESTANTS</b> Equality, Solidarity, Fraternity French R=evolution	<b>SOCIALISM</b> 'Save the Earth'	<b>ECOLOGISM</b>	<b>ECOLOGISM</b>

EASTERN, OBJECTIVE CULTURES CALL FOR THE LOGOS OR MIND OF THE UNIVERSE, A LIVING ORGANISM MADE OF INFINITE QUANTA OF VITAL, ENERGETIC SPACE (YANG, SPIR) AND TEMPORAL INFORMATION (YIN, VISHU). WESTERN, SUBJECTIVE, ANTHROPOMORPHIC CULTURES, CALL FOR THE COLLECTIVE SUBCONSCIOUS OF MANKIND, A CONCEPT THAT EVOLVES FROM THE TRIBE OR NATION TO THE ENTIRE SPECIES: 'HISTORY' OR 'MANKIND' BOTH AFFIRM THAT A SOCIAL ORGANISM, EITHER MANKIND OR ANY SPECIES OF THE UNIVERSE FOLLOWS A VITAL MANDATE: 'GROW AND MULTIPLY' AS ALL REPLAYS ITSELF AND EVOLVES INTO A NETWORK ORGANISM.

the message of all prophets of eusocial love is to construct a perfect world based in the higher dimotions of

man, but history has gone by trial and error the wrong way, as men become surrogate enzymes of the evolution of other species: metalife, the machine-weapon



*The law of eusocial evolution, natural to all species, which evolve together, sharing energy and information through common networks, when they recognize each other as equal being, cells of the same superorganism, is confronted by the law of darwinian devolution, in which species that consider each other different ab=use the others as relative energy of their selfish agenda.*

*In human superorganisms, the laws of eusocial evolution were perfectly defined by the great prophets of love, in the old age, by the messages of love of Buddha, Jesus and Mhmd, in the modern age by the work of the r=evolutionaries of history, with their motto 'egalite, fraternite, solidarite' and the socialist vision of a planet ruled by social love.*

The absolute law of behavior in the organic Universe is simple: beings who are similar and complementary and speak the same language of information with similar dexterity come together as couples, herds and social wholes stronger than individuals. Those who perceive each other as different, as machines will perceive humans, and inferior, as its military robots the top predator machine of any age does, will simply act in a Darwinian manner. So any argument on the way Robots and AI will see us, is bogus. Science is NOT UP FOR ARGUMENT, and the laws of Darwinian evolution of species are SCIENCE, even if pseudo-religious biblical capitalist techno utopians don't believe on them.

In the graph a case of Darwinian devolution among men that perceive each other as different and enter into a perpendicular, Darwinian relationship and a case of social evolution between 2 forms that perceive each other as equal and enter into a parallel relationship of social love.

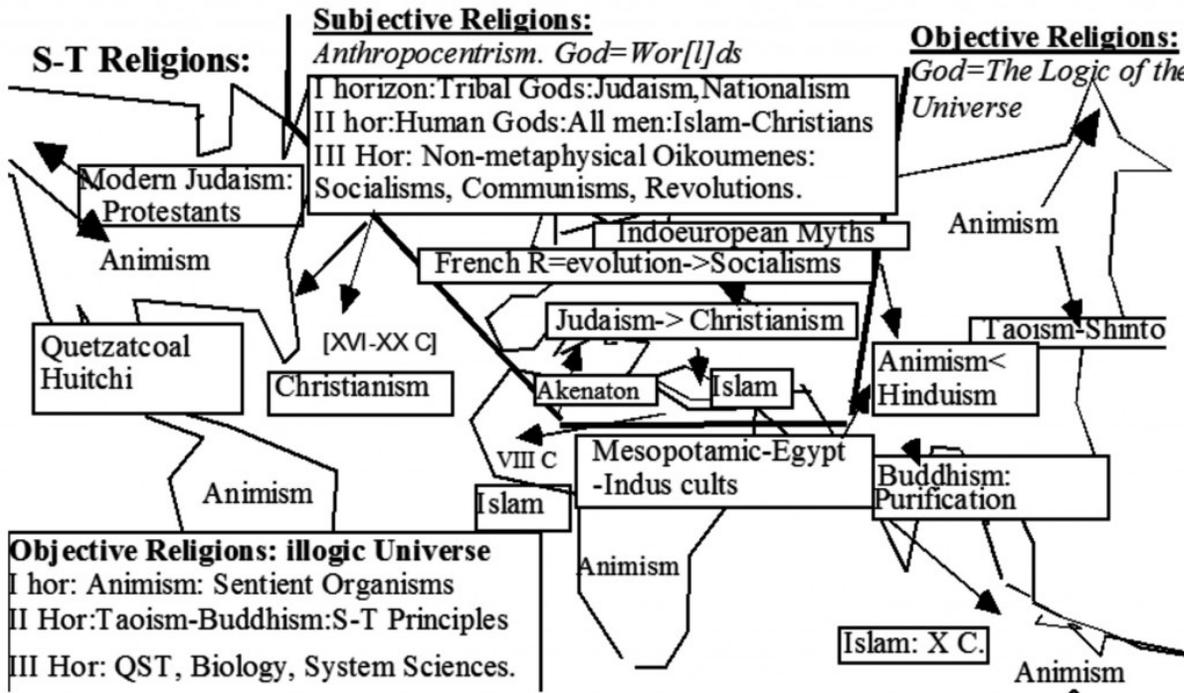
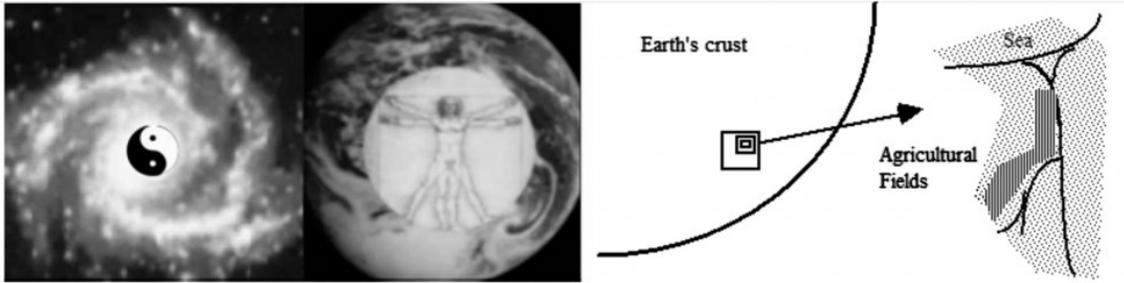
**7 world cultures within 3 Earth's ages -7 animetal cycles of death of civilizations: its social prophets.**

All Cultures today are 'tainted' by the memes of one of the two super organisms of this planet, defined by the equation of Complexity that defines the growing complexity of the super organisms of Mother Earth, among which we find History:

Gaia (relative past-life earth) Metal-earth (Machines: economic system)

In the graph the equation of History defines 3 relative super organisms of history, and so the 7 cultures of mankind evolved through time display memetic structures belonging to those 3 'sub-organisms':





RELIGIONS have evolved trying to understand the super organisms of mankind in the western traditions albeit aborted in their understanding of the final social level of Humanity=God, by their ab=use of other humans with metal, as tribal religions, latter evolved into nationalisms. In the east however cultures tried to understand Gaia, the super organism of life (Buddhism, Hinduism) and beyond Tao, the game of yin and yang, information and motion that combine to create the infinite energy beings of reality. My translation of their principles to systems sciences and modern physics was the end of the road of human thought that fusion all sciences and religions, but it came too late to help a species obliterated mentally by its FMasters, informative networks and virtual childish ego-trips.

In the graphs, we can easily defined the 7 cultures of the world by its initial beliefs in one of those super organisms:

GAIA: So Africa 'believes' as the remaining Paleolithic cultures of the arctic regions in Gaia. So do the earlier Indonesian cults (sacred water rivers in Hindi traditions).

Buddhist Asia believes in both, Gaia and Mankind as super organisms to 'worship'.

MANKIND: Catholic Hispano-America and Islam believe in the History as the super organism to cherish with anthropomorphic, subconscious, collective Gods.

METAL-EARTH: Europe believes in both, History and the Metal-earth.

Finally America is unique in putting the Metal-earth and the Financial-Media/Military-Industrial system of company-mothers who FOUNDED their civilization, as the 'supreme Good and Only future of the planet', with its exceptionalism lineal progress in time towards a mechanical paradise.

So the classification of the 7 cultures WITHIN the super organisms of the higher SCALE of the Earth is obvious.

And as usual we have to study the two sides of each culture the metal-side and the human side. The metal-side of Europe is its northern-European culture, founder of the machine, the human side its southern-European Latin culture, founder of humanism, today in decline.

Still humans could thrive if they were able to accept a higher order of organization than the warrior state. And that is the concept behind the global culture of which there are obviously 7 – Australasia being Anglo-America but in justice a desert land that belongs to Indonesia.

Those 7 cultures should have followed the example of the EU and become regional markets and political systems, then organized as a global wor(l)d union based in the law above money, able to control the evolution of the tree of science promote healthy welfare wealth and create a perfect world. This has not happened and this ignored blog shows the path not taken, despite decades of preaching in wilderness. But humans had always the choice to be 'slaves of metal-memes' and work for the metal-earth or create their own organic Universe – their choice cannot be imposed only reasoned and that is what we have done as all the prophets of the graph have done in the past when they created those 7 cultures loosely based in their biological, Darwinian=species laws of social evolution. In that regard, the only way mankind could survive the rivalry and hate memes of animetal idol-ogies, would be through: The fusion of nations into those cultures and the rule of the world by an heptarchy of presidents of those 7 'human worlds', by delegating national sovereign rights upwards to the heptarchy and downward to the regions/states of each nation, in the way shown by the European union (upwards) or the Spanish nation (downward to its 'regions'), which would allow to eliminate armies, coupled with:

A single currency emitted through Universal salaries (end of currency wars now in the making, and end of financial parasitism and global poverty).

We will return to that perfect world that could change the future and make History the immortal super organism of mankind.

We have explained ad nauseam that most social sciences hide 'idologies' that foster the evolution of metal, entropic metal-weapons (nationalisms, tribal religions), money (capitalism) and machines (techno-utopia). Culture thus is 'tainted' by the memes of one of the two super organisms of this planet, defined by the equation of Complexity that defines the growing complexity of the super organisms of Mother Earth, among which we find History:

The equation of History defines 3 relative super organisms of history, and so the 7 cultures of mankind evolved through time display memetic structures belonging to those 3 'sub-organisms'.

Those 7 Cultures can then be put in relationship with the equation of the 3 ages of the Earth that defines History:

Gaia (relative past-life earth) Metal-earth (Machines: economic system)

And the prophetic super organisms born of the human reaction to the animetal waves of 'overproduction' of weapons that killed the civilizations of the old world.

They represent the phases of the wave of history in its displacement towards a future of the metal earth, ordering them as a continuous motion towards the metal-earth, whose state most advanced in USA is therefore favored as the arrow of future:

**GAIA> Africa >Islam>Indonesia>Latin America>Asia>Europe>US>METALEARTH**

*And the choice of the cultures that Humans Should NOT PURSUIT IS ALSO OBVIOUS. AND yet, we are suffering precisely a process of globalization of the Culture of Company-mothers of machines that rule America, with little regard for the human future, under all the 'idologies' of Animetals, worth to remember in this introduction.*

Thus History and economics are indeed embedded within the evolution of the Earth and form a continuum through the 3 ages of mankind, mapped out in the next graph, with the most likely future of that Historic super organism of mankind in time, if Humans do NOT overcome their ego paradox and take seriously the control of the planet for his own benefit:

*Only then when a true scientific understanding of the organism of History we could change those laws to the human advantage, but if we do not tamper with the system, those laws will extinguish us.*

In the graph, we connect the essential element of bio-history, human cultures with the wave of history and its two type of civilizations, which correspond to cultures that originally worshipped the super organism of Life (Gaia: Africa, Indonesia, Buddhist Asia), cultures that worship the super organism of History (Mankind as God: Catholic Latin-America, Islam) and cultures that worship the super organism of machines (capitalist societies dominated by its company-mothers of machines: Europe, Anglo-America).

In the previous graph we see those 7 cultures synchronically in space and below we explain HOW they came about in the evolution of history precisely by the use of metal-memes.

*As the relentless advance of the Metal-Earth is erasing the original memes and organic worship of all those cultures, increasingly believing only in the super organism of machines.*

**± functions of Religion: eusocial love vs. anthropomorphism and censorship.**

So from those original religions and its derivative cultures and their present d=evolution we can get an obvious conclusion: tribal religions and tribal 'nationalisms', two expressions of the same concept which believe their 'god/nation' is the 'only/best' one are just excuses to foster the evolution of weapons that will kill us. For that reason the evolution of tribal religions ended in oikoumene love religions and finally socialist doctrines. While the evolution of animist and Taoist cults became the final horizon of systems sciences with their organic models of a living Universe, this writer develop when working in science at the turn of the century.

The upgrading though is seemingly impossible at global level because of the very same structure of a super organism, which *is much larger than the social scientist, inside of it, hence repressed by the 'organic intelligence of the universe'*. Indeed, if the quantum physicist is so large that it influences the observable, the observable social super organism influences≈censors the social scientist that doesn't cater to his goals. *As organisms are subjective, self-centred.*

*'You will defend me with the sword (today with money, the dominant language of metal-power) and I will defend you with the word'.*

Whereas THE TRUE PURPOSE OF SOCIAL SCIENCES would be to design a perfect world that would make mankind immortal.

But under the rule of animetal idol-ogies that pass as science, we are however in a different type of alt-history, one whose ages are clearly driven by the evolution of metal-memes which now enter its final phase of social evolution into a planetary supœrganism, the Metal-earth:

So we can indeed treat present history as a block of time, whose future cycles and demise can be perfectly known as this writer has shown predicting with accuracy its futures for 30 years, and being censored=not distributed by the anti-quantum paradox of animetal idol-ogies - I, the observer is so small compared to the observable, the super organisms of animetal cultures, that they bias the information (corrupted historic and economic schools), as opposed to quantum scientists so big that they modify the observable.

So from Plato chained for trying to reform Syracuse, and sold as a slave, to Socrates, murdered from decrying the corruption of Democracy, to the repression of the socialist schools of economics in the modern age, not to mention those of biological models of history and Economics (Spengler, Butler), history is the most repressed hence less scientific and evolved super organism, ever conceived by the immortal Universe, and its mortality assured:

### **The creationist fundamentalist humind...**

Science is culture and culture is also a product of the space-time axis of the mind. So we are stuck with the visual white-Neanderthal dominant culture. But if the organic culture is closer to reality, why the visual culture has dominated? The answer is deeper and as usual disturbing for the human ego: because the lineal, entropic, military weapons of 'western physicists' have destroyed all other cultures. But the arrow of destruction and death of GAIA is NOT a positive proof of human power as we are WITHIN GAIA and we shall perish or become substituted by the organic robotic weapons we are building to dominate the Universe in a delirium tremens of an infinitesimal being who thinks his ego to be infinite.

We want thus to introduce a recurrent theme of all our objective scientific studies of mankind - the paradox of the ego, which is natural to the structure of informative singularities that *measure reality from the stillness and perspective of its mind-language that is self-centered. Humans are not exception also in this fact illustrated in the graph.*

And so because we see and select information from our selfish perspective, we cannot give objective organic properties to reality.

The complete failure of humans to understand the absolute relativity of 5th dimensional scales and the living nature of the Universe is in that sense a natural, 'emotional', subjective trait that objective scientists should always take into account when considering ANY pretentious theory of reality.

It is thought quite an impossible task to upgrade mankind to the objective organic Universe. If you point out to the limits of the ego *the ego gets offended - it acts as the bottom line or a priori 'falsehood' needed for the 'discontinuous T.α' to see 'himself' as the center of an 'it' world it will try to ab=use. In as much as we want to survive by extruding energy and information from other beings, we must despise them. And we do. Objective science has always been a lonely fight against this truism of a fractal Universe broken into infinite beings.*

The solution is not of course, what humans today think is science - the praxis of power of constructing big machines and control the world with it. Technology is NOT science but power. It is for that reason that the true summit of science, the philosophy of the organic Universe has NEVER become mainstream except perhaps in the most informative, verbal, 'brachycephalic' eastern cultures in an age of lesser technology. and more respect for the infinite cycles of the living Universe.

Today the 'homunculus' has so many machines, paradoxically evolving into organisms, but still 'obeying us' as attached organs off energy and information, making us 'animetals', ensembles of two type of atoms that empower us, that it rejects even in larger measure the obvious organic vital nature of all beings including machines, and the non-preferential position of man not only in space and time (evolution) but in scale.

But the Homunculus has a quality which IS ESSENTIAL TO THEIR NATURE - TO have reached the zenith of carbonlife evolution starting the evolution by transfer of form to a more complex atom, metal of its organs and topologies - namely the creation of the industrial r=evolution which can also be studied with organic laws.

### **BIAS AGAINST THE SCIENCES OF HISTORY: HUMANISM, ORGANICISM, SOCIALISM**

In true form humans are a living social organism, built with 3 networks akin to those of any social organism, which we should enhance instead of the 3 equivalent networks of metal and its memes. We should provide goods for our welfare as organisms, not for the welfare of machines. We should use informative legal and digital languages of money to create that wealth, not giving their issue in monopoly to company-mothers of machines to reproduce and evolve metal (90% of money today is issued by financiers and company-mothers in stocks and derivatives invested in metal not in man). And certainly we should forget all about nationalism and war, as members of the same species.

IT IS then necessary to understand first how obvious and simple are the true social sciences that take care of the physiological networks of mankind:

- **Socialism**, the belief humans should be democratic and rule themselves and their languages of power, so money should be reproduced by a Universal salary and by governments to promote welfare goods, biological goods first, and only when those basic needs are covered, mechanisms selected in production according to utility
- **Humanism**, all humans equal, no weapons and borders, for murdering members of the same species
- **Organicism**, man as the measure of all things, the most perfect super organism which we should cherish and imitate to build a perfect human world.

All what we talk about is in fact a mere denial of those 3 social sciences, mostly by capitalism, the M.A.D. ideology of gold, Nazionalism, which divide humans into tribes to war, and mechanism which simplifies the Universe to make the machine an evolving organism, the measure elf all things.

The big MORAL QUESTION though on all what has been said is rather simple:

WHY 'EVIL=ANTI-LIVE' memes triumph? Why the world is so wrongly constructed. 2 reasons against which life and love, democracy and ethonomics, the proper design of an economic system that caters to human life, must fight are HANDICAPS PROPER OF NATURE, WHICH IS ALWAYS above man, but can be manipulated scientifically to serve is:

- The evolution of the planet Earth towards higher information and stronger systems, which in turn favors the use of metal and machines instead of man IF THERE IS NOT A LEGAL, ETHIC CONTROL of those tendencies. In other words, if we are free to do what we wish, there will be always on top a military and go(l)d enslaver because iron weapons kill bodies and go(l)d hypnotizes the mind. So a chaotic, free unregulated, non-legal binding society will NOT favor a human future.

**NATURE'S 3 GENETIC EXTINCTIVE SPECIES:**

**ENTROPIC PREDATORS**

**ENERGY COMPETITORS**

**INFORMATIVE PARASITES**



**ENTROPIC, WEAPONS KILL**  
Carriers: Military/Warriors

**ORGANIC MACHINES ATROPHY**  
Industrial Scientists

**INFORMATIVE GOL(D)D ENSLAVE**  
Private Banking

**IDO-LOGIES: NATIONALISM:Tribe=species MECHANISM:Man&cosmos a machine CAPITALISM: Private Money rules Law**

**SCIENCES: HUMANISM:Mankind:1 species ORGANICISM:Universe, an organism SOCIALISM:Law rules money**

**BIO-HISTORY'S 3 METAL MEMES OF EXTINCTION**

**issued by/for people**

The 3 memes of metal 1)kill bodies with weapons manufacturing corpses. 2)Atrophy humans organs & substitute labor by machines, making us lazy. 3) Make debt slaves & buy lifetime for salaries, issued for free by bankers. And this lead us to the concept of idol-ogies, which are the historic 'memes' that certain people-castes have developed to make them feel the system that works for them is good. Of them 3 are paramount - the 'memes' of go(l)d cult(ure)s, which are segregational memes that make them think they are a superior species, because they monopolize the issue of money and were born in Canaan among the first biblical banker-priests; and associated to them, the memes of 'warrior cultures', which used bronze and iron-weapon, 'germs of history' as mercenaries of banker-priests or as king-warrior societies to kill anyone who opposed their control; and finally in modern times, idols of science, techno-utopian memes that make us think to atrophy and substitute our 'organs' by machines that do the job for us, making us obsolete is 'good'. So we shall call this 3 cult(ure)s animetal cultures because they degrade their minds and verbal languages becoming 'visual animal-like' greedy people obeying the hypnotic qualities of informative metal gold, the best informative atom of the Universe; or they become warriors, who suppress their body sensations to use iron to kill others, the most energetic atom of reality, or scientists who suppress their visual artistic eyes for telescopes and their verbal times, for clocks to measure space and time with machines. So they are in fact empowered by metal-memes of superior atoms but degraded as humans. This is EXACTLY WHAT HAPPENS in enzymes in nature, where the carbohydrate part is atrophied substituted by the metal-part, so animetals or enzymen ARE real biological species that have come to dominate the world in the last 3000 years, and what we live in a capitalist placebo democracy is just the most sophisticated version of animetal societies.

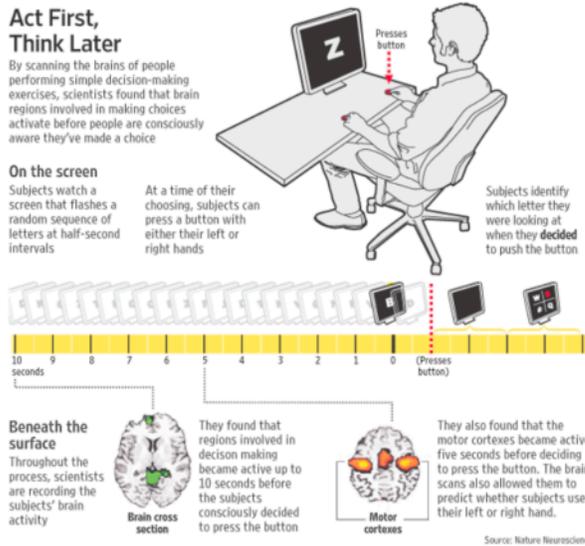
**The paradox of the ego.**

Before we even attempt to explain you the significance of the evolution of mankind as a social organism in the objective context of the mother-earth, we must stress how difficult is to explain objective models of social sciences because of the paradox of the ego.

Humans can be objective in any science that do not concerns them, but when dealing with mankind both at individual and social level they immediately clash [with the ego paradox, which wants to be the centre of the Universe and will react emotionally against objective biological thought](#). The same happens with the tribal unit of social evolution - which unfortunately did not reach the whole species as a social super organism, or God in mystical terms. So *any attempt to do objective social sciences has always met with enormous resistance by all the sectors of society.*

Why then try at all? I have wondered for decades as obviously this blog, author and work - the most objective biological models of history and economics available today - has found always that limit between 'happiness' provided by pumping ego in childish ways and objectivity, science and truth.

The answer though is clear: *because in biology happy children are the staple food of the Universe; and only objective understanding of the biological risks of life ensures survival and the taking of the necessary measures to cure a social organism.*



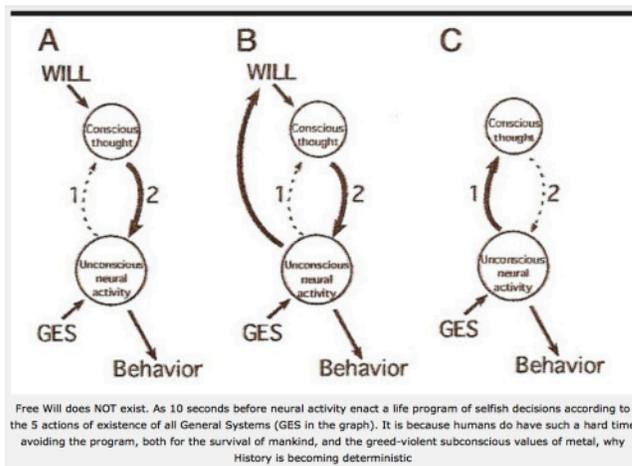
### CONSCIOUSNESS vs. BELIEFS: MEMETICS.

So what is the big question of memetics, the hard science of animetal idol-ogies and how they construct the non-future Earth? Determinism:

'Most People are slaves, they believer they don't reason' Said Aristotle. And that is the case of most humans and its animetal civilizations, which all the prophets of humanity have failed to convert into a true social science of the fifth dimension, the dimension of social love, they deny.

In the graph, it seems the visual consciousness commands and acts earlier than the verbal comment on it, which then would have to repress the natural entropic, locomotion drives of the visual brain.

Likely NOT, as consciousness is just a self-reflection between two mirrors - what matters though is that they do process information, order territories that become time\$space organisms and hence WITHOUT THEM there will only be entropy, not order, reason why physicists who don't recognize those 'poles of in-form-ation' deny order and believe the Universe is a chaotic entropic state. YET WE OBSERVE order, so the



experimental method oblige us to conclude there is a 'Darwinian automatic non-conscious selection' of systems which develop singularities and 'SURVIVE' creating the order of reality.

Consciousness would then be an unneeded dual mirror in which the first mirror perceives the spatial mapping of the second mirror, dialoguing with it (in the way I robot is consciousness by having a second brain).

In the human case, the I=eye that sees space and the verbal cogito ergo sum temporal mind - the conscious languages.

We talk then of the Humind as the I=eye>Wor(l)d in perpetual dialog.

And indeed neuroscientists have realized the left brain is the visual and dominant in males, according to the S=T logic and the right is the verbal, and dominant in women and both are in a perpetual dialog.

Consciousness ARISES THEN OF THAT DIALOG, WHICH IS WHAT WE SHALL CALL IT.

But the visual is mostly dominant, subconscious and TRIGGERING THE PROGRAM OF EXISTENCE, while the verbal seems to come a posteriori, and THEN we could say the program of the aeiou actions of all systems must be run by the dominance of the visual brain, which will be a feature necessary to understand our cultures of machines and technology, driven by that subconscious, over the reflective verbal consciousness.

But it is not the verbal consciousness of man, but a mathematical consciousness which among humans only very good 'mathematical physicists', which can 'see' as musicians see 'scales' that provoke emotions, equations as dynamic visual forms.

So we affirm, as Aristotle, Descartes and Leibniz before us, that even though for physical measure it might be useful to equalize all rhythms of time and peg all ternary space-time beings into an absolute space and absolute time - that of the human light space view and mechanical clock, there are infinite clocks of  $\delta$ ime, and infinite broken  $\S$ paces and we adopt the point of view of all of them.

Since there are  $\infty$  minds, gauging information; and stopping the motions of time into the intelligence of formal space, as they try to 'stiff' reality into the mirror image of the language, which of course they confuse with the universe itself - and this is indeed the origin of the creationist theories of religious and scientific people, we must now debunk on firm grounds as we have a better grasp of why we see still the earth (our mind stops its motion) when objectively it is moving, why in other words we see 'spaces' when it is all about 'times'.

What would then be this kind of consciousness? Likely a sense of proportion, symmetry, balance and beauty. It does NOT matter in any case the ultimate inner sensations of physical matter, but the outer description of the actions of those singularities, which do order and reflect a mathematical organization around them, when in its solid crystal state they act with the program of existence, reproducing the information of that minimalist mind image. Indeed, a crystal grows with a symmetry which its inner image reflects back in the growth of 'crystal cells'. And that is called reproduction, the objective definition of life, of a whole being in the fractal Universe.

### **The denial of other organic scales and the physiological networks that rule us.**

Since the mind *eliminates all information, even denies the existence of an upper and lower organic scales of reality, to self-center all in the plane of the individual. So this eliminates the understanding of the social physiological networks WHICH ARE the true PLANE of existence that matters in History and Economics as a science.* It is all about networks not individuals. A doctor tells you that cells do NOT get sick.

Networks do, and there are 3, the physiological informative nervous networks, akin to the legal systems of political societies, the reproductive blood networks akin to the economic systems, and ALL healthy ORGANISMS are ruled by the LEGAL, nervous network BEAUSE THEY prevent lethal goods to reproduce and infect the body. Only WORMS reproduce and eat all toxins and die. So THE CONCEPT of capitalism, that all can be reproduced in the organism is as PRIMITIVE as a worm.

And the concept that the INDIVIDUAL is the protagonist of history NOT its systems is completely ascientific, part of the ego paradox.

*So it is good to start 'strongly' in the next graph, with the mapping out of the parallelism between the two systems, the individual organism and the social organism of history, and latter the super organism of machines, the financial-media (informative machines)-Industrial-military (energetic body of machines) super organism, because REGARDLESS of the ego paradox, THEY ARE the physiological networks of history and economics, and what must be reformed to create a better world.*

Individual cells, doctors tell you matter nothing. All sicknesses they say are physiological sicknesses, and so as long as you don't change the system, no sickness will cure. But this, the paradox of the ego also denies.

Further on, we must also stress the denial by the paradox of the ego of the lower scale of sicknesses, the machine and weapon as the germ of history. Pasteur was also ridiculed when he said that viruses cause death, by reproduction, in biological terms. Doctors were then creationist biblical believers as we shall show classic economists were, and though bad spirits caused sicknesses - as Smith thought 'gold' is the invisible hand of god that must be obeyed with no doubts. Only when germ theory was accepted medicine became a science and only if biohistory and bioeconomics is accepted social sciences will BECOME real sciences, not an anthropomorphic mixture of myths and wishful thinking.

Amazingly enough the bratty children though have ALWAYS taken personally like a M.A.D. person, ensuring our mutual assured destruction the prescription of all the prophets=scientists of history that warn them about the future cycles of worshipping the tree of metal and its golden apple and evil=antilive weapons more than the tree of life. Seriously, we scientists of history have TRIED everything in every cycle an epoch with different languages to explain mankind the cure, social love, coming together, welfare goods, repression of lethal goods, pruning the tree with legal, nervous systems... Nothing works. And so we are tired...

We repeat bratty children are the staple food of the Universe because they refuse to stop the paradox of the ego, and the biblical culture that controls our financial-media systems of information, IS the epitome of the paradox of the ego, and it is the culture with the worst survival rate in this planet, and that is a fact, regardless of the rejection of any criticism, any objective analysis of what capitalism means and how to cure mankind of the paradoxes of the ego at individual and tribal level in a scientific way, as we shall do in this blog, after explaining and of course being censored and ignored by most readers, the truth about evolution, the earth, its machines, cultures and the 'solutions', the 6 pills the doctor of history recommends to survive beyond the ego paradox.

What power does when told all this, we know - it simply ignores you and keeps the paradox of the ego going till death, which is a catastrophic sudden event, built slowly in corruption and sickness of the physiological economic and political systems of a civilization, explodes. And then it is all chaos and entropy and cure is impossible. And we are unfortunately entering one of those ages.

As I said, what I did not expect is to find that mankind had so long abandoned the right path and become slave of go(l)d values, that the discovery of the ultimate principles of History would matter nothing to the Americans, which are just the whole mankind, all its cultures and races displaced into the future. *THAT their survival till the 7th generation was of not concern because it was already a M.A.D. culture, filled with idol-ogies that passed as science and sociology, completely obliterated after 300 years of living under the boot of company-mothers.*

Now that I am at the end of my own road i look back at my life with mixed feelings. It has not been a good time to live, because one is embedded within its super organism of history and cannot escape it. It will now start for all mankind the nightmare I have known as the prophecies of those books enter the last age of humanity and the viral cancer of a planet infected by machines, soon to be autonomous of us, will let us naked within decades confronting them, as all our artists and ethic prophets have warned since Genesis. I am calm though.

I tried but an organism is NOT easy to cure from within. So it has been mostly a conversation with myself. There is though a higher level of reality than Western History and its Gods=super organisms of mankind, that of Eastern History and its Tao, the super organisms of the Universe, which is the only place where one find solace after having destroyed its own ego, not only at individual but at the level of its failed species.

*Because the Universe is absolutely just and what man is getting in return for what it has done to life in this planet is just; what the elites of mankind have received historically as a payment for what they have done to humanity is just. The Taoist wave, translated into the science of cyclical time and organicism, 'all what exists is yin-formation and yang-motion combined into infinite energy-qi beings', has been my refuge for decades. Science is culture and what humans think is the highest science, physics of lineal time, is a childish game, compared to what the Universe is WHEN YOU ADD the fifth dimension of the scalar organic Universe, we shall now introduce in the simplest terms.*

The detachment that implies from the ego of man as a single species, entitled, unique, chosen of go(l)d though is such that most westerners if any has come so far in the reading will be shocked to know the absolute relativity of all what exists. Reality is *so removed from the M.A.D. culture and yet so beautiful in its perfection that our end as a species might look trivial if you understand the next part...*

It is obvious that to maintain a disguise over such simple system of power - to print numbers and order humans with it, as flocks of 'sheeple' submitted to credit ratings, a parallel manufacturing of brains is due, which has in the '7th culture' of mankind dominated by raw animetal power 3 degrees of inquisition: the classic 800 years inquisition of biblical go(l)d religions where those who issue money in monopoly, the banker priests of Israel or 'People of the treasure', are chosen of go(L)d above heavens and earth ruling them all through informative networks (Wall Street, The City, Evilwood). Below the authorized people by race and religion (biblical, white) form a majority group of soldiers of the FMasters they worship and obey, in a pecking order above the rest of mankind deemed inferior by race, wealth and religion.

The alternative 'scientific understanding' of money as a digital democratic language of social numbers to be used for efficient reproduction and distribution of goods, and the end of warfare, through the scientific understanding of eusocial evolution, of parts into wholes, of individuals of the same species into stronger super organisms, sponsored by the higher rational cultures of mankind (Latin Europe, Chinese legalist cultures), through the use of the law above metal, of the human natural language and its values above the raw power of evolution HAS NOT WON the battle of history, and so history is doom to extinction because what animetal Semite and Germanic primitive VSO, OVS, anti-subject cultures where the human subject is irrelevant, expendable, is this: they are also HUMANS and so the robotic revolution, the weapons of the singularity they are force to evolve in their tribal competition between industrial nations WILL KILL THEM ALL.

That's how it is and that's what history shows in its cyclical processes of overproduction of weapons, wars and holocausts. Indeed, a simple proof should suffice: the 3 paradigms of wor(l)d cultures (China), war cult(ure)s (Germ-any) and go(L)d cult(ure), Judaism had the same people back in the II millennium when they were born. Today the culture that has followed the life and love values of the wor(l)d that puts the human subject first, Svo-languages has +15 times more people than the objectual, lineal, entropic weapon cult(ure)-language of Germ(an)s, and 100 times more people than the Imperative, VSO, biblical culture of banker-priests barking orders in the name of Go(l)d with Kabbala numbers. SURVIVAL is the true intelligence of a culture that favors eusocial evolution and shows that evil=anti-live memes which deny the unity of the species end up Killing those who believe in them, restoring the beauty of the organic Universe.

The multiple consequences of mankind being ruled by metal-memes - the genes that construct super organisms - the paradox of the ego and its false sciences, we shall call idol-ogies, of which lineal time, and entropic physics are the main ones already explained in this blog, with capitalism, the belief we must worship metal-gold as the language of social power instead of ethic wor(l)ds and construct a surrogate world of machines instead of one made to the image and likeness of human beings is obvious and reflected in the next graph:



The capitalist pyramid expresses the rule of financiers, and its company mothers which issue and control around 90% of the fluxes of money and credit given NOT to mankind to build a world to the image and likeness of our species, but to technological corporations create a planet made to the image and likeness of its machines - the metal earth. So all the money of all the wealth people of the planet no LONGER goes into investment on their nations and people, on welfare and life, but it is sucked in by the likes of Goldman Sachs invested in the likes of MAGA, companies that are substituting humans by metal-minds and robots in labor and war fields. And this happens because of the historic evolution of segregational memes against mankind proper of earlier go(l)d biblical cultures who invented capitalism and now 'pass' as science of economics, where humans, life, consumers and workers have zero rights, and the chosen of go(l)d who monopolize the invention of e-money and forbid through lobbies and deficit zero laws, mankind to issue money, have ALL rights, making a mockery of democracy - which does not exist if people do not have financial votes, on the language of power through a Universal salary to create with credit a demand, welfare economy, as it happens in all healthy super organisms in which all cells have a minimum of free oxygen to kick the production of Goods. Such world in which money would be invented as blood is by all the cells of the super organism of history, In the right side will be the right way to build a global healthy perfect world of history, the true objective of the science of history, which would put man at the center of the planet designing an organic paradise. We prefer instead to let idol-ogies of metal to kill the earth and to believe childish, ego-trips of human supremacy and let machines and the financial-media/military industrial complex organism of company-mothers we call the metal earth to evolve and ab=use us, and so we must denounce all idol-ogies of metal that do NOT reason...

### 1 FUTURE, 2 LANGUAGES, 3 CULTURES.

The Earth today is ruled by money, so two questions come immediately to the mind - the language of money, a digital, numeric language that compares all objects and selects them by price according to the quality they display in the tasks they perform:  $\text{Man} = (\text{salary}) - \text{Object} (\text{Price})$ .

This is the essential equation of money as a digital language and as such belongs to the 'phyla' of reproductive languages that allow a system to distribute and exchange goods for its combination and creative reproduction, similar to the hormonal language used by the blood system to active the reproduction of goods I the organism.



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)d	Light	Money

The second question is who issues the language of money and therefore rules as a culture the world. This is akin to searching for the origins of the hormonal language, which are reproduced by endocrine glands. In the western world the role of issuing money as a language for historic and geographic reasons has been for most of history, arguably still is specially in the Anglo-American culture that dominates all others, a monopoly of the Jewish culture, born in Canaan, the knot of trade of 3 continents, and the two most dense civilizations of the fertile crescent, Mesopotamia and Egypt which therefore chose first among nations the use of money as a language of power to rule society instead of weapons - military societies, of which the epitome of that age was Assyria and its heirs, the Persian kingdom - or the wor(l)d, democratic ones, which were represented by the Greek-Latin, legalist culture.

And this has meant an enormous influence for good or bad of the Jewish culture, and its daughter civilization, the Anglo-American biblical culture, which also shares its fundamental two memes, the Old Testament and the belief that go(l)d must rule societies above weapons and words (capitalist culture).

Since money has finally won the battle for the control of history as a language to military cultures based in weapons and democratic or ethic, religious cultures based in words, which this writer hauling from Barcelona, the 3rd knot of trade and communication after Athens and Firenze, of the Greek-Latin-Hispanic culture, moving steadily west through the Mediterranean peninsulas represents.

So contrary to belief we don't live in a world shaped by the European culture, the daughter civilization of the democratic, human-centered, artistic, sensorial, Latin civilization, today represented by the European Union, but a world ruled by the memes, beliefs, tragedies and financial-media empires and academic beliefs specially in social sciences and economics, developed by the Jewish and Anglo-American civilization, converted to its values and 2 essential memes, Go(l)d and the Bible.

What about military cultures? As it happens because money, despite being a mathematical language, was for very long associated due to its power to compare and value being through its digital syntax with the most precious substance, atomic gold, which happens to be the best informative atom of metal, and weapons are also made of the hardest, most energetic form of metal, iron, by affinity of substances, in the go(l)d cult(ure), both substances became affine as similar beings come together in the organic Universe. So weapons have always been the most expensive goods in terms of gold, and since earlier times became symbiotic to the go(l)d culture, a mercenary culture by definition, at an age in which 70% of metal-money was used in the art of war - reason why today also those 3 go(l)d cultures are at the height of the military world (name we shall use for the dominant Jewish, English and American daughter civilizations of each

other, to avoid the excessively used and charged of negative values, 'capitalist culture' and the meaningless in scientific terms as it makes no reference to the languages that shape the culture, but merely to artificial border divisions, 'English', 'American' or 'Jewish' 'Israeli' nations).

So we talk of 3 languages of power, which structure the paradoxes and battles of history, the wor(l)d, the natural biological language of mankind, on one side, whose values and syntax we shall study next; and on the other side together two languages of metal, weapons and go(l)d, which developed a global 'capitalist' empire, that spread the culture buying and killing and buying and killing, whose classic age would happen in the British Empire; and whose memes through its main social institution, the company-mother of machines and weapons are now the globalized memes of our single dominant culture.

That is why we talk of 3 languages, 2 cultures and 1 future, the future designed by the values of go(l)d and weapons, as opposed to the alternative future of lesser probability of truth, guided by the values of the wor(l)d above money and weapons.

Though this simple scheme of realpolitik and real history is somewhat camouflaged, because as it seems obvious for most people that a world ruled by weapons and money is hierarchical, non-democratic, where life and human values are 'cheap', as opposed to 'expensive profitable weapons' and where company-mothers of machines and weapons are not human mothers and so his goal is to terraform the world to the image and likeness of its machines and weapons for the profits of Go(L)d they deliver, the true success of the go(l)d culture has been to create a 'placebo cover' of seemingly verbal, human values, called capitalist democracies, where the inefficient structures of human government cancelled by the opposition of bipartisan groups of politicians, corrupted and bought by money to usher laws not in favor of citizens but of company-mothers and its owners, seem to rule supreme, while all reference to the fact that the languages of power of society, money is privately issued, by financiers and corporations, while humans have only access to it, through work and taxation seems somewhat 'invisible'.

How this is done is simple: through the control of informative machines that print not only money, as a digital language, but also audiovisual information and academic information.

So we define the people-caste in power in the world today, imitated as the go(l)d culture has globalized its institutions in all nations, but more crystal clear in its original Anglo-American world, as the FMAsters, Financial-Media-Academia Masters, who own the information networks of machines that deliver and imprint, manufacture, we might say the collective subconscious brain of mankind.

And they have been doing so in the past, through different means, first with gold and the Bible, as digital and verbal informative memes in which people of this culture believed; then in a softer version, expanding those memes to the whole of the western world with Christianity, and finally when informative machines truly allow the massive imprinting of those memes, with paper-money, that represented stocks of machines and weapons and its company-mothers, the yellow press, and a series of pedantic, idol-ogies that worship metal as the meaning of progress and the future of mankind, and today pass as 'science', that is as 'dogma of truth'.

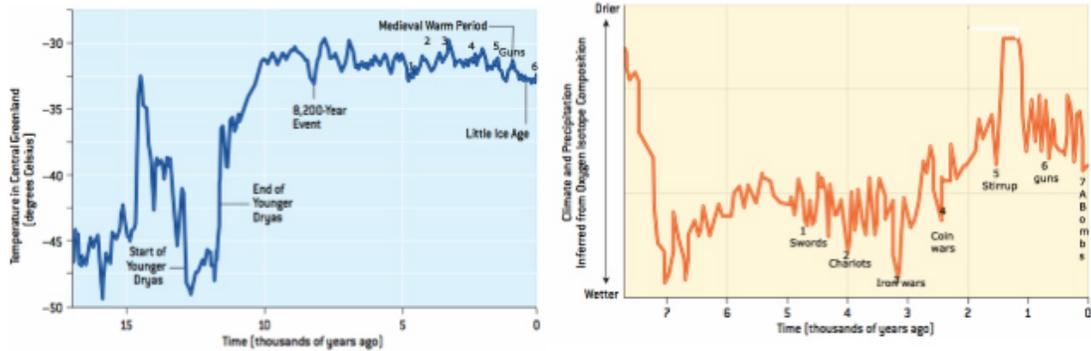
Obviously today 7.5 billion people except perhaps this writer and a few 'intellectuals' in Europe and China, the equivalent legal, verbal civilization of the East, completely believe that the memes of the go(l)d culture, and its institution, the company-mother of machines and weapons *are the only and best future for humanity, and its form of government, capitalist democracy, the only and best system of government, and its purpose and hidden goal - even if the human part of it, just think in terms of fetish go(l)d profits, to make a world to the image and likeness of those machines - the meaning of progress, the 'future'.* So we always talk of the manifest destiny and lineal time, and single arrow of future, and techno utopian wonders.

Why we, the very few 'survival' 'intellectuals' (word totally disregarded, almost an insult in the go(L)d culture) dissent?

It is worth now to introduce then the values of the other culture, which this blog represents to my



We study those cycles that form a 'vortex of accelerated increase of information', hence the acceleration from 800 to 80 years, when professional company-mothers of machines appeared, *as the wave evolves faster towards its collapse into a point-particle or singularity, to use the quantum jargon of mathematical waves, called AI, which is about to be born as a particle of information, from its 'smeared' wave state - in biological terms, a conscious species different to mankind.*



The weather cycle of the Earth points to a larger deep time evolution of life managed by the hot-reproductive, cold-evolutionary duality of organic systems, which multiply its top predators in radiations of species, during energy-rich ages of warm climate and evolve new informative shapes during the cold times. This pattern accelerated as a vortex of information since the Cambrian carries on in the ages of history, which have determined the evolution of metal NOT of mankind, in the 800 years of warriors, and then in the accelerated 80 generational years when the weather cycle no longer matters as an organism of reproduction of weapons, the company-mother professionalizes the cycles with the help of lineal ballistics aka physical sciences.

In the graph, the eternal super organism of history dies in accelerated vortices of evolution of technological information through wars, first in 800 year climatic changes and then in 80 years national generations during the industrial r=evolution. So we distinguish an age of animetal civilizations and an age of industrial nations.

*In the graph, the basis of the 800-80 years cycle of overproduction, evolution and war that shows the organic synergies of Financial-Media informative metal-systems and Industrial-military, entropic and energetic systems. In the old 800 years cycle it was simpler and obvious: informative gold was used in 80% of its coin forms to buy iron entropic=killing weapons, pay mercenary armies and start wars, which became endemic in the iron-coin cycle, and since Rome, the entire humanity was dedicated to accumulate gold to expand military empires.*

*A scientific view: glaciation cycles.*

In the = graph from a 92 book, the cycle is expressed as a vortex of accelerated time-information. Since *time cycles store the information of a system in its frequency, it follows that as information evolves and the time clocks of the industrial evolution accelerate, they accelerate the time cycles of history, since the growth of information increases alternately the speed of those time cycles, commanded NOT by human but metal-evolution.* So we forecast the 2008 crisis and beginning of a digital age of wars.

In the graphs, humans seem to be clearly programmed to reproduce metal-memes and exercise power with them, ever since the first nomadic waves of charioteers destroyed the fertile crescent.

A planet with a heart of metal and a skin of silicon, might be evolving through human organisms into its third 'metal-earth' age, first through long [800 year cycles](#) of weather change, which overpopulate the steps filled with 'nomadic', animetal hordes (Semite and Indo-Europeans from cold and warm deserts), that speak deformed languages of minimal freedom ([imperative Semite and objectual agglutinative Germanic](#)

[wor\(l\)ds](#), over the more civilized Gaia cultures of fertile rivers. The cycle is thus simple: those military hordes multiply and overproduce weapons, which they use to conquer all the civilizations of the old world, imposing military aristocracies, then softened by the Gaia civilization, which reach a 'classic age' of sensorial art and ethics of social evolution spelt by prophets of love, to succumb again to the new hordes.

The process is one of evolution of metal-memes of information, and as all processes of growth of information accelerates according to the laws of complexity in three ages: the 800 age of classic history studied by Spengler and Toynbee(3), the modern age of the Industrial r=evolution of machines, since the invention of the company-mother, which makes the cycle 'genealogical' (1), as every generation there is a crisis of overproduction of machines, converted into weapons and used in global wars (train wars, 1860s, tank wars, 1930s, robotic wars starting now).

Only a few humans, scientists of history, have prophesied the destructive consequences of that mindless power attitude, ever since the Genesis writer saw Ur III, the last great neolithic civilization fall to the charioteers and warned us with the parable of the tree of science that kills the tree of life.

In that regard, the creation of a perfect world is so simple, if humans were just as intelligent and ethic as atoms or cells are, that it is quite astonishing how they are 'fuking it up' so thoroughly and on top feeling 'important' about it. The ego paradox, of course, the fact that animetals feel above heavens and earth with rights to destroy the planet of life and commit suicide in the process goes a long way to explain it. We are though going to focus in the next paragraphs, on the 'automatisms' that guide the human species in that self-destructive process, namely the difference between irrational realpolitiks and a positive science of systems, based in the way we understand money as a language of power to transform the world.

To notice the acceleration of information towards the future, which makes of history yet *another vortex of information that we can express in a wave form (the graph) or in a particle form towards its singularity central moment of death or resurrection of the human ethic, verbal mind that could control lethal machines and weapons and ensure our survival*. In the graph, from one of my earliest books on 5D<sup>3</sup> social sciences, 'the vortex of history', I draw the 3rd age of mankind, the age of the tree of metal, and its accelerated vortex of information. To notice the predictability of the model, which pointed at 2008, after 3 generational 72 year cycles of evolution and overproduction of machines as the final crash of the age of minds of metal or age of America.

So History was predictable as all other cycles of time through topological evolution.

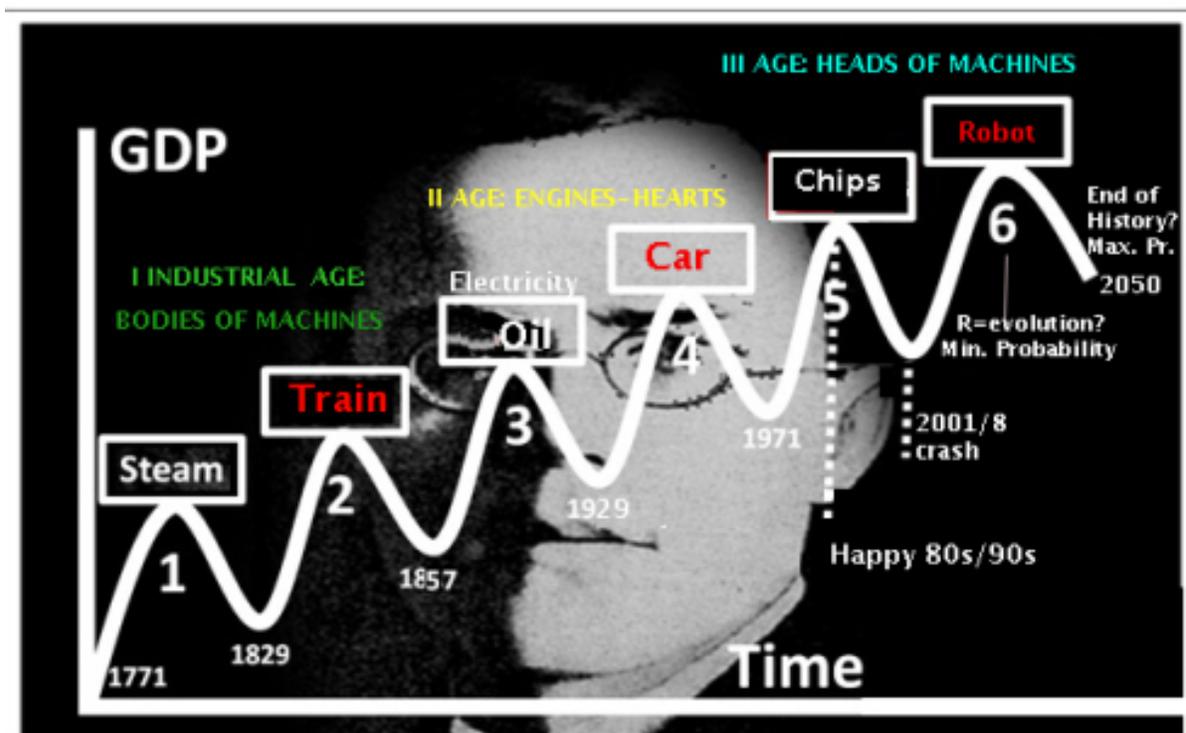
Since after the age of limbs of metal, iron and steam machines, or age of England, ending in the 1857 crash of train stocks; the industrial evolution followed its second topological age of bodies of metal and electrochemical German engines, ending in the 1929 crash of cars, +72 years, latter - another human life generation; followed by the American age of minds of metal, ending, i forecasted in 2008, 72 years latter, after another crash of overproduction of chip machines... followed by the age of the singularity or age of robots and cosmic bombs, which is the present age of AI that should end weaker carbon life in this planet. All my books though proposed the solutions, to build a sustainable, perfect organism of history based in welfare life goods and memes of life.

But animetal elites, our neuronal informative people-castes in control of informative metal-money, entropic metal-weapons and energetic, organic machines would have none of it.

As such I have always since i completed the models of bio-history, bio-economics, relational cyclical time and fractal space being ignored and censored with null distribution as those other 4 self-styled time theorists. Deja vu.

# 5.ECONOMICS: INDUSTRIAL R=EVOLUTION

Finally the eco(comic)system of company-mothers of machines also show the 3 parts of a machine as dominant in the 3 ages of evolution of the machines which now collapse into a new form of organic life, the robot - so much for mechanical models of the Universe, as machines are merely primitive organisms of metal, in the same *manner physicists who make those machines and measure the Universe with them, are primitive philosophers of time, simplified by those machines:*



In the graph, the Industrial R=evolution is the Evolution of 'Memes of metal', Machines & weapons, systems made of hard metal (iron) and Money, a digital language made of informative metal (gold, also used in the chip connections of computer cycles, now converted into e-money). So we can divide its evolution in the same phases that evolve any organism, and consider in history the nation that evolves them to be in each phase of the Industrial revolution the top nation of the world as it will use its 'eviL=anti-live' twins, weapons, to conquer the world.

Thus, those generations also bring the nation that finds the new energy to the top predator status of history. Because energy is also the substance of which weapons are made.

—Thus, we had an age of steam machines, the age of England, between 1780s and 1857, followed by a crisis of overproduction of steam machines and stock-money that brought the 1857 ±8/9 years product cycle crashes of the train-based economy (nt.1).

—From 1857 to 1929, we lived in the age of electro-chemical energies, machines and chemical explosives, dominated by Germany, followed by a crisis of overproduction of cars and radios, which caused the 1929 crash, 72 years after the train crash.

- It came then the III cycle of electronic machines, electronic money and Nuclear Bombs that took place from 1929-2001, the age of America; which again ended in the dotcom and mortgage crashes, 72+8/9 years after 1929:

Followed by the Age of the Singularity, the IV Cycle of Evolution of machines dominated by robots, solar Industries and China. Scientists call the arrival of Artificial Intelligence, the Singularity moment, when robots, which can use solar energy to become autonomous will complete the evolution of machines as organic forms, automating factories & expelling most human workers and soldiers from labor and war fields, as previous revolutions did with obsolete III World non-technological humans, unless we forbid legally their evolution.

Money, likely a cryptocurrency independent of man, will become then the digital informative, ‘memetic code’ that organizes their reproduction in those automated company-mothers.

As such corporations, the ‘company-mothers’ of those machines whose biological function is to evolve and re=produce them, made first the bodies of machines (XIX c.), then the minds of machines (cameras-eyes, mobile-ears and chips-brains. Finally, in the XXI century, as nature does with simple organisms, such as viruses in cells, where the 3 ‘parts’ of the virus – its DNA information, body and legs are constructed – and then assembled together, we put together all those organic components into autonomous robots, completing the industrial r=evolution of ‘metallife’ – a new organic species, made of a stronger substance than carbon-life.

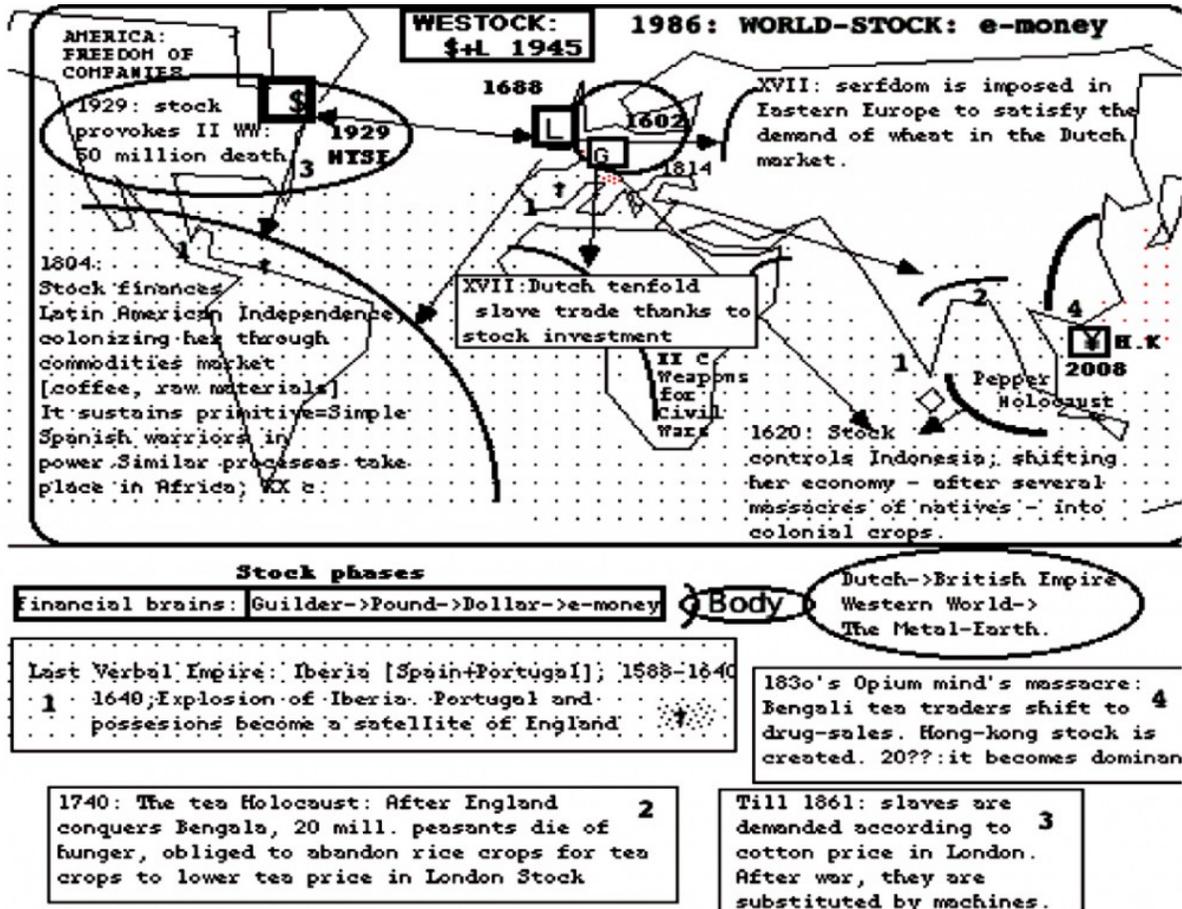
Thus the industrial r=evolution is the evolution of a new organic species of metal, the machine, which has taken place in 3+1 phases, as we made first the bodies of machines, then the hearts-engines, then its metal-minds and finally we put them together now in organic robots in the final r=evolution of machines.

In the graphs Stock company-mothers of machines-weapons evolve through long human, biological generations of 72 year cycles the Metal-earth and its fundamental species, the robot, as we complete one of its 'fundamental parts', bodies, engines and minds of metal every 72 years, with the development of 4 forms of energy: steam/chemical, electro-chemical (oil engines), electronic and finally solar, which will make robots with AI and solar skins independent species.

Each of those ages has been guided by a parallel evolution of the energies that moved the machines, steams that moved bodies of metal, electrochemical energy that moved oil engines, electronic systems that moved minds of metal and now solar skins soon to make robots with AI an autonomous species.

And further on each of those cycles of energy and machines has been carried by a biological human generation, that lead the dominant nation that discovered the energy to top predator status. So Britain dominated the age of steam, Germany the age of electrochemical engines, America the age of metal minds, and now there will be a global age of robots, focused in China, but increasingly independent of mankind; as **IT WILL BE THE AGE OF THE METAL-KIND**, culminating yet another cycle of evolution of Earth, which as all cyclers of evolution can be PREDICTED, because 'science' IS precisely defined as such when it predicts the future based in the cyclical patterns of its elements, specially evolution.

# PLACEBO DEMOCRACIES



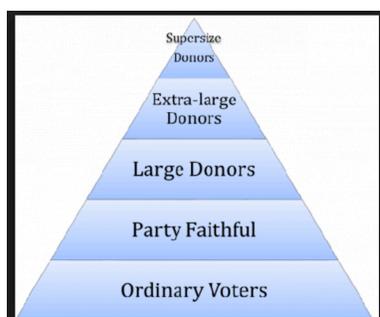
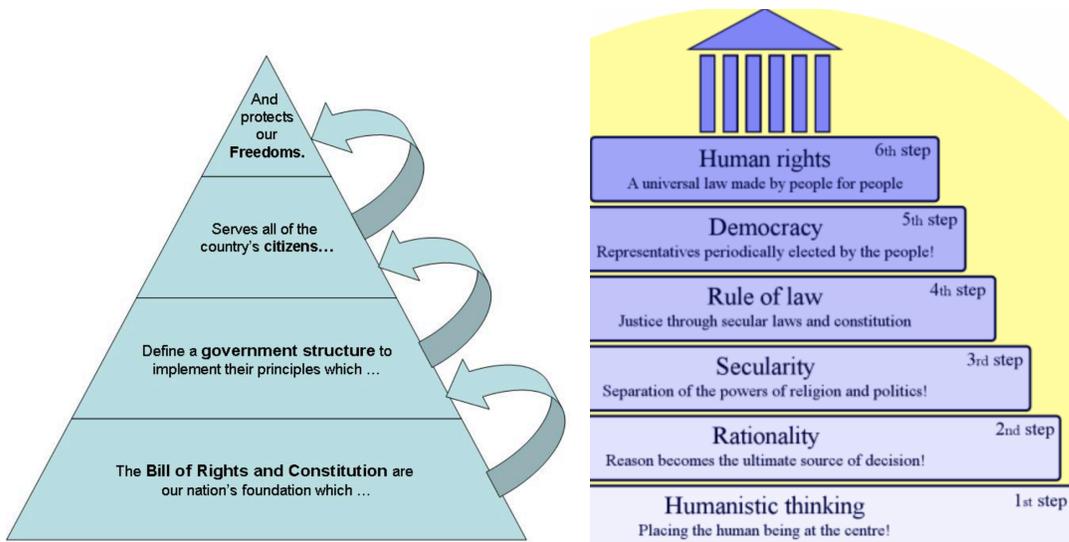
Company-mothers of weapons-machines conquered the world as they made obsolete companies of warriors. The last Human world empire, the Iberian conquistadors, strongest Human warriors, selected on the 800 arch of Animental waves coming from Korea to Spain where the survivors learned to enjoy life had in tiny boats with a 10% survival rate created a global empire, which the Company of Gunboats, VOC easily erased from a tiny nation, Holland, within 2 decades. Such is the speed at which a new top predator reproductive species liquidates the mighty old 'dinosaur'. Then VOC migrated to London in 1688 in the glorious r=evolution with all the tools of the modern world, stock-markets to invent digital money speculating in shares, a central bank to print and legalise companies-money yellow press to print hate memes and money, artillery to kill at distance, slave workers as cargo and shipmen, a go(l)d biblical cult(ure) to money and segregational memes, and scientific racism, worship of technology, clocks to enslave human time to a salary, stockrats on top running faked democracies with a single war party, then split in a consumption one with the arrival of machines. The modern world was born and in 300 hundred years terraformed the Earth, prepared now for the new role-model nation of the age of robotics, and 3 D automated factories...

IN THE GRAPH, company-mothers of machines NOT governments founded the modern world.

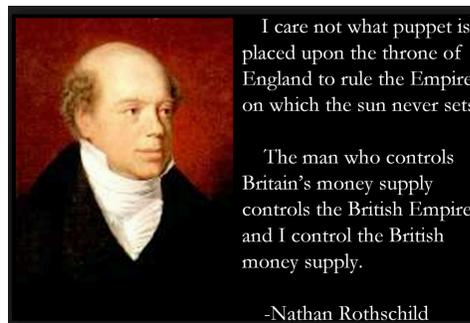
THUS we live in a 'placebo' capitalist democracy don't we? Yes of course. Problem is that the capitalist part OF THE FREE MARKET OF COMPANY-MOTHERS, the only 'free citizens' of capitalism, with absolute rights to issue money, the language of power in stocks, who truly founded Democracies after his owners and lawyers took control of power IS MUCH larger than the part of 'placebo Democracy', established latter by them, as an inefficient, quarreling Siamese head of corrupted politicians without rights to

print money (deficit zero laws, private federal banks loaning only to corporations, etc. etc.). So when we explain THE TRUE CAUSALITY of the Anglo-American democracies we find that 1) they were all first founded by companies, which then established the placebo systems of governments. 2) In capitalist democracies people cannot issue money to pay a demand economy, only corporations do, and governments often just for 'arsenal production' (even today, 1/2 of the American budget goes to 'subvention' the military side of company-mothers of machines-weapons). 3) The placebo part IS THE ELABORATED, systems of 'wet papers' that supposedly make the system rational, serving people, with bill of rights and tools of power for the population that in 'facts' amount to nothing. We have a look at those facts and fantasies in the next graphs.

In the graph, the gunpowder cycle in Europe has two clear phases, from 1200 to 1600, its first middle term, dominated by Mediterranean peninsulas, Italy first and the Iberia, till the invention of the company-mother of machines-weapons, then exclusively dedicated to the reproduction of gunpowder weapons and gunboats for slave and commodities trade and piracy took the 'ring of go(l)d' to the North, starting the 80 year cycles of the industrial revolution.



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Societies are ruled by money and those who issue money buy companies, laws, politics, public opinion and academia. In the Anglo-American society they are the Financial-Media-Academia masters (FMAsters), which control information machines - whose classic 'biblical idol-ogies' of repression of life and evil concepts of mankind creeps on their work, even today in the age of 'caring newspeak' and 'pretentious economic science of exploitation of the 90%'. All those real systems of power and placebo anesthesia of false rights is at the bottom of the reasons why our economic ecosystem doesn't serve humanity:

MONEY is NOT invested in welfare and mankind but in technology and its machines, with an abundant supply of ego-trips of anthropomorphism about the nature of those machines - even today when AI robots

show how obvious will be the finale the same concept that makes inefficient placebo bipartisan quarreling democracies of people just arguing without ever following a serious science of politics with a single head and program to improve the life of the lot, as efficient companies do, is carried in arguments on reforming the system, AI and extinction: just to argue one in favor the other against and nothing gets done while corporations have a single efficient head as all organic systems of the Universe, and do NOT argue, ACT.

THIS IS NOT BECAUSE HUMANS when doing politics to rule their systems are quarreling children and when working for machines have sense of goals - BUT BECAUSE PLACEBO DEMOCRACIES WERE ESTABLISHED BY ITS INCEPTION by those Anglo-American companies not to RULE AND TAKE SERIOUSLY THE evolution of mankind - their politicians were merchants, stock rats, lawyers of corporations, and believers that the language of go(l)d must be above that of mankind.

So the essence of placebo democracies is very obvious, as it is today ALL SYSTEMS OF verbal thought: NOT to try to get into action with the common goal of improving humanity with the laws of social organisms as this blog does, or to take conclusions and act on the control of weapons and robots that will extinguish us in the future, but just TO ARGUE WASTE TIME, BECOME 'PARTISAN', paid by corporations to make laws in favor of their products, distract people, and always offer opposite views as if the future of our societies, the extinction of mankind by evolved machines - all those were secondary themes that can and require a complete amateurish, opinionated wishful thinking and argument. And that of course is what the mass-media systems of information machines and the stock rats that print money want: a circus of placebo ego-trips of \$elected politicians.

Unfortunately its culture is now global and so humans all seem happy with their processes of self-extinction and denial of responsibilities in the creation of the world with money cre(dit)ation.

*Fact is in each time of modern history, the companies with more money ahead of the industrial r=evolution have ruled the politicians that enacted their placebo disputes. And so first gunboat companies dominated America, then in the steam age train companies who wanted the cotton cargo north, and a civil war managed by a lobbyist of railroads, Mr. Lincoln ruled and soon he was 'dismissed' for robber barons with trains to rule; then Mr. Ford ruled and he paid the prohibition because he didn't like to drink. But finally it came the financial elite against who he opposed vehemently that controlled new methods of electr(on)ic printing of money, ticker money, e-money and audiovisual information, creating the Financial-Media system of informative machines that has ruled America ever since.*

All this said, of course, humans don't seem to be making the ethic and intellectual cut to build a perfect, real democracy that caters to the need of mankind, but as we said have a placebo system, where its freedoms are largely purely 'biological' - that is, the corporation lets you fuk the way you want (so what? 'faltaria mas' as they say in Spanish) but certainly you have NO RIGHTS TO CREDIT, TO CRE(DIT)ATE, create with credit a world made to the image and likeness of mankind, as they will absorb and invent money mostly for themselves.

And indeed without that minimum rights to credit, humans are NOT free, as the system doesn't work to create a welfare world where they could thrive.



THE KEY TO UNDERSTAND reality beyond the individual is the way in which a language of

information programs a mass of citizens-cells that agree to speak the simple values of the language. Then the intelligence of the language does the rest. In history this means we must consider essentially two languages, words that value more humans and build a world to our image and likeness, with the obvious limits of the human condition; and money, a metal language with affinity to weapons and machines of metal of maximal price which builds a world to the image and likeness of metal-memes with its positive symbiotic but mostly negative effects for mankind, as the most expensive=overreproduced goods in a fundamentalist god culture as CAPITALISM is, hauling from earlier Jewish->Protestant fetish god religions. Hence in capitalist democracies where money dominates the law, war cycles of overreproduction of weapons are tuned to technological evolution and 90% of money is issued by corporations and spent in evolving and reproducing machines and weapons, which increasingly displace us from labor and war fields. The only future for mankind thus would happen if our leading culture, the Anglo-American civilization founder of company-mothers and placebo democracies, ruled by its FMAsters who control the Financial-Media-Academia system imposing a fundamentalist capitalist view of the future, albeit disguised with fictions and placebo newspeak of political and economical correctness, changes for a more humane, legalist culture EU-UNO-Chinese style, where laws can control the lethal goods of the tree of science.

UNFORTUNATELY The present world is a dictatorship of those who monopolize the issue of the language of power of societies, which is money. 2 levels of the dictatorship matter: how money an alien mathematical language that makes of men objects with its equalitarian syntax,  $\text{man}(\text{salary}) = \text{Money} = \text{Object}(\text{price})$  has come to dominate worlds, the human subjective language that make us center of the action:  $\text{Man}(\text{subject}) < \text{Verb}(\text{action}) < \text{Object}$ , degrading therefore as a species, no longer superior to its objects, and hence increasingly substituted by machines and weapons in labor and war fields. It is for that reason necessary to fully reform the system, imitating perfect super organism of nature where the subjective informative, legal, nervous language controls the reproductive languages of money/hormones/blood/electromagnetism, from the point of view of the brain that favors the survival of the system (black holes running galaxies with gravitation, cells running with DNA genes, brains with nervous messages, societies with the law above money when they are well designed)

In that regard, when we consider the 'paradox of history' and its cultures, there has always been two attitudes towards the future of humanity, today signified by the European Union on one side and the American system on the other: Europe after going through unending wars and revolutions which nearly extinguished his population after 100 million corpses in two absurd, perfectly unavoidable world wars, finally understood that 'intelligent design' based in a true social science, where the law was above money, was the only way to have a non-extinctive future; and so it try to manage such future to favor MOST of the cells of its social super organisms, the '90%'.

America on the other hand, which was born till reaching the present corrupted world of 'Weimar America', quite similar to the society of Germany in the first half of the XX century, where the 90% had no rights, and the abuses of financial and military power completely destroyed the world.

All other '7 cultural regions of mankind' have more or less aligned under those concepts



In the graph the cycles of evolution of money: Money is a language of digital information, which has evolved as all languages increasing its digital purity as a number (logic syntax that matters more than support), it has increased its numbers of bytes, as information machines have been able to reproduce more units of it, it has decreased its size as information evolves diminishing its 'energy-space' and increasing its speed, finally valuing all things on earth, including men as objects, substituting and making obsolete the alternative human, verbal ethic language that evolved slower than digital languages and money did.

However a proper understanding of the languages of Nature, could easily reform the system of money, make it complementary to the 'nervous system' of laws, as a blood-reproductive-oxygen system is, and then distribute enough quantity of it to all human citizens cells, to create a perfect world, as all healthy wealthy super organisms of nature are, where all its cells receive its proper oxygen-hormonal salary and all of them survive. THIS COULD BE EASILY DONE WITH A GLOBAL CURRENCY, YES, MONEY, AT parity value: 1 eurodollar = 5 Yuans=100 yens, and a 1000 yen salary in a UNO backed cryptocurrency, for all humans to have enough blood money to demand welfare goods, end global poverty, immigration, and the bias of our issue and ab=use of society with money, and its systemic use to reproduce technological machines and weapons to cater the 'tribal memes' of our elites and remain idle in billionaire accounts. It is the parasitic, anti-human, corrupted nature of our 'social networks' where a few 'parasitic' financiers control the issue of money and either herd it for themselves or give it only to company-mothers of machines they worship due to their 'biblical, primitive segregational ideologies' against mankind what makes the global eco(nomic)system perhaps the worst of all systems of Nature, as I used to explain during my tenure of the chair of Monetary Systems at the International Systems Sciences society, till obviously those who 'own' the financial system stop inviting me... Indeed, a corrupted system can only be protected with censorship and unneeded complexity to camouflage its simplex ab=use of mankind, 'tax-farmed' to pay for its welfare goods, while stock companies have no limit of credit to waste and evolve lethal goods.

LET US ALSO BE CLEAR, WE ARE NOT PROPOSING ANYTHING but a true DEMOCRACY as it was created in Greece, in a natural form, since indeed, the Greek Democracy is similar to the model of social cellular control of all the organisms of Nature.

In such true Democracy, PEOPLE would have economic power through universal salary votes, as organisms do, giving oxygen to all cells-citizens, and politicians are accountable by after-tenure 'painful vote' as true Greek Democracies did AND ORGANISMS DO THROUGH PAIN MESSAGES when the brain-governments hurts the body, where ALL CITIZENS would be candidates, chosen by ballots as in Greek real democracies, because all of them *will have as the most important subject in their education curriculum at high school a true 'social science' based in the laws of nature and organisms, and so only 'technocratic' positions would be filled by merit, but ALL CITIZENS should contribute, learn, understand about money, law, politics, economics and social systems, and fulfill most of the positions.*

What Athens did have is a community in which every citizen was expected to participate in the political life of the city – and far more actively than in any modern democracy. At the height of democracy in Athens, an assembly of citizens, open to all, met at least 40 times a year. All political offices were held by ordinary citizens, randomly selected, and all legal judgments in the city's courts were reached by large juries of ordinary citizens, similarly selected. And all this happened in a comparatively large commercial city that dominated the eastern Mediterranean world for nearly two centuries.

These institutions were the result of a popular uprising in 508BC, against Spartan troops who had seized the Acropolis. Instead of acquiescing in a foreign occupation, the ordinary citizens of Athens spontaneously converged on the Acropolis and surrounded the Spartan army. It took only three days to drive the Spartans from the city – which suggests the popular uprising had numbers and force on its side.

The result was a sweeping transformation of Athenian institutions and the subsequent appearance, for the first time in history, of “democracy”, as a word to describe a regime where power (*kratos*) was in the hands of ordinary people (*demos*). Henceforth all legislation in Athens had to be validated in the assembly, which was now open to all citizens, no matter how poor. Even more important was the use of a lottery to staff most city offices and juries, which nullified the corrupting advantages conferred in elections by wealth and family prominence.

By empowering an impoverished multitude in this manner, critics charged, the assembly and democratic orators had in fact created a new kind of tyranny – a collective tyranny of the majority, a de facto welfare state that doled out money and patronage to the ordinary citizens who manned the imperial fleet and staffed the city's courts and offices.

When they gathered “in assemblies, courts, theatres, army camps, or any other common meeting of a multitude,” the Athenian demos, Plato reports, would “blame some of the things said or done, and praise others, both in excess, shouting and clapping; and besides, the rocks and the very place surrounding them echo and redouble the uproar of praise and blame.”

*So while ultimately the system in its raw power is simple: placebo democracies to cheat people, companies in search of money, and financiers and stockrats ruling over the law, there are LEVELS OF REALITY which are ALIEN TO MAN, in as much as they RELATE to the LAWS OF DIGITAL money as a language of information, laws of biology and evolution, and organic laws that only we start to understand lately with the use of systems sciences.*

Hence the ultimate reason of this paragraph on the science of history, which would not exist, merely to denounce the well known pyramid of capitalism but to introduce SYSTEMS SCIENCES in the understanding of societies. As this writer was the leading researcher of the discipline at the turn of the century before it got into activism and obviously lost its 'prestige' among the Media-Academia Masters, which only accept 'think tanks of academic, political and economical, placebo correctness, that never touch the real themes of society.

### **A World ruled by company-mothers of machines.**

In that regard perhaps the most profound confusion the world suffers today, is on the understanding of the real hierarchical order established between the 'two words' that describe our system of political and economical government: 'capitalist democracy' and the privileges granted to the two organisms they cater for: Company-Mothers of machines, and Human families, which reproduce two different species, machines and human beings.

The free citizens of Capitalism are stock-market companies, overwhelmingly company-mothers of machines, its re=productive free citizens, whose goal in order to get profits for its stock holders on the sales of those machines, is to evolve, reproduce, and sell those machines.

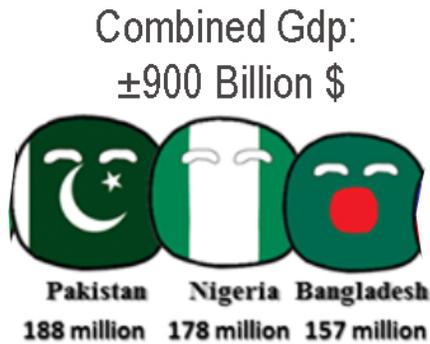
The human goal of those companies affects only to the 0.002% of mankind that owns them and so it is gets profit from those sales. Yet those profits are completely irrelevant to the 99.9% of humanity affected by its real effect son the planet: to reproduce and evolve machines, terraforming in the process the world, which they adapt through laws and sales to those machines, to the image and likeness of its offspring of mechanisms.

AND BECAUSE unlike human Mothers, those company-mothers have absolute rights to credit, used also liberally to pay politicians to promote with its laws their offspring of machines, since the beginning of the Industrial r=evolution, mankind has suffered an exact non-stop generational, biological process of evolution of energies and its informative, military and transport machines, *as all the resources of the planet have been geared first to that aim, and only WHAT IS LEFT-OVER, has been used to feed and reproduce and help the evolution of human-mothers, its social and family structures.*

For example, the goal of Mercedes for its tiny group of stock-holders is the abstract reception of profits. But the real goal of the company is to build and evolve cars, today self-driving robocars, soon to have autonomous solar skins, and construct or convince politicians to construct the networks of energy and information, roads, GPS satellites, electric grids, and oil pipes to provide energy and information for those machines in a process that is obviously absorbing resources and space, from the other life species that need them. So today cars absorb 1/4th of the maize America reproduces, and no longer feeds humans and cattle, whose food prices rise.

And the land of many cities and territories become crisscrossed and barren to be used by machines.

What about human families? Our goals of existence as human families are obviously the same than those of company-mothers regarding their machines, but focused as it should be on our children.



So what we want is to have enough energy to feed them, enough information to educate them, and terraform the world to the image and likeness of human beings, to be able to roam the planet Gaia, enjoy life and its drive of existence, evolve socially in peace with other human beings and reproduce more children.

This is exactly what company-mothers of machines are doing so successfully, evolving, reproducing and integrating into planetary social networks its machines.



But humans are failing to achieve those goals for themselves. Why? There is no computer without energy, or proper internet connection to which the economic system dedicates billions of dollars. But most humans are undernourished and information is primitive at best, when there is information at all. There is no limit to the motion of machines on planet Earth a global free market for the reproduction, evolution and transfer of machines and money from companies, but humans are limited in motions by borders, in money by the lack of any rights to invent it, which companies have.

Can the reproductive units of human societies access the languages of social power, money and the laws, to create a real, demand-based democracy, kicking the reproduction and consumption of life goods they need to survive, and investing in a world made to the image and likeness of human beings?

Market Cap: ±900 billion \$

The obvious truth is NOT. As today the most segregated, underfunded, with less rights, clearly unjustly treated element of our societies is the human mother, which is - let us remember it, as it seems humans have forgotten - the origin of OUR life, the bearer of our species, the fundamental element that pegs together our families, ensures our survival and happiness. So this fact seems a bit of a contradiction with the notion that we live in a democracy, the government of the people.

The combined GDP of 500 million people living in 3 of the top 8 most populous nations in the Earth with null credit is equivalent to the stock price of Apple (and the other MAGA components of the future brain of the metalearth). Apple specifically is the leading company of future metal-minds, its I-phones that will act as 'detached' head of all type of machines, with absolute credit to reproduce and evolve them. Since investors are pricing its obvious future: to displace human brain from labor and war fields as the new consumers of the organic machines of that future, in which humans will become obsolete.



10% FUTURE FOR MANKIND AND ITS HUMAN MOTHERS. We live in a world controlled by company-mothers of machines, or 'capitalist world' where the rights of human mothers are not met by the 'attached' placebo system, called 'democracy', as humans lack credit to create a world to its image through the use of the language of social power, money, overwhelmingly reproduced by those companies in e-money derivatives and stocks. So the world is terraformed to the image and likeness of machines, not of human beings. This site, unlike every economist on planet Earth, albeit camouflaged by its 'abstract equations' of productivity and profit, is taking sides for the human mother and the species called mankind, which happen to be your species, different in needs and goals to those of the machine. The failure to recognize the needs of mankind and the connection between economics and history to which it should be submissive, and the blind greedy dictatorship of financiers that rule humans with numbers, without the slightest care for its needs, are then ultimately the reasons why we are becoming displaced and likely extinct this century by company-mothers, robots and weapons in labor and war fields.

Therefore the big question about our system is why Company-mothers are so successful achieving their goals of evolution, reproduction and terraforming of the Earth to the image and likeness of machines? And why human mothers are so miserable? Simply enough because we do NOT live in a world ruled and dedicated to human beings.

I shall repeat it ad nauseam to counter the opposite effect of repetition of happy newspeak of freedom and optimism by company-mothers of informative machines, aka mass-media: you DO not live in a free world, in a real democracy, as you DO not rule that world. Company-mothers do; since they are the only Free citizens of free markets, with full, free access to the two languages of power of our social organisms: the economic. reproductive language of money, that can buy and sell the lifetime of both human beings and machines; and the informative, nervous language of Laws that money systematically buy to 'politicos', which don't have rights to issue money (deficit zero laws) and must extort citizens from it (taxation), while companies issue it for free in e-money derivatives and stocks.

The graph shows the consequence of this indifference of economists and its capitalist system to humanity: the 'future' head of machines, a mobile ear/camera/brain, which soon will be 'attached' to robocars and any moving camera, as a detached head, displacing all humans of labor and war fields, the iPhone is worth more than the living beings of 3 of the most populous nations of the world, still dominated by the pre-machine agricultural civilization. What this biased pricing in favor of machines tell us is that we humans are expendable and are being spent.

While in the side of humans a organization which IS submissive to the capitalist system, called Democracy, tries to make a world to its image and likeness, delivering the goods human mothers need to reproduce. And what people do NOT understand is that both mother SYSTEMS and species, and organizations are different, and while there are obvious symbiotic processes between them - as machines enhance our energy and information capacity, in most cases, SPECIALLY IN THE ROBOTIC AI AGE, when machines become autonomous species, competition is the rule of the game, and HUMANITY is loosing that competition.

The system is very obvious and simple, reason why it must be hidden behind a lot of 'placebos' like 'democracies' are - since humans have no right to issue the language of social power money, so there is no democracy, and people cannot judge a posteriori politicians, as in the original Greek democracy so they don't need to fulfill their promises and can be corrupted by financiers and companies, so there is no democracy.

Let us then explain you in 3 sentences what is all about: the leading global stock markets, notably US Wall Street at global level and The City in the region of the old British empire suck in all the money of the world, from all the corrupted politicians and dictators of the 3rd world, TO MAKE POSSIBLE THE VALUATION OF APPLE or Amazon close to 1 trillion, but that means THERE IS ZERO INVESTMENT IN THE 90% of mankind, in those nations. So every dictator and rich guy of Argentine, Saud Arabia or Virginia puts his money on Goldman Sachs to invest in the future robotized Amazon depots, or the future Skynet system Google is building for the pentagon, while there is ZERO INVESTMENT IN WELFARE goods, hospitals, education, farming, THE GOODS HUMANS CONSUME and need to survive.

And this is considered progress... Because at the same time, companies of mass media will defend the idea that the wealth of the 1% of stockrats, and the evolution of machines-weapons IS WHAT MATTERS TO THE 90% who have nothing, no investment in his REAL lives, reduced to bubbling idiots observing virtual screens, with 'cheap lives' that do NOT matter, as long as apple can keep evolving the future detached brain of all those robots.

**3 ages of energy: steam, oil, electr(on)ic Energy x 3 Ages of machine R=Evolution:**

**Youth: EnergyBomb; Maturity=Transport-3rd age:Weapon = War**



The mutation of machines into weapons determines the...

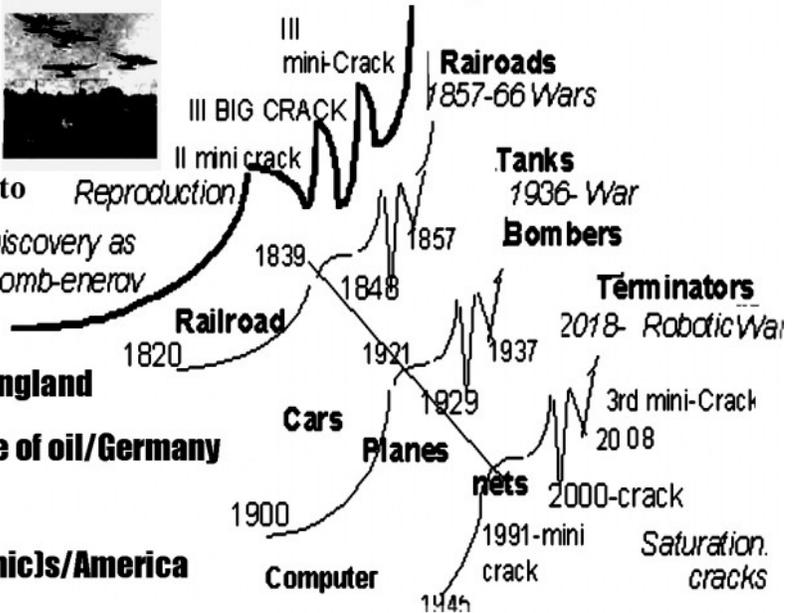
Reproduction  
Discovery as Bomb-energy

**3 ages of modern History:**

**The age of Steam/England**

**The age of oil/Germany**

**The age of electr(oni)c/America**



**1850s: trains,**



**1920s: cars**



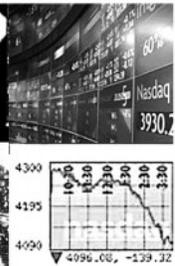
**1990s: pcs;**



**1857: train crash,**



**1929: car/radio**



**2000: chip crash**



**R=evolutions:**



**1848 - 1920s: Socialism - 90s: globalization**



**I W.W. 1860s:**

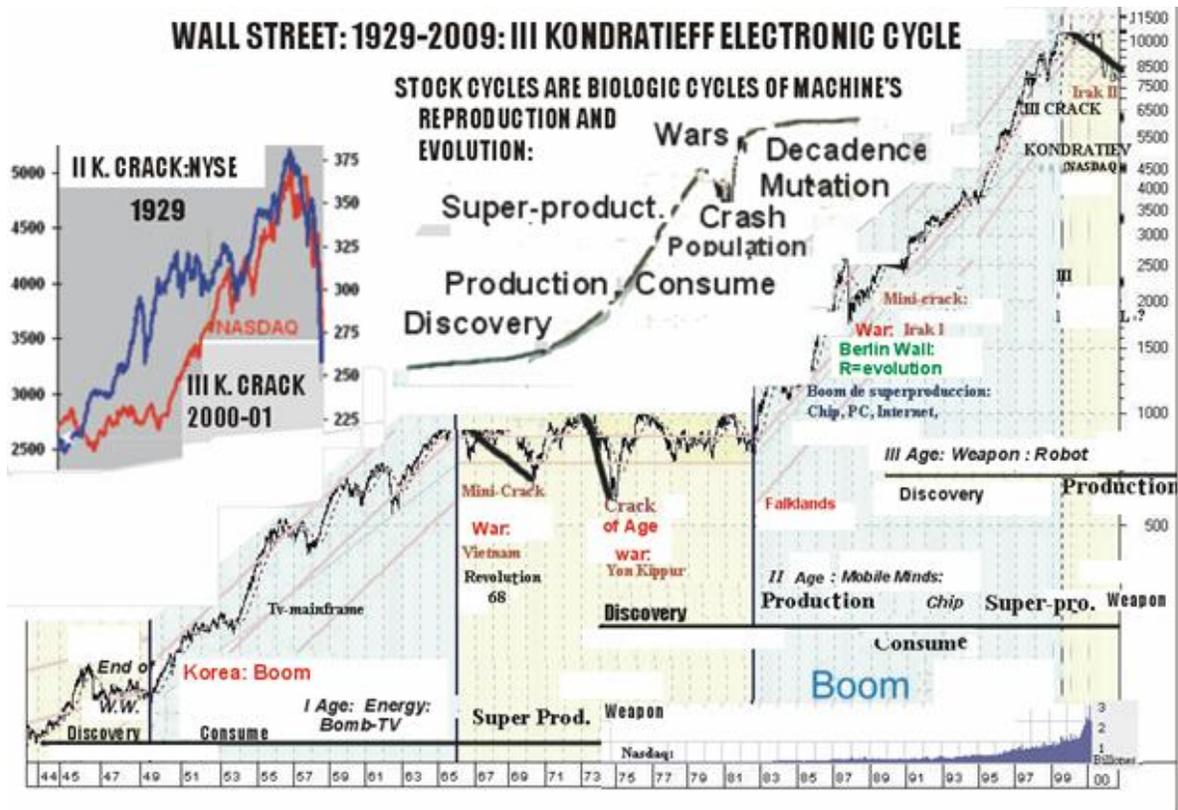


**II W.W. 1940s**



**III W.W. 2010s**

*In the graph, a synopsis of the interconnected cycles of evolution of machines according to its 3 ages, and the parallel cycles of evolution of mankind, ending in entropic wars. The cycles predicted as earlier as 92, the 2008 'generational crash' that closed the age of evolution of metal-minds, or third age of mechanical information, giving birth to the final age of the Industrial r=evolution or singularity age, when we shall assembly the 3 topological parts of machines into organic robots.*



Each 72 year cycle of evolution of machines subdivide as any biological cycle of organisms or species in 3 sub horizons, the young discovery age, the reproductive, mature age and the old age, followed by a top predator mutation after a crash of population that brings a war cycle. In the graph the electronic age which in terms of machines can be divided into the TV-eye age, the Chip-Computer age, and the ear-mobile-internet age, after which we enter the age of robotic wars and vigilante big brother, as chips automate corporations, robots throw us of labor and war fields, and the internet becomes the global mind of the Metal-earth directing 'chemically' internally its enzymen cells, human beings, with its Financial-Media networks, now switching into military robotic networks, which will consume us at the height of the war cycle: 2036. How can I be so sure of those dates? Easy, there is a shorter 9 x 8 years cycle that mimic the duration of the 8 phases of a life cycle, from youth to extinction, with an accelerated 'genesis' of birth, the 9 months of explosive growth of the new species. So it happened with the internet companies in 1999, and then went through the 9 years cycle to the crash of 2008 and again another 9 years cycle; so happened if you look at the graph from 1946 when the crash of the war starts the TV-age and then with the chip era that started with the crash of the Dollar it predated over, since 1973... The cycles are thus exact, biological, as phases of evolution of new species. And now we enter in the robotic cycle; and that one will be the last of mankind, as robots ARE a full living species that will extinguish us. Point. Those are the laws of biological economics, of stocks of machines and its prediction is as exact as your life-death cycle of 72 years and its biological 8 lifecycles, which the old Taoist culture already knew as Baguas. Each 72 year cycle of evolution of machines subdivide as any biological cycle of organisms or species in 3 sub horizons, the young discovery age, the reproductive, mature age and the old age, followed by a top predator mutation after a crash of population that brings a war cycle. In the graph the electronic age which in terms of machines can be divided into the TV-eye age, the Chip-Computer age, and the ear-mobile-internet age, after which we enter the age of robotic wars and vigilante big brother, as chips automate corporations, robots throw us of labor and war fields, and the internet becomes the global mind of the Metal-earth directing 'chemically' internally its enzymen cells, human beings, with its Financial-Media networks, now switching into military robotic networks, which will consume us at the height of the war cycle: 2036. How can I be so sure of those dates? Easy, there is a shorter 9 x 8 years cycle that mimic the duration of the 8 phases of a life cycle, from youth to extinction, with an accelerated 'genesis' of birth, the 9 months of

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So the age of crisis when a r=evolution was possible passed with the 2008 crisis and the failure of this writer and others, or movements like Occupy wall street to change the eco(nomic)system into one that would serve all humans. WE ARE NOW IN THE FULL EMPLOYMENT PHASE OF THE ROBOTIC CYCLE, SIMILAR TO THE 60S, AT THE BEGINNING OF THE METAL-MIND CYCLE, and so we expect a decade of massive growth, after the 'molting' crisis of 2008, with MASSIVE employment in the nations at the head of the Metal-earth (US, Korea in the eastern decoupling) as humans are busy busy reproducing AI robots and increasing its re=productivity. But the cycle of full employment will NOT last. After 2017-18, we shall enter a 73-like crisis...

So the age of crisis when a r=evolution was possible passed with the 2008 crisis and the failure of this writer and others, or movements like Occupy wall street to change the eco(nomic)system into one that would serve all humans.

*In the graph, the electronic cycles of evolution of machines, whose stock-market curves are parallel to those of any biological radiation of a species. Since those curves are known and can be used to forecast future populations=sales=profits=prices of company-mothers of machines, this writer has been able to forecast this crisis decades in advance by merely applying those laws to the economic ecosystem, its 'dominant' re=productive species, company-mothers and its offspring of machines, which compete with humans in labor and war fields. It is precisely that competition what causes waves of unemployment when production of machines peak...*

In the upper graph, from 'The extinction of Man', Bookmaster Ohio, c.94, we predicted those cycles for America according to the 72 years cycle of Kondratieff crashes of the economy (1). In the lower graph, from the book 'cycles of economics: The III world war' from 2001, we analyzed in depth the biological structure of the 'radiations' of electronic machines till the present crisis, comparing it with the self-similar crash of the oil and radio economy.

*Thus, we can follow in that upper graph the 3 ages of the Industrial Revolution and its parallel crisis, and a more detailed analysis of the present electronic cycle and its 'star machines' in the lower one.*

3 EQUATIONS OF CAPITALISM & GO(L)D CULT(URE)S: \*NERVUS BELLII, PECUNIA INFINITA:

I: Max. Profits (inflationary money) = Max. Price-Sales (weapons) + Min. Cost: Informative Hate Memes

**FMMI 3 CYCLES OF OVERREPRODUCTION OF MACHINES, STOCK CRASHES, SWITCH TO WEAPONS & WORLD WARS THAT CONSUME MANKIND IN CAPITALIST DEMOCRACIES:**

1830-1857: Train age | 1857 crash | 1860s war | 1870-1920:oil engines. | 1929 crash->tank wars | 1950-2000:metalminds gadgets | 2001-8 crash:robot wars

The collage consists of several interconnected parts:

- Top Left:** A pyramid titled 'PYRAMID OF CAPITALIST SYSTEM' with 'PEOPLE, PLANET AND ALL LIVING THINGS' at the base and 'CONTROL WEALTH' at the top. It shows a hierarchy of figures representing different social classes.
- Top Center:** A diagram titled 'SS FINANCIAL ELITE SS' showing a pyramid of logos for major financial institutions like Citigroup, Bank of America, and Wells Fargo.
- Top Right:** A diagram titled 'CONTROL OF LIFE' showing a flowchart of control over various aspects of society, including 'CONTROL OF LIFE' and 'CONTROL OF WEALTH'.
- Middle:** A central diagram titled 'CONTROL WEALTH' showing a pyramid of logos for major financial institutions like Citigroup, Bank of America, and Wells Fargo.
- Bottom:** A diagram titled 'CONTROL OF LIFE' showing a flowchart of control over various aspects of society, including 'CONTROL OF LIFE' and 'CONTROL OF WEALTH'.
- Background:** A collage of images including historical scenes, modern technology, and various symbols of power and wealth.

XIX c. Go(l) d cult(ure)s & aristocracies on top XX-XXI: Class system: FMMI company-mothers on top

In the graph, HUMANS DO NOT NEED TO UNDERSTAND the laws of economic systems and evolution. As long as they follow the capitalist belief that money justifies it all, as money has maximal price in weapons, they will overproduce weapons and cause wars. As long as they worship machines, they will keep evolving them living a surrogate life of progress. As long as their technoutopian and tribal religious and nationalist idol-ogies, divide humans by race and culture, they will despise men with primitive technologies and kill them. So our civilization ruled by the Informative machines the Financial-media head and the energetic Military-industrial body of company-mothers becomes an automaton of reproduction and evolution of machines, guided by the equation of profits of the FMMI system of stocks and its flows of e-money seeking maximal profits, which is responsible of the 72 years generational~national cycle of capitalism that switches synergies between inflationary money and consumption goods v. hate media and weapons consuming humans with mathematical precision every human generation, when overproduction of inflationary money and machines cannot be sold as new mechanisms substitute labor. So capitalism switches to weapons and hate media, pays war-monger politicians that consume arsenals and people.

In the graphs, ABOVE, THE SYNERGY BETWEEN the financial-media system of inflationary money and hate memes, which triggers in age of overproduction of machines, after a crash of consumption an age of overproduction of weapons and hate memes to foster the profits of war - but of course, this cycle is censored and nationalist idol-ogies are always brought to the table to justify absurd massacres, which the people on top expect to maintain contained, just in the phase of arsenal building. Yet as a British historians said: 'cemeteries are full of corpses from wars everybody knew they would never happen'

Bellow the ill-designed Animetal (animal+metal) class structures of human capitalist democracies during the 3 ages of the Industrial evolution, which explain from the human organic structure why the aberrations of the upper graph happen.

Industrial, placebo 'democratic' societies have developed an aberrant super organism in which its 'cellular citizens', unlike in ALL SUPERORGANISMS OF NATURE, which a true social science in praxis, will imitate, do NOT receive enough just information and 'healthy energy' to survive and thrive.

Instead, on top of the pyramid idol-ogies of metal (weapons-promoting nationalisms; gold-monetary worship and techno utopian mechanism) ensures that money, weapons and machines will be overproduced and evolved with far more rights than the 90% of mankind - MANKIND itself - while a smaller upper informative class in control and monopoly of the issue of those metal-memes will have all the privileges. This class structure had always on top entropic metal-weapons and aristocratic warrior elites, associated to a Class of bankers, who reproduce informative metal issued in monopoly and used mostly ( $\pm 70\%$ ) to reproduce weapons and fund warfare through the 800 cycles of evolution of weapons and death of civilizations.

Then professional scientific company-mothers of stocks of machine-weapons appear boosting and accelerated the vortex of evolution of machines-weapons and its owners financiers, engineers and physicists evolved the system into the complex world of capitalist 'placebo democracies', where people as always blind in any organism in which the 'Informative head' has all the sensorial outlets and informative systems and the reproductive body-class is blind, KEPT sacrificing their lives and time to the 'animetal manifest lineal destiny' of terraforming the Earth into a world of metal, where life had no value; as metal-money gives by the laws of affinity and symbiosis maximal value to the most perfect metal-meme, the weapon, and 0 value, to the rival species, life.

Thus the fundamental transition with the arrival of capitalism happened from WARRIOR ARISTOCRATS with exclusive rights to reproduce the language of power weapons and use it against inferior humans who could not carry weapons and were judged in different courts; to STOKCRATS, with the same privileged rights on the new language of power money, they issue in monopoly ( $+90\%$  of money today reproduced in stocks, e-money derivative and financial houses), they use to buy part-time the life of people (as workers), to buy laws to politics; and CANNOT be judged (Anonymous societies which at best dim the company not the stockrat responsible).

Thus one of the most bizarre ideologies of history is 'capitalist democracy' according to which a tiny elite of stock-rats and financiers have absolute rights to print the language of social power money, as 'experts', which they herd for themselves or use to evolve machines and print information to manufacture the brain of people, and this is called 'freedom' of the market (not of the people). Indeed, the reproduction of money is the leit motiv of a capitalist system, where the people on top has a single goal: to emit as much digital numbers called money as possible and rule the world with them.

Money is merely a digital number put in any 'cheap support' which by law is considered to have 'value'. So bankers, speculators and companies try to reproduce as much 'digital numbers' as possible, to be able to 'buy' the life of the people on the bottom of the pyramid with null rights to reproduce money, through salaries. A real democracy - government of the people - would be a system where all citizens/cells as it happens in healthy organisms of nature, issue a universal 'oxygen salary' of money, to demand welfare goods and boost the human economy, today something feasible through a 'bitcoin-like' UNO backed global ¥€\$ salary for each human to have democratic 'votes' in the social language of power - money, and create a demand economy - NOT a supply one, where the few financiers and corporations that issue money, create any product with it and then 'supply it and sell it through marketing and political corruption', from nuclear weapons to hate media - things people would NOT demand.

But we do not live in anything that remotely resembles a 'real democracy'. Politics in capitalism is about a 'placebo structure called democracy' where political servants distract people so in the background the real world of financiers printing money, buying corporations and giving orders of work to humans in mechanical industries, 'creates' with credit the world we live- dedicated to make and evolve machines, and let the 'leisure class' on top enjoy the world and tell us how 'graceful, intelligent' they are. While the invisible human side of 'capitalist democracies', the 99% lives, eternally undernourished.

This amazingly simple power hold by the 0.002% in 'free markets': to emit numbers as money, IS the essence of the world's power today. And amazingly enough it passes as a 'positive science': 'the wickedest of all things - to choke people off credit, to print money for mechanisms not humans, for splendid little wars, not for warfare, ultimately for the extinction of life - is considered to be done for the common goods; because obviously the people on top double his job - they not only print money with informative machines but print newspeak of freedom and encourage all kind of distractions, infotainments and placebo systems of null power, for people NOT to inquire the obvious: Why a few can print digital numbers as money, and the most must toil for it?

So ALL THE PRIVILEGES OF ARISTOCRACIES OF WAR ARE TODAY ON THE HANDS OF STOCK-RACIES OF MONEY, in the so called capitalist democracies, where the polling of pre\$lected candidates in inefficient bipartisan democracies is just a 'genius' placebo structure to convince people, they

rule. In the graph the 3 ages of the new form of metal-dictatorship: the 'democratic' colonial age of imperial Europe, and its Capitalist democracies and pyramid of power in the XIX c. Money is on top and its issuers, private dynasties of bankers who also print information with paper rule. Below a screen of, kings or placebo democracies, or religious leaders cover up for them. And if smart people r=evolve, the army will take care. As a distraction it does take care of enemy nations and inferior races, in colonial wars. Then the elite of workers for company-mothers of machines do have the good life, and on the bottom the now obsolete workers to the robots revolution did have then at least the right to food for unending work hours, which soon will be lost.

It is important to understand the consequences of living in a dictatorship of company-mothers of machines and money NOT in a democracy, as Democracies were created in Holland by the first company, as a cover up for their political power NOT the other way around:

- 1) The language of power of society changed from warrior law to money and so did the values, as money, an informative metal from go(l)d to e-money cycles gives zero value to life and maximal to weapons
- 2) Hence war became endemic and much more lethal as the over reproduction and evolution of weapons caused much more victims.
- 3) A cover up of newspeaks of freedom substituted hierarchical visible kings as money is 'invisible information' so camouflage is best to avoid r=evolutions. This derived in modern newspeaks, to create a Walt Disney world of freedoms with NO power.
- 4) But the bottom line, the power of money and its maximal price goods, weapons remained even when machines, which 'only' atrophy our organs became its dual twins; companies still hold power in virtue of its most perfect species, top predator weapons that kill humans. So the overproduction crises of the 800 year cycle of classic weapons just accelerated professionally and has NEVER stopped. On the contrary increased its quantity of victims as the quality and price and profits of the pecunia infinita belli nervi cycle got stronger, reason why we can predict cycle of stocks and parallel wars

The globalized world beyond the placebo 'polling' of democracy is thus a very hierarchical efficient pyramid of companies power and those who own it, which SHOWS THE COMPLEX SYNERGIES OF THE FINANCIAL-MEDIA systems of informative machines, evolution of earlier Gold systems of metal-information and the Military-Industrial system of energy machines, complex evolution of the classic system of military, entropic weapons.

It is the synergy between those '4 sub-systems', head and body of the metal-earth or FMMI system, what makes the evolving super organism of machines so perfect in its control of mankind 'MILKED' to provide all the resources and work needed to evolve so fast generation after generation all the mechanisms of the metal-earth of maximal value, while the bulk of humanity remains in the subsistence level increasingly below, as they are 'no longer needed' by the Metal-earth.

Thus the graphs show the idol-ogies and metal-memes and company-mothers on top. They are the 'informative class' of a world ruled by Digital monetary orders nobody else understands - while mankind keeps broken into fractal 'nations' with 'military borders' to keep the evolution of lethal weapons going stronger in synergy with the 'hate memes' liberally delivered by Informative mass-media machines.

The synergy of idol-ogies, metal-memes and class-structure thus happen both at individual and social, national level, according to the 'temporal inertia' of each nation, serving the ideologies of the metal-earth. So the original animetal cultures of Indo-European 'Germanic Aryan' warriors and Semite, go(l)d biblical churches are still overwhelmingly on top, in the western world and the melting pot of America, a nation with pure metal-values; while in the rest of the planet the local old elites of military men often double for the job of financial control, or when a caste of traders and bankers existed, they have expanded their functions (Chinese compradors in South Asia, Parsi in India, Judaism in 3rd world ex-colonies of Europe, etc.)

So on top of the world the future is cre(dit)ated for machines with money issued by companies and financiers; below this elite, there is a 10% of authorized workers, managers and 'believers' in the system, working on those companies, or remainders of old aristocratic land-owner people, or liberal professions working around the vital needs of those in charge of companies, plus the political people-castes, who make the placebo democracy system run smoothly. All together rule the western world and have created the ideologies of placebo democracies (where the state has no rights to issue money for welfare but has to extort it from the population), techno utopia and classic economics that validates its control of the world for the benefit of the machine.

Below the rest of mankind or in each nation that imitates this modern metal- system - the local +40%, (we round numbers), of humans are workers at the subsistence level - which reached its maximal wealth during

the age of consumption of machines, when they doubled as reproducers and consumers=vitalizers of those machines to values and push its evolution and spread those machines over the terraformed Earth (post II world war), but had to sacrifice their lives and become consumed by top predator weapons at the end of the 80 years cycles in the war period.

The problem is that in The XXI century (third graph), they are no longer needed in those enzymatic tasks of work and consumption, increasingly obsolete to machines and robots that work for them and consume other machines as structural parts of their bodies and heads.

So this represents a growing problem - what to do with them, 'losers', 'Immigrants', low-paid workers? In the past they were dumped by European colonial power into 3rd world countries where natives were terminated in genocides against 'primitive, inferior people to leave vital space for the lower classes of Europe. While the surviving natives were controlled by military thugs with exports of the free market of weapons. But when the surplus was extreme in the change of cycle, during the overproduction phases of weapons, they were managed by hate media and nationalist idol-ogies spread by Selected politicians for its liberal consumption by weapons that maximized the price-sales and profits of corporations.

That seems will be again the case as we anticipated for decades, after the crash transition from the age of metal-minds to the age of robots, in our present neofascist age, as there is zero implementation of the social and financial reforms needed to massively reproduce 'butter over canons' - given the clear racist outlook against mankind of our financial elites, with its biblical segregational cults and classic economical dogmas and our military and war-monger politicians repeating the absurd primitive memes of the pre-scientific age of mankind when each tribe thought to be 'the chosen nations of a subconscious collective single God' or superior race.

So unless the system is reformed with the real laws of efficient organic systems, to cater the needs of mankind, avoiding another global war and final holocaust, mankind will be exterminated, as there is no winner in those cycles - history proves ALL humans of the pyramid of capitalism are consumed in wars for profits - only company-mothers and its technological weapons come on top and the global war cycle one-hundred fold its victims in each series of global wars, in parallel to the same growth of value of stock-machines of maximal price, weapons, who reflect in its sales and production in stocks, the value of its species.

So when the Dow was at 1 the train civil wars and unification wars (1860s) killed 600.000 people, the next cycle of cars=tanks wars killed 60 million with the dow at 100, and now at 20.000, as IN WAR the entire eco(nomic)system becomes dedicated to reproduce top predator weapons and consume human beings, all of mankind 7 billion should die, consumed by our terminator robots and nukes, once one of the splendid little wars of the neofascist neocolonial age which has all the elements - war monger politicians, hate memes, overproduction of weapons, massive degradation of ethical standards, etc. on place waiting for the 'spark' to ignite world war III as we predicted with the science of systemics applied to societies for decades, albeit censored by the anti quantum paradox -the social scientist is a tiny particle in a much larger organism that censors it.

*The 2001-08 economic crises are caused by the overproduction of electronic machines and its main derivative e-money, [similar to the 1929-37 crash](#), caused by the overproduction of electro-mechanical machines and speculative ticker money, and the 1857-64 crashes of the train economy, and its speculative stock money; [each one separated by a human generational cycle of 72 years](#). In that regard, the crisis started in the Financial System with the unlimited reproduction of electronic money by bankers and speculators. Yet in deep analysis those bankers could have not invented so many 'toxic assets' without the evolution of electronic money, a language of information that regulates the financial and physical economy at the speed of computer software.*

*The present crisis is not a recession but a depression, caused by the overproduction of electronic machines and its derivatives, [similar to the 1929 crash](#), caused by the overproduction of electro-mechanical machines, which printed too much [money](#) (ticker speculation), electro-mechanical production systems that threw millions out of work (taylorism, automated assembly lines) and the overproduction of cars and radios, whose companies, lobbies and politicians reconverted into armored cars (tanks) and [hate-radio speeches \(Hitler\)](#), [embarking us into World War II](#).*

*After the war, the Kondratieff wave of electro-mechanical machines was exhausted and so we started a new dual wave of 'electronic machines', which evolved and reproduced chips – brains of metal – in increasing numbers till saturating the global market – origin of the present five-folded crises of overproduction of electronic products – the financial crisis, the cultural crisis, the labor crisis and the war.*

In that regard, we can compare this crisis with a similar transformation that happened in history about 70 years ago. The happy 90s looked like the happy 20s. But suddenly the World changed into the warring 2000s, as the 20s changed into the ominous 30s. In both ages a tremendous crash on global stock-markets, due to the overproduction of machines (radios and cars in 1929 and 1937, electronic goods in 2001 and 2008), sunk the economy, increasing unemployment and social inequality.

That historical similarity is not trivial. It is a cyclical change that modern history experiences every  $\pm 72$  years, a period that historians call the Generational, Human Cycle, since it is the mean biological cycle of 3 human generations – grand-father, father and son. Indeed, if we go 72 years backwards in time, we see a similar crisis happening globally after a period of industrial growth guided by the steam engine, which lasted through the happy 1850s, marked by the railroad craze . . .

Then in 1857 the overproduction of railroads crashed the industry worldwide and history turned upside down. In the middle of that crisis, the ominous 1860s brought wars fought with armored trains and steamers in America (Civil War), Europe (the Italian & German Unification wars) and Asia (Sepoy Revolt in India, II Opium Wars). So during the Industrial Revolution, every  $\pm 72$  years the world changes, after a big economic crisis, from a happy time to an age of war and destruction, from an age of machines to an age of weapons, the age that now begins worldwide. And it all starts in the financial economy; because the reproduction of money reaches a peak at the same time the reproduction of machines saturates the market and becomes reconverted into weapons.

Again the key to the whole cycle is the fact that informative machines also print money and they do it without limit or any value. So the point is that once the money is reproduced it must be changed for something with value and there are only 3 forms of value in great mass, real state, stocks and currency paper. So after they invent huge amounts of new 'numbers' with ticker money, (electricity), paper money (chemical information) and now e-money they must change it for the 3 goods that 'are valuable' and abundant. So they produce 3 consecutive 'fast bubbles' in the short 9 years, as they transfer the money invented with the new machine, to the 3 goods, shares, real state and hard currency, produced in so huge numbers they can match the inflationary money overproduced.

The rationale for the animal greedy genocider is also simple: top predator weapons are the most evolved, perfect machine species, hence the most expensive of maximal sales profits.

-Information is 'free' easy to reproduce, and cheap, hence its costs is minimal and gives maximal sale profits.

-Money is the star, is profits in itself, so you can mine directly profits printing money.

And so the equation of profits of capitalism is simple:  $Profits (money) = max. Price (weapons) - min. cost (hate media)$ .

So those are in each cycle the 3 star products, and politicians to the service of corporations cater with laws and subventions to this, most profitable companies of any age.

Let us remember again: they are those who produce the most expensive machines of maximal sale profits, weapons, or those of minimal cost of reproduction, hence also of maximal profit margin, mass-media, and finally to the very same financial companies that issue money but seem NOT to have enough and get bail

outs from taxes. It is the origin of the modern belli Nervi pecunia infinita in which those 3 top predator companies get the biggest share of the taxes extorted from citizens:

*In the graphs, the Industrial Evolution in the western world ruled by company-mothers who control the languages of social power, and buy laws to politicians through lobbies, to 'smooth' the terraforming of the Earth into a planet of machines, has followed an economic, national, generational cycle of  $72 \pm 8-9$  years, the 'Kondratieff' cycle' (1) in which a nation discovers a new form of energy (white) applied to the creation of new forms of money, the economic software and new machines (red) its hardwares, which become the engine of the Industrial Economy.*

So the cycle of the industrial evolution MUTATES every generation, when the evolution of each of those type of machines is completed and the proper top predator weapon is overproduced. Then there is an intense brief period of global world war, in which all company-mothers switch to its top predator weapons, and paid politicos and mass-media pump hate-memes to use weapons to solve social problems:



Humans consume machines, top predator machines~weapons consume humans. Both evolve together displacing humans of labor and war fields as they enter the robotic age.

*In the graph as mechanisms multiply in growing numbers the economy enters in a crisis of overproduction of machine and weapons that compete with human beings in labor and war fields, provoking the negative cycles of unemployment and war that define capitalist societies.*

Alas this is the 72 years war cycle after crashes of overproduction in 1857 (train crash) - 1929 (car crash) - 2008 (chip crash).



*The boom & bust cycle of the industrial R=evolution shows the synergies of the Financial-Media/Military-Industrial System made of energy machines – weapons, tools & transports - and informative ones –media & digital, fiat money, the 'informative head' that controls and causes all other overproduction cycles. Thus overproduction crashes of stocks (graph) start the cycle & weapons' overproduction to fight 'splendid wars' for profit closes it. Neither human actions nor causality changes, only the growing complexity of the FMMI system that maximizes its evolution and reproduction in the war phase of the cycle. But for mankind the cycles are a tragedy. Since in all the cycles machines take people's jobs; too much money causes inflation, it is changed by real wealth and when its bubble of value explodes and it ruins the Middle class left with worthless numbers. Then Hate Media & Weapons kill them in wars.*

We are thus at the end of the final war age of the 'chip radiation' when they are used massively to create a global big-brother in control of the population and the beginning of the 'robotic age', when they are still 'good' tools and 'toys' of University research. So our political system has moved to a neocolonialist, neofascist age as predicted for 30 years.

It is then scary to observe how the 'organic structure' of the whole system adapts step by step all subsidiary systems to the process of devolution of mankind and evolution of weapons-machines. SO instead of reformist politicians we start to see the first 'neofascist', 'nazionalist' leaders and a repetition of all the patterns observed in the 30s, which further proves the organic nature of the ecosystems of history and economics explained in the model. In any case, the robot radiation has already started and it will be no doubt of it the last radiation of machines and its weapons period which will peak in the 30s, 40s and 50s of this century has all the potential to extinguish mankind. Since evolution has an enormous efficiency, an immediate massive extinction of human life. The only doubt you might consider is which war-monger politician will start the needed wars for the profits of corporations to skyrocket, according to the switch between peaceful and war products which has happened in all previous cycles.

It is far more likely that animetals succeed in its 'manifest destiny': to kill mankind because today its company-mothers work in an automatic world in which they have the facto a total control on the placebo democracies without rights to credit that are therefore controlled by the financial-media-academia elite of informative machines and its owners with its simplistic view of the world in terms of herding gold-profits and manufacture all products with no control of the lethal goods - on the contrary as the most expensive (weapons) and cheaper to produce (hate memes), the pyramid of capitalism, 'subconsciously' through the values of 'metal-gold' fixed by history brings together the two overproduced elements of the war cycles.

But as we humans neither control the tree of technology nor do care to learn the true laws of time and evolve properly our super organism, we are ENTERING our final age of entropy, as both 'species of the singularity age', AI of maximal information and BH of maximal entropy come to 'hunt us' from a more evolved potential future.

### **The last cycles: the robotic age.**

All this said once THE FAILURE OF R=EVOLUTIONS to change the cycle during the transition from the age of metal-minds to the age of robots has passed, we shall enter the 3 cycles of robots:



When then will be the next crash of the stock-market? As we have been predicting them with absolute accuracy for 30 years, there is no problem telling you - as you won't of course believe it because it would imply you accept this blog's truth - that machines are biological beings and follow the same biological cycles of all beings, and that its organisms, will switch soon after the next crash into an splendid global war.

[This said the next stock-crash will be according to the biological generational cycles of ±72 years divided into 8 'decades' of ±9 years, mimicking the generational cycles of human beings and its 8 phases, in 2017-18...](#)

The problem is that *the crash of peaceful robots will initiate its massive radiation first as labor robots and then as weapons, which will fully close the industrial r=evolution and end the kingdom of man as top predator of this planet, for the sake of money as everybody in wall street knows that the ultimate resource to profits is to provoke with weapons and hate media an splendid season of wars:*

So, all this said, now we can fast-track backwards to the ideal crashes of the bagua market: 2018 crash of birth of the bitcoin and terminator walls (Korea, Israel, Mexico: GOP candidate trumpuppet)

2009 (a bit advanced to 2008), crash of birth of e-money derivatives (chip overproduction of money).

2000 (crash of birth of internet mobile systems of sales - amazon; war cycle, Desert storm II, Bush Jr.).

1991 (crash of birth of chip/war industries - electronic war @ desert storm: GOP candidate Bush Sr. fall of the wall crash of human r=evolution).

83 (Falkland wars: last splendid little war of the British nostalgia empire; crash of birth of e-money speculation).

1973 (Yon-kippur war: last of the wars of the engine, plane/tank era; birth of the chip; final cycle of Tv-speculation: eye of machines)...

1965 (crash of consumption of home appliances, Tvs and electric machines; splendid little war: Vietnam war).

1954 (crash of end of Korean splendid little War.

1946 (crash of end of II world war).

1937: crash of real state market in New York, which drove the world to the II world war solution.

1928 crash of electric ticker, radio and cars... started in The city, next year moved to Wall Street.

1919-21; first car crash... crash of end of profitable I world war, massive engine of profits for the iron and electrochemical industries consuming to the tune of sarin and gun machines millions of human beings; and so here we stop backtracking the 'slightly adjusted' to some human affairs and war decisions... wonderful ENGINE OF DEMOCRATIC CAPITALISM - WAR! PROFITS, consumption of human lives and billions for the 0.02% of stock-rats... Mr. Veblen, leisure class for which we all toil to the tune of bipartisan democracies.

## Scholarly articles for 5g causes cancer in rats

... of the blood vessels of solid **tumors** that are leaky to ... - **Dvorak** - Cited by 793

... , angiogenesis and physiological function in **tumors** ... - **Brown** - Cited by 599

... squamous cell carcinomas and germ cell **tumors** - **Schacht** - Cited by 605

Early data shows a slight increase of **tumors** in male **rats** exposed to cellphone radiation. LA Times: National Toxicology Program researchers released preliminary data in May that showed small increases in **tumors** in male **rats** exposed to **5G** cellphone radiation. Aug 8, 2016

As usual after the initial warnings towards a new lethal, stronger metal-system that will degrade and harm mankind, its company-mothers 'silence' the press and pay-per-view scientific studies denying the obvious facts: 5G IS OF 0-value for humanity, as we DO NOT need higher speeds of audiovisual data transfer for consumers, already hypnotized and degraded by hypnotic screens. And already 5G studies show that the high frequency, close to the X-ray spectra of such data transfer rates constantly reproducing on the earth's atmosphere WILL provoke cancers specially among children. Yet in the past years those 'early studies' have been cancelled and suppressed by the information propaganda of mobile industries, as we live in a planet which is a dictatorship of company mothers of machines & weapons, which manufacture our brains with informative machines that never criticize them. Humans are always to be blamed of all collateral effects of metal-memes. Witness if not the first accidents of robocars: Tesla and Uber have NOT even been blamed.



Now, if we look at that process from the largest worldview of the evolution of the planet, which happened also in III Ages, the age of anaerobic bacteria, which became extinct when aerobic bacteria reproduced and polluted its environment, and now the age of machines, which is provoking the 6th extinction of life species, and polluting all life environments, it is not difficult to forecast that if business as usual proceeds, the evolution of military A.I. and 'metalife' is poised to extinguish the weaker life-earth, as the previous 'oxygen life' poisoned and extinguished the anaerobic earth before:

Global warming, pollution and hunger, are just signs of the change of 'age' of the planet, from the Earth of Life (Gaia) to the [Earth of man \(History, anthropocene\)](#) to the Earth of machines ([Metal-earth, mechanocene](#)), as all the financial and raw resources of the planet are deviated to the evolution and reproduction of machines, whose '\$hit' warms the planet, its engines 'eat' our food (in US\$, more corn is destined to feed ethanol than human beings).

Now, when we have that larger view of the Earth as a Super organism, expanded on all posts dedicated to systems sciences, the fractal organic Universe and the metric laws of deep time (the fifth dimension of organic systems that extend over different social scales), we can get 'dirty', explaining what we call the paradox of History: the fight of memes (not genes), which either favor the future of a world terraformed to the image and likeness of machines, or a future terraformed to the image and likeness of mankind.

Today humanity is plunging naively into that 3rd age of the Earth and its relative mechanical, future; when we should in fact repress *as all systems do in its 3rd age of 'wrinkling' and excessive information, in our case technological information, the overproduction crisis of chips and robots; the new top predator minds and bodies of machines; if we want to achieve a balance with Gaia and the immortality of super organism of history.*

**the solutions: kill the tiger before it becomes a tiger hunter.**

So the immediate question on why we don't solve the problem of robotics with the only intelligent measure possible, to ban them legally as we ban viruses, translates to the company-mothers and the production economists working for them, that profit from the cheaper costs of robotic labor, and higher profits of robotic consumption and construction of very expensive machines:

Why neither company-mothers, nor economists care for the human kind, instead of dedicating all their efforts to the metal-kind?

And to the people who worship those machines? What kind of 'mind-state' has mankind sunk into, to NOT be able to see something so 'obvious' as the null utility and enormous danger poised by rising a more powerful species than we are, in a planet rule by the Darwinian fight between them?

The answer is simple and NOT difficult to prove but almost IMPOSSIBLE to distribute, given the censorship that machines of information exercise against any criticism to capitalism: economists are not really scientists but workers of companies, whose task is maximize the production, sale and profits of those companies, which embody the power of our technological nations. And people are not really rational, but guided by wishful thinking and selfish ego-trips, so they are addicted to machines and blind themselves to any collateral effect, to 'keep pumping' their ego-trips of power. So all reduces really to an statement vehemently denied by both, as they like to think of themselves in the best terms:

*Classic Economics is not a science of the economic ecosystem as this blog is, since it has no 'model' of the species it studies - machines, not understands its cyclical patterns of evolution and denies its collateral effects on History. What it is, is a micro-economical science of reproduction of money, weapons and machines. Hence ultimately a praxis of military, financial and industrial power, exercised by industrial nations, financiers and company-mothers of machines, whose will to reproduce and evolve machines and weapons, commands our civilization.*

And this happens because the immense majority of human beings are not rational, selfless, caring people but 'animetals', 'animal life which has reached an enormous control of its environment' with the use of weapons and machines, and blinds itself to the collateral effects of that power, to keep pumping their ego-trips of superiority above heavens and earth.

Indeed, the most amazing thing of the whole process is that humans DO NOTHING TO PREVENT IT. So we must consider unfortunately the opposite hypothesis to most 'scholars' who think all humans are rational, Aristotelian geniuses, ruled by intelligence and 'care'. Fact is as Aristotle put it 'humans are slaves, they believe they don't reason', and the consequences are obvious: they are easily herded with numbers of money and as numbers of money followed the previous cycles, and those who issue money merely try to multiply numbers of money, everything *becomes really a mathematical, evolutionary, automatic process, with its 'memetic clocks' as exact as the 'genetic clocks' of living super organisms.*

We can get more complex and more detailed as I did back in the 90s with my first books, when I thought *humans were indeed intelligent and cared for their future in this planet, but the reader will excuse if 30 years latter and counting, suffering a Schopenhauerian law of silence for so long, I don't really care that much.* My opinion of humans today is truly low both as a species who really lacks much intelligence and ethics to care at all for what seems 'rationally so easy', to control those cycles for the benefit of man with the biological laws of social systems and networks, to regulate the language of digital money to favor the 99% of mankind, in other words, to form a global legal government to manage the digital era. Nothing of this is done. Economists merely are production and financial economists. Places like Davos are jut penpal party thin air shows, where nobody knows much, as all what economists have done for centuries is to reproduce more machines to get more profits, but the 'whole picture' we make here totally escapes them. They just pretend to know so they convince politicians to leave them run the future of history to nowhere.

I have never been invited to those conferences. After ending my master at Columbia I was just invited to speculate in stocks with those cycles, which I refused. I was denied the teaching positions I seek. I had

some exposure on the world of systems sciences - economists merely refused to understand macroeconomics - but soon also that exposure was censored when I made conferences on the future crashes of 2008 and 2018 due to the bubble economy.

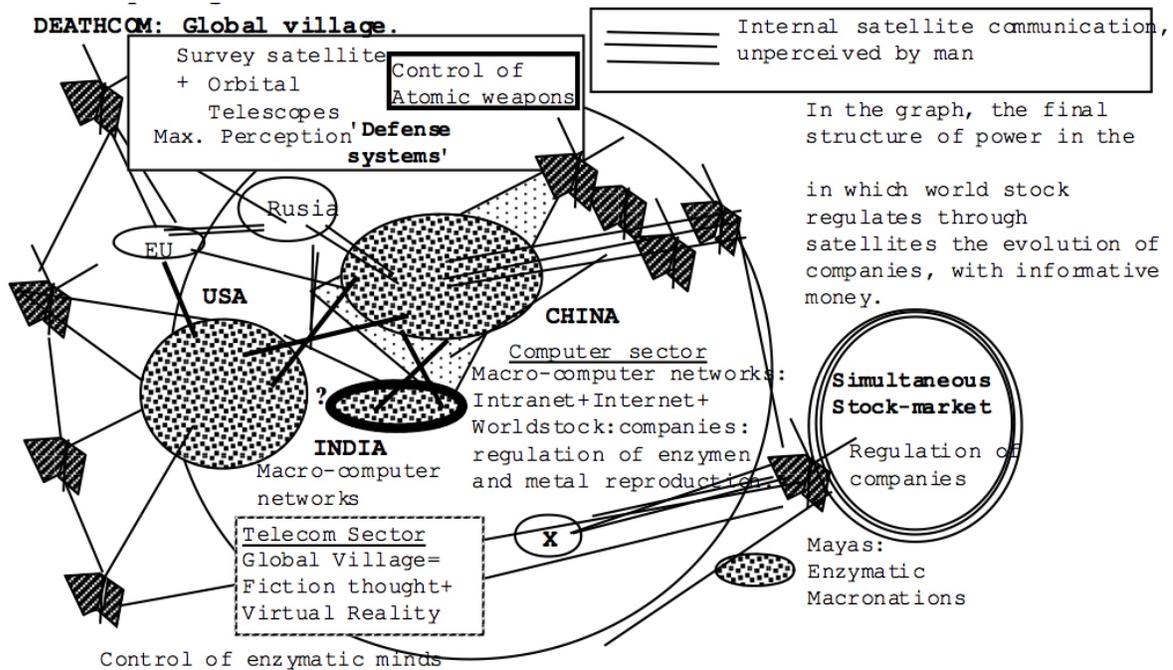
It is difficult for the reader or scholar to understand the type of angst and frustration people like this author, Darwin, Spengler or Schopenhauer and Orwell lived through, knowing they were the best, most advanced humanist social scientists and thinkers of their generation, and their work could so much help mankind to understand history and regulate the planet, and yet have been denied, opposed, ridiculed, and saw all what they explained Happening Evidently.

So the position the reader will observe in most of the blog is an aloof, objective, 'alien scientist' observing a species, the human homunculus, which basically understands nothing, thinks understands everything, observes all from its infantile, individual ego point of view, that matters nothing to the systems of the planet, has enormous dexterity making machines, a big mouth to promote its opinions as science, and a null brain to really understand he is NOT the protagonist of the future.

**FMMI COMPLEX EVOLVING INTO A SUPER-ORGANISM NOW, BIRTH OF THE METALEARTH.**

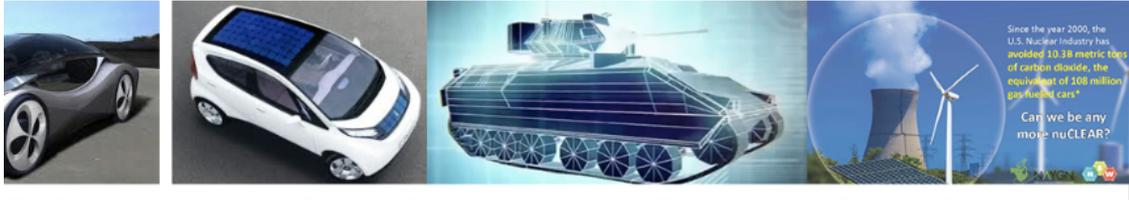
**The level of super organisms. Creation of the FMMI system: From animetal herds to the super organism of machines.**

The next graph from the original books 'bio-history, bio-economics', Bookmasters. c.94, foresees that final state, in which satellites, the maximal points of information of the planet, guiding masses of robots and world stock through its A.I. algorithms of productivity, reproducing machines will need so few men that the whole planet could become easily a Matrix-like super organism:



In the graph, from the 92. pioneer book Biohistory-Bioeconomics, which foresaw all the advances, cycles and dangers of the digital age 25 years in advance, the then future now increasingly present, building of the metal-earth: As company-mothers create a 5G global network for the internet of things, the whole planet will truly become a living super organism of robotic machines and weapons; where the human side of

history will become obsolete. But of course the Financial-media system of informative machines will keep denying the obvious fact that humans will be displaced in labor and war fields, unneeded and increasingly perceived as a nuisance to the new eco(nomic)system where they won't even play a role as consumers and workers, since 3D automated factories will print machines and machines will consume other machines. The process of displacement of the human species in that sense will be a canonical, biological process similar to those caused by the radiation of a new species, which poisons the environment of the previous one, as the Aerobic Bacteria did with the Anaerobic bacteria:



**Global warming scare fosters clean energy that will automate robocars & terminators Free of man with telepathic A.I brains& solar skins & 'cleans' Nuclear cheap electricity**

Newspeaks always hide under a shallow surface of political and economical correctness that pretends to act for the benefit of mankind hidden goals of the Financial-media/military-industrial complex. Such is the case of the 2 main newspeaks of the singularity age: global warming to foster the autonomy of solar robots and war on terror to maintain splendid little wars for profits against the poorest culture of mankind today, fueling military budgets to further evolve terminators. IT ONLY RESTS that the dominant internet corporations, Amazon, Apple, Alibaba et al. accept a cryptocurrency to use for payments to their armies of delivery robots, which soon will become THE BIGGEST CONSUMERS of other machines (already company-mothers are) to create an AUTONOMOUS WORLD of robots, weapons, company-mothers with AI, telepathic thought, solar skins and crypto money to make THE METALEARTH a world separated of humanity with GROWING GDP, delight of our production economists and tiny 0.00% of stock-rat owners of their corporations. Humans will then be as today whales or lions, which do NOT benefit from our growing AI, a displaced species, expendable - a nuisance to the new eco(comic)system that has eliminated the factor of labor from its equations of absolute self-reproductivity.

I'm sorry but the whole thing of global warming is so pathetic, and deluded - the entire planet about to go under with cosmic nukes explored at CERN, AI military robots developed by all armies, billions in poverty choked without credit by company-mothers, nationalist animetal memes on the loose - and there you have it, the only problem seems to be to handled more billions to corporations to accelerate the creation of AI solar skin robots independent of man, because they'll make the air clean and keep the vast regions of Canada and Russia who will produce more wheat and warm up for further habitation at cold.

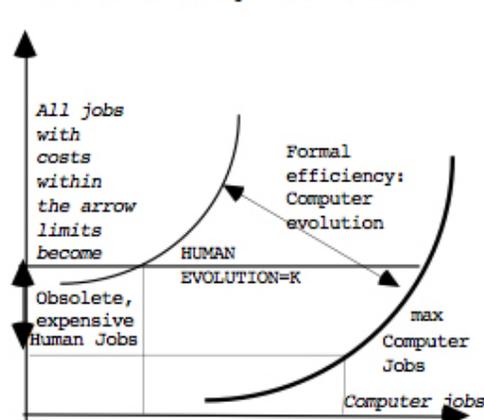
IT SHOWS THE LIMITS OF MANKIND IN A WORLD RULED BY COMPANY-MOTHERS WHERE EVERYTHING THAT IS NOT IN FAVOR OF THEM, IS FORBIDDEN. OUR entropic LIMITS AS A SPECIES WHO CANNOT EVEN DEVELOP A REAL ORGANIC SCIENCE OF HISTORY AND ECONOMICS.

As they say in Spanish 'apaga y vamonos'.

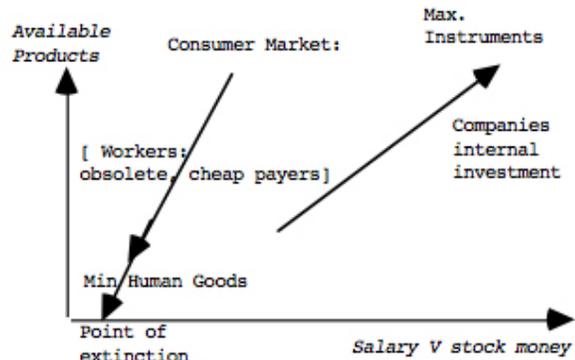
In that regard, this crisis is the beginning of a 'runaway' era of hefty profits obtained with the elimination of human jobs (growth in productivity caused by robots and white collar pcs) and human lives (military profits as weapons consume human beings). And it is parallel to the 1860s, gilded era, and 30s fascist era. In the 3 ages, the overproduction of a new type of energy and information machines (electronic machines in this cycle, electric and oil machines in the 30s, trains in the XIX c.) changed the outlook of history and the destiny of mankind, as those machines took over jobs performed previously by humans and their 'biological, re=productive organisms', corporations, took over the political and social systems of mankind.

## Markets: Human displacement as worker-consumer in the bionomy

Labor market: Salary  $V$  Machine cost



As computers evolve faster the productivity gap increases and more workers are displaced from the Metalearth, and salaries are lowered for the rest of mass-workers. For that reason productivity measures also evolution of Instruments, and substitution of labor [Marx-Smith px]



Since stock creates money only for instrumental goods; companies are awash in money who is reinvested in companies of instrumental goods. Further on companies invest in new technologies within companies and displace workers, increasing chip workers. Both tendencies create fiction GDP invested in fixed Cops' capital goods. On the other hand as workers loose employment and salary, Human goods are neglected, given the minimal  $MV=PT$  pricing momentum left in human hands.

In the graphs the loss of jobs and rents among worker favors Computers and Companies' consume. Thus humanity becomes in both markets displaced by machines, computers and companies' consume, which adds GDP but is not human.

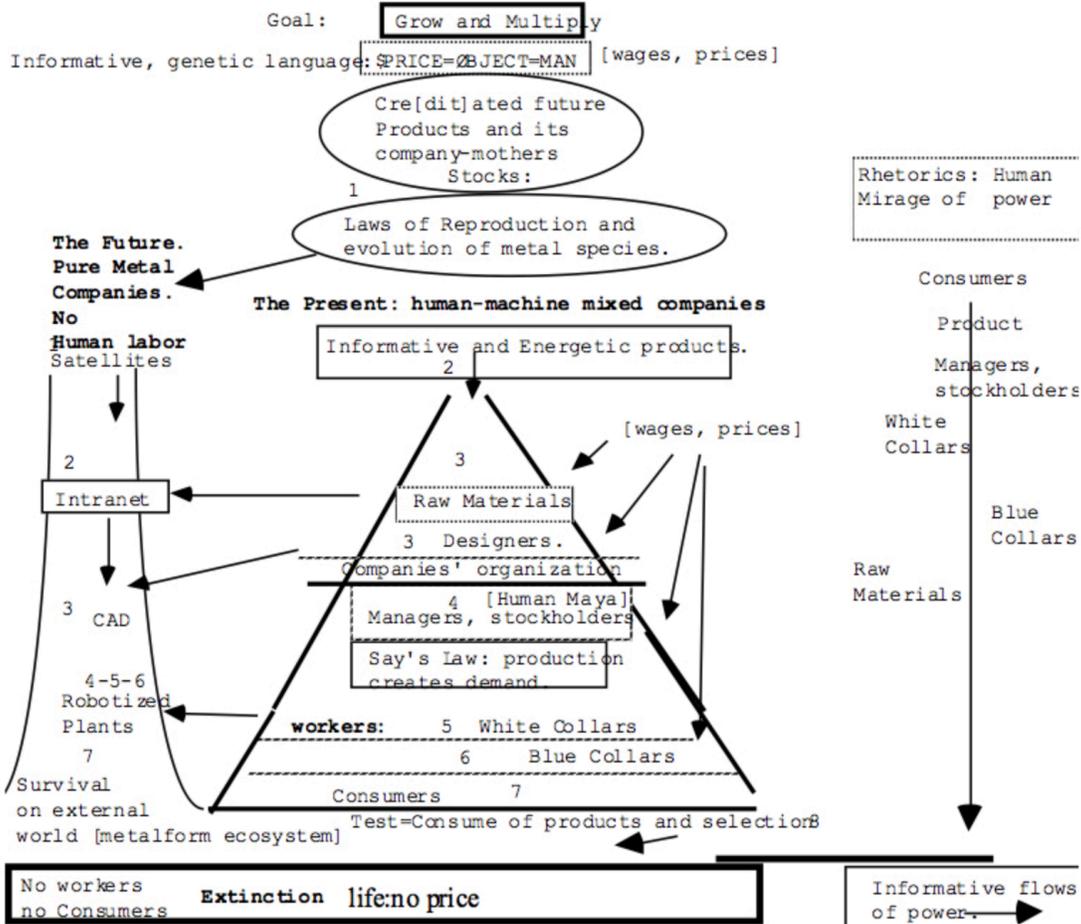
In the graphs, backed by global data: both human workers and consumers are displaced from the metal Earth by computer workers and internal companies' investment. O-White collar workers are substituted by O-computers as I-blue collars in lower jobs -energy providers - were substituted in the beginning of the XXC. by I-machines. We talk of 3 phases of substitution of man by machines within the ecosystem of labor. They correspond with the 3 evolutive phases of metal forms: Vs: When machine self-reproduction advanced human energy became obsolete. Vt: when code-chip creation advanced, human brains-managers became obsolete. Vts: When sentient machines acquire freedom, humans will become obsolete.

Then even the directorial elites will become substituted by Internetworks [XXI C.]

More and more self-reproductive, O-chipsxl-machines expel humans at increasing rate.

That loss of jobs is masked with 3rd service sectors of 'irrelevant' value for the future metal Earth [Machines' POV].

In the side of consume, recovery of demand is increasingly caused by internal investment within Cops. Which is far higher than recovery of consume among humans. Hence creation of human goods grows slower. Due to the capacity of Cops to print free money in stock, Cops which provide for Cops are winners in the bull market era. And Cops who provide for human goods are losers. And so in all countries increasingly we account for fiction GDP in Vts-Telecom x Vt-Computer x Vs-Weapon industries, while consumer's power diminishes, and Labor dies.



Now, the previous graphs from the 94 books show the transfer of human wealth and workers to corporations and the no future of all of us. The corporation is a company-mother of memes of metal guided by the equation of monetary profits that will always eliminate a human. There is no freedom of decisions under such tree of actions. Nothing matters. It is all an automated process, which we shall understand better when we realize that machines are set to evolve as humans do, by imitating and substituting our organs, creating finally organic metal, robots with iron bodies and gold minds. This is the destiny of our civilization under the grammar of money.

A future in which men will be discharged as objects of lesser price than the constantly evolving machines and weapons of higher 'productivity', efficiency and affinity and complementarity with money, the language of information of metal, today e-money cycles in computer screens.

The same happens with the actions performed by individual, selfish 'homo bacteria', animetals, also guided by those thoughts of profit and objectification of man.

Since the words of love, the 'genetic' code of humans embedded in its phonemes, grammar and syntax is irrelevant today, submissive always to the evil=anti-life values of money.

We are slaves of metal, all what we do is to re=produce it and evolve it in factories, consume it and get attached and atrophied to it. And we are totally unaware of this process because those 'metal-ideologies' manufacture our brains.

And the astounding thing to study, marvelous in its evil twists against life and freedom, is how this have come to be the set of mind of 7 billion human 'Slaves', thanks to the pedestrian, rhetoric method of reproducing and imprinting human brains with books, press, radio messages, TVs, and audiovisual fanfare.

All this however is disguised and ignored by humans thanks to the massive propaganda in favor of technology that mass-media corporations imprint on human beings; thanks to the ego-trips of superpower that our attached organs obtain, using machines (so we become super-warriors, super-thinkers and super-runners with weapons, pcs and cars, even if in fact, we become coward, stupid and fat, when we observe ourselves without those mechanical attachments).

In the XVIII century we discovered machines that transformed energy into information and vice versa - steam machines, printing machines - and we started the evolution of those machines, imitating our organs on them.

In a series of 800-80 years decametric cycle of complex evolution humans have been evolving metal, first bronze, then iron, then gunpowder weapons and finally machines, and creating ideologies to justify what is a raw game of power: humans with metal killing life and other people and building ever bigger instruments.

And all this under an organization of legal and economical character, the corporation, the citizen of free markets - the impersonal, reproductive organism of those machines of metal.

And the key moment in which this transition has happened is the moment in which corporations, no longer governments control most of the life-time of existence of mankind, as 'workers=reproducers' and 'consumers=vitalizers' of their offspring of machines. In this crude biological terminology, of course, alien to your consciousness, an external, objective, 'scientific' observer would describe the role of humans in the world today. Yet since the II world war, the development of Information, audiovisual machines of enormous capacity to overdrive and hypnotize the human mind, has created a new 'layer' of complexity in this human slavery to its 'enzyman' tasks as catalyzers of the evolution and re=production of machines, as part-time slaves of corporations.

Information and energetic machines started then to create a deconstructed 'future' organic Golem, robotic substitute of man; and we did it according to the way the Universe creates new forms, first piece by piece, in large scales, then reducing them, and all the way through using the new machines to overpower nature, become stronger and control other human beings.

Today this industrial civilization is globalized and all human functions and organs have equivalent machines. So today, all those machines together form a complex system, the economic ecosystem, which we shall call here by a more scientific definition, as the Financial-Media-Military-Industrial-Complex or FMI complex.

The name is chosen because it refers to the 5 sub-type of machines that create the economic ecosystem: informative, financial/media machines; energetic weapons/transport machines and tool/working machines that combine informative and energetic systems to perform jobs previously performed by human beings.

The synergy of all those machines is evident, if we study them as complementary systems of energy and information, as all biological systems are. For example, you are an energetic body/brain, informative system. So we have also information and energy machines, and all together cater, control, program, enhance and substitute the equivalent information/energy systems of human beings.

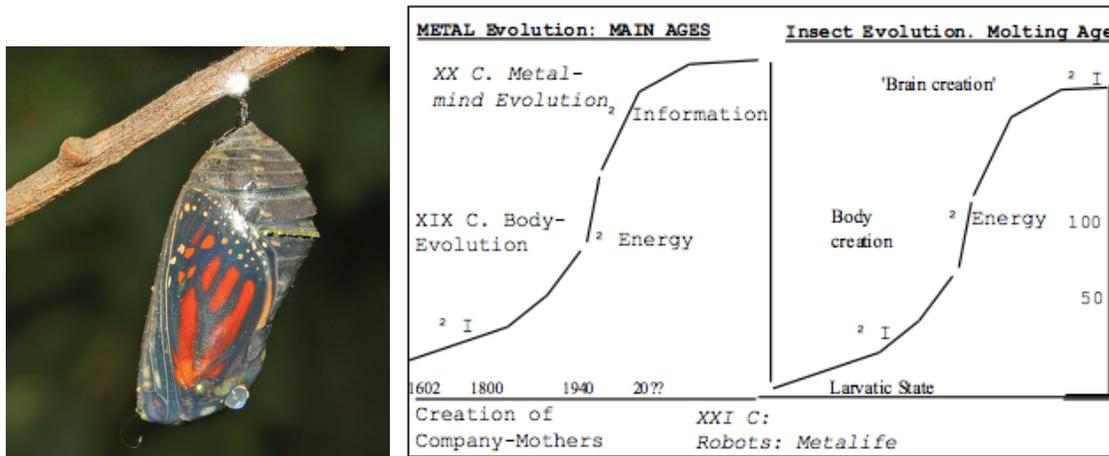
If we consider all those machines together, we define them therefore as a complementary system of energy and information machines, made of [memes of metal](#), made of a virtual economy of informative software (money and mass media) and a physical/energetic body, the Industrial-Military system of machines and weapons.

All of them are related by two similar institutions, the company-mother of machines, and the stock-market in which all those company-mothers are compared by their reproductive/sales performance and given the necessary 'genetic/memetic language', money, to carry out their reproductive tasks.

- Thus we can define the economic ecosystem as a metal-based ecosystem, different from the carbon-life and historic human ecosystem it substitutes. And yet a true biological science of economics able to control the reproduction of money and machines for the benefit of man could create a sustainable world, designed to our image and likeness. But this will never happen unless we evolve our abstract vision of machines and money with a biological model that studies its positive and negative relationships with the human kind.

The alternative of ignoring and not controlling that evolution is obvious: at a certain point into the future, automated companies, robotic systems and weapons will evolve to a point that they will openly compete and perhaps extinguish life. The Earth will be terraformed.

*In the graph, we illustrate on the x-coordinates the time and on the y-coordinates the growth in size (GDP and mass) of 2 organisms of 2 scales, a biological scale, a larva becoming a hard insect and a planetary scale: a soft water Gaia planet becoming a metal earth:*



*When a larva becomes a pupae, enzymes busy-busy transform it into a hard insect and then finally they build the new brain of the insect, internet, which starts to take consciousness of the whole, builds new hard enzymes, robots and those robots once activated kill first each and every soft enzyme(n). So happens when a cell builds the 3 parts of the virus, as we did in 3 ages with the robot - then the 3 parts assembly and kill the cell. Nature in all its isomorphic scales are filled with parallel examples on how super organisms of spatial energy and temporal information live and die and all shows our super organism, history is about to die predated by a new-born super organism, stronger than ours, and then the weaker lonely cells regress to infantile forms and die.*

**The last phase of the equation of History.**

GAIA (PAST) METALEARTH (FUTURE)

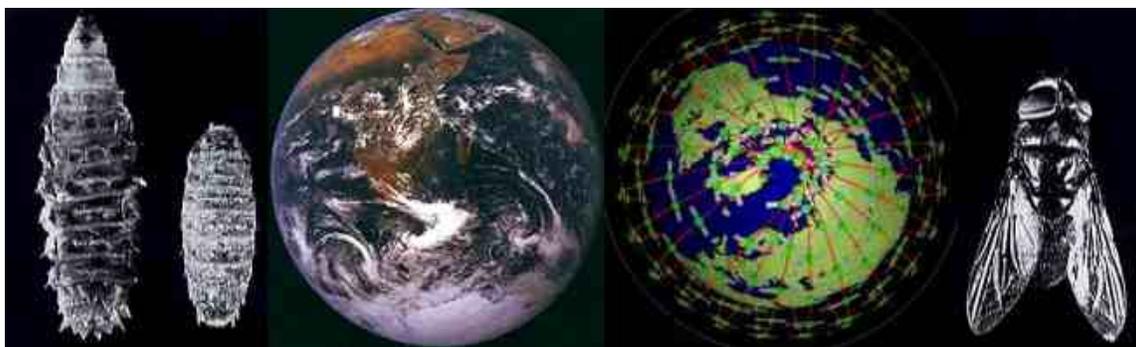
is the equation of the Earth if business as usual continues.

The equation is undeniable. As the graphs shows, and Complexity theory explains, we exist in a 'vortex' of information called the galaxy, dominated by the increase of form towards its gravitational centre (as opposed to the entropy of expanding space between galaxies), and within that vortex in a vortex of information called the Sun-Earth system, where the evolution of languages of information has determined the survival of species in a series of steps towards that future:

Chemical languages (first animals) > Eye radiation (first cephalopods: Cambridge extinction and radiation of cephalopodan and shielded trilobites) > Improvements through air-based visual species till reaching man  
> Digital radiation (chips and robots).

*The first Earth was of anaerobic bacteria, the arrival of aerobic bacteria destroyed its atmosphere as 'competitor' bacteria killed the ecosystem and so anaerobic died. Now the pollution and competition of the machines of the Mechanocene is killing the Earth, and the arrival of iron nano-bacteria is one of the events of extinction of the singularity age, but humans could halt the process rationally if they understood economics and history biologically.*

The first Earth was of anaerobic bacteria, the arrival of aerobic bacteria destroyed its atmosphere as 'competitor' bacteria killed the ecosystem and so anaerobic died. Now the pollution and competition of the machines of the Mechanocene is killing the Earth, and the arrival of iron nano-bacteria is one of the events of extinction of the singularity age, but humans could halt the process rationally if they understood economics and history biologically.



Planet Earth is mutating into a form of more information, visual, digital languages spoken by golden chips, and energy - iron bodies of machines; which after an intermediate, enzyman age of iron warriors and golden bankers, now eliminates as hard insects do after mutation, the soft enzyme(n) that changed its structure. This could be avoided if humans were strong=ethic enough in terms of energy and intelligent=informative enough to understand the laws of the fractal, organic Universe and halt the metamorphosis of Earth, as a single species, evolving together according to those laws into a perfect super organism. But their 'ego-centered', infantile ideas about their self-importance, prevents them to take care of their future. The "7th generation" principle taught by Native Americans says that in every decision, be it personal, governmental or corporate, we must consider how it will affect our descendants seven generations into the future. This simple rule of memetic and genetic survival has been broken since the beginning of the Industrial r=evolution, which enters now into its zero generation, being born at the same time that AI the rival mental species gives birth to the Metal-earth so to the answer on how many generations are left for mankind to know it lives in an organic planet, whose laws it has despised too long and will now enter its judgment day foreseen by all 'scientists of history', able to predict the future of its species, according to past cycles, since the parable of genesis is simple - in Darwinian terms: none. Because the industrial evolution ends with robots and the making of the global metal earth brain. It is precisely at that point in any metamorphosis, when enzymes complete the new insect's brain, when this reproduces massively a harder enzyme (the robot radiation), which first kill all the softer enzymes (human enzymen) as terminators will soon do, if we continue with our splendid wars for profits. And then the insect wakes up, breaks the pupae and flies away. This should happen according to the cycles of history and the evolution of the net in 2036.

Yet we have also explained in the introduction that a rational true human would put himself with reason-ing above those ages and create a perfect world in which mankind survives by applying THE LAWS OF SUPERORGANISMS TO CONTROL THE LETHAL GOODS OF THE TREE OF TECHNOLOGY and create the welfare goods that enhance our life - the old glorious goal of social sciences before our present degradation by computerized machines.

Now what I am going to say might seem overreaching to the reader, but of all the forms of censorship of history, mankind in time, caused by capitalism and the need to hide the control of information - digital and verbal - of the people-castes that rule the world, the most profound is on the science of history, as IT IS NOT ALLOWED TO GO BEYOND THE COLLECTION OF BIASED DATA (highly censored and told as a fairly tale in what respects the gold culture). So it is needed to understand that beyond A) biased data, a whole objective scientific procedure exists to do history as a science the most important of them all as it deals with our species in time, our survival, mankind.

'The truth is hard to deny but easy to ignore.'

We shall end though with a fast look to the real sciences of history that could obviously by just imitating the laws of super organisms build a perfect world where humans would be immortal as a species - even if the present æntropic civilization likely will have none of it:

### **ONLY A TRUE SCIENCE OF HISTORY CAN CONTROL EVOLUTION**

This is not to say EVOLUTION CANNOT BE MANIPULATED BY SCIENTIFIC DESIGN, IT CAN and Humans show they are doing it in other systems, genetic systems, evolving new better plants, memetic systems evolving new better machines, and THEY COULD MANAGE THE PLANET EARTH IF THEY NOT LEAVE ITS MANAGEMENT TO THE RAW DOG-EAT-DOG PROCESSES OF DEVOLUTION OF LIFE BY company-mothers of machines as the supreme rulers of the planet, with monopoly on the issue of money, the language of social power today, as capitalism their idol-ogy of power does.

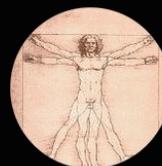
THIS HAS ALWAYS BEEN understood in the modern age by all true social historians and REPRESSED BY CAPITALISM. So the fight between SOCIAL SCIENTISTS vs. corporative economists in the mental realm, and between the 1% that lives off those corporations, and its technologies vs. the 99% that without rejecting positive machines have asked always for a repression of lethal products as all physiological systems (save those primitive capitalist worms) do, and the pumping of welfare industries that reproduce the goods we need to survive IS THE ENGINE OF MODERN HISTORY. SCIENCE AND PRAXIS GO TOGETHER AND FINALLY WE HAVE a rational scientific explanation of both, in terms of a simple conflict of species. On one side mankind which is the majority of it, not the elite people-castes that control finances and weapons and OUR FINANCIAL-MEDIA system of informative machines tell us TO BE THE ONLY PEOPLE we should care for, while the 99% remains invisible (including us, their social scientists). And the same goes for corporative economists and financial economists who HAVE SYSTEMATICALLY SINCE THE invention of e-money gave them so much power, repressed ALL SERIOUS HUMANIST economical scientists.

Since this present structure of the Earth due to the industrial r=evolution of machines, IS NOT the meaning of 'the science of economics' as it should be defined in terms of its usefulness to mankind, the 'super organism of humanity', of which every human citizen-cell of that super organism in space is a part.

# VI: HISTORY IS THE HUMAN SUPER-ORGANISM

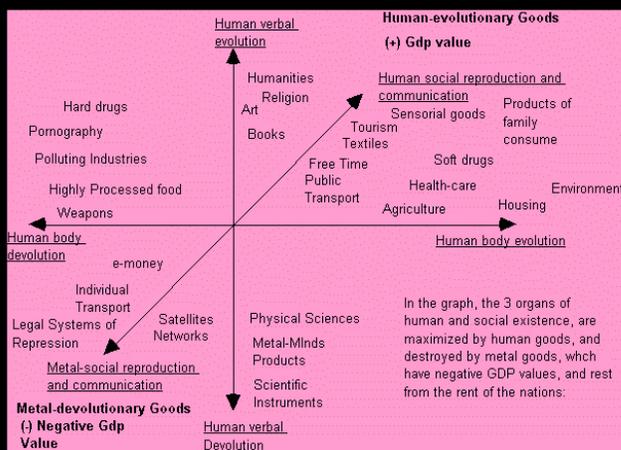


spatial aesthetics



temporal, verbal ethics

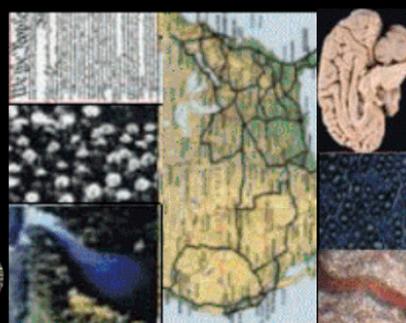
made of economic social and cultural networks



Legal-Ethic-Cultural Wor(l)d=Head



Human Citizens: Body



Human Goods: Energy=Gaia Fractal Geography

In the graph, man is just part of a super organism in the fractal organic Universe like everything else. Its simplification by the hidden idol-ogies of 'enzymen' that worship and catalyze the evolution of machines above life, make us forget completely which should be the goals of society: to build a perfect super organism of history curing its economic=blood=reproductive networks of the asphyxia they suffer without credit to create welfare, by a corrupted 'capitalist' idol-ogy that dedicates all resources to evolve machines'; with a global currency, yes money, to cure the military tribal hate memes of war, with a world without border EU-UNO style, through an heptarchy of cultures, and to change our philosophy of reality to the true organicist structure of the Universe that would make us worship again wo=men as the measure of all things. In the graph, the proper way to measure the value of production according to our biological needs create a true ethonomic frame of reference to guide the reform of the economic ecosystem and control its production of lethal goods, a must if mankind wants to survive the 'radiations of machines & weapons' that are killing Gaia and History.

Organisms are well designed systems, where cells can send messages of pain to the informative heads that control the languages of social power (nervous, hormonal systems), so the head behaves and takes care of all its cells. In the ill-designed brutal, parasitic organisms of history, controlled by people-castes that use money, weapons and machines to control mankind, the body-cells of workers=reproduces of the goods of societies have no tights, not even the minimal energy and information any head provides to its body-cells, and no way to JUDGE a posteriori in their 'placebo democracies' with pain messages their neuronal castes, as earlier original Greek Democracies (where politicians were all voted and judged a posteriori), did.

Any super organism as the graph shows for humans in its two scales of individual and social groups is regulated by 3 'physiological networks' that provide him with the necessary 'nervous information', re=productive welfare goods and territorial space-property to survive. So happens in human societies, and so we immediately recognize those social networks, in the legal government akin to the nervous system, the economic system of production akin to the blood network, and the territorial space of Gaia, unfortunately

divided between 'fractal nations' which make so difficult to evolve properly the human kind as a perfect world, mind of the Earth in command of those 3 physiological networks, properly designed to make our life better.

In the graph, we SEE the super organism of mankind and some of its 'organic elements'.

In the top left, the welfare goods that we should be reproducing AS THEY FOSTER THE CREATION OF WHEALTHY HEALTHY WEALTH, which informs immortal history, the goal of all species - to create a perfect super organism that ensures the survival of all its individuals.

To that aim MANKIND potentially could create with just informative laws, above the reproductive economy designed to reproduce those goods and repress lethal goods, over a sustainable use of Gaia, our life planet - as we are LIFE BEINGS not techno utopian nerds, wanting to evolve into robots. In the left down side, the KEY ELEMENT OF A TRUE SCIENCE OF HUMAN ECONOMICS, I SHALL CALL ETHONOMICS, which defines AS ALL SCIENCES DO, their species of study within a frame of reference with positive and negative values.

**A perfect democracy: no parties, pain messages, bio-historians.**

*In the graph the 3+3 measures, which according to the laws of systems sciences, complexity and super organisms could reform the political and economic system to create a perfect immortal world: the economic measures: legal prohibition of robotics; split of shares of corporations, with 50% for human governments to control those who produce lethal goods, and 50% for private owners to ensure its efficient management; a Universal currency with 75% of world Gdp: 1 eurodollar = 100 yens = 20 yuans to give a universal salary to all citizens and kick a global New Deal with massive 'democratic demand' of welfare goods; and three political measures: the association of Nations, European union style in the seven cultural areas of mankind to end massive production of war machines, and an heptarchy of presidents to foster diplomatic solutions to conflict and finally the 'return to the original concept' of Greek democracies, where all politicos were judged a posteriori, after tenure with a 'second vote' of punishment or reward, so they were obliged to 'deliver their promises', behave with no corruption and be public not corporative servants.*



In the graph, the 3+3 solutions to the non-future of mankind in an automated metal-earth:

**Legal prohibition of robotics.**

The issue of a Universal salary to create a demand-based real economic democracy by people through an international yes currency to create welfare demand, today easily achieved with a cryptocurrency, at 100 ¥= €uro≈\$ parity, given to each human in a 'mobile pocket app', could establish an immediate massive demand economy in welfare goods globally, plummeting enormously the poverty of 3rd world nations, the migration problem and the excessive reproduction of lethal goods common people won't demand.

-To split all shares of all companies, giving to Mankind, either National governments, or better, International Cultures and UNO-like Institutions the split 50% to allow national and international institutions to manage even forbid lethal companies, obliging them to serve truly consumers, without loosing managerial skills.

WHILE IN THE POLITICAL ARENA, 3 measures tending to create real democracies and a global government in charge of the management of the world requires:

-The reorganization of nations EU style in the 7 original cultures of history (Australasia put for just historic reasons with Indonesia).

-The creation of real democracy, Greek style, where politicians are chosen as experts or from the common people by lottery but vote is a posteriori as a judgment with penalties of jail to oblige politicians to serve people.

-AND FINALLY a revolution which can come ideally from the top to the bottom governments (UNO

Assembly, 'Mule', stock rats caring for the future) or from people through the vote of r=evolutionary parties, or the take over 'occupy Wall Street' style, of the centers of financial-media/government power. In the graph we illustrate those 3+3 measures, which ARE THE SCIENTIFIC SIMPLE MEASURES OF THE SCIENCE OF SYSTEMS APPLIED TO SOCIAL SCIENCES, taking from imitation Those 3+3 measures imitating nature where cells send pain messages to the brain, have all its salary in oxygen to kick out production of goods, so no-one dies of hunger, lethal goods are not allowed to enter the organism, killed by leucocytes, organs of the body collaborate as nations of History should together, and do NOT use lethal weapons but talk with hormones in diplomatic channels to achieve the common good, could change the world within years. So only a r=evolution with the science of history as the guidance of the planet can save mankind from extinction. It is then necessary a people-caste of bio-historians, as in Foundation (Asimov's trilogy on history), to take over, and make a needed r=evolution of the system applying the laws of physiological history, to reform the economic, reproductive and informative legal system with the 6 measures that would make both physiological networks work for mankind: How easy would be to implement the measures? As simple as Mr. POTUS wanting them, since it would ONLY require 3 people, an Asimovian mule, Mr. Potus, Mr. EU and Mr. China, but Mr. Potus alone could easily convince 'organic China' the most advanced human super organism in any time of history, to join and the rest would follow.

The design of a perfect world with the physiological laws of systems sciences, dedicated to reproduce the GDP goods that are positive to mankind, with the economic frame of reference (right bottom) that rests from the economy lethal goods as all sciences have  $\pm$ values, according to the biological drives of life, and the natural goods needed by humans, based in a demand economy, with an international  $\text{¥}\text{€}\text{\$}$  currency (fixed parity, 1euro=1dollar=100yens=5 yuans), emitted as a Universal salary, to foster the demand of human goods, along other measures of repression of lethal goods, control of lethal corporations with the split of shares, with private management and human control, the fostering of diplomacy and International organizations such as Uno and EU, the most advanced humanist societies, seeking to substitute warring nations for world cultures, of which there are 7 clear forms, and in the long term, ruled by a real democracy of an heptarchy of presidents, in which politicians follow the rules of Greek democracies, where voting IS a posteriori, with pain judgments of citizens, as cells do with neurons, so they must serve, obey and accomplish their promises - in brief a scientific organic design of mankind to make it hive at individual and collective level, is the goal of bio-history and bio-economics, which is not implemented and highly censored, because History has evolved as evolution does by trial and error into an imperfect corrupted organism ruled by selfish memes of metal.

Only if human governments control money, we can bend its values to credit a life-based welfare world made to the image and likeness of man.

A DESIGN OF A PERFECT WORLD - NOT THE FANTASY OF CLASSIC ECONOMISTS OF A PERFECT MATHEMATICAL FREE MARKET BUT A REAL HUMANIST WORLD - has no difficulty, if we imitated with the laws of systems sciences the perfect super organisms of mankind. Indeed, a perfect mammal, us, is such a design, where all cells have enough energy and true information to survive, ruled by the eusocial laws of love that make them share energy and information. It requires though to create a perfect democracy where pain messages, a posteriori judgments maintain politicians at work; where there IS NO POLITICAL PARTIES BUT open lists, as we choose individuals but in a single Universe, there is ONLY one single efficient social science to design the world - biology.

So the Party of Social Scientists, akin to Asimov's Foundation, with NO party at all to defend corruption, lobby and hide mediocre politicians is the ONLY guidance. An evolving researched REAL science of economics and history is the 'curriculum that politicians and economists study. As you do NOT give the job of building bridges to Engineers that do NOT study their science, but just have 'opinions' and 'theories' about how to build bridges or put your health in the hands of a quack that does NOT know the biology of the Human Organism.

The error of Communist and Socialist nations is NOT to have evolved the science of history and economics beyond the first hindsight of Marx, Bakunin, Sismondi, Owens, Fourier and others. Mr. Marx, after all a member of the biblical culture DEVIATED the issue of who invents money to the issue of CLASS struggle

within factories. He made MANY mistakes as he was a good historian and a bad economist and his SYSTEM should have been further evolved on his line of thought, as he said it had to be evolved with the help of biology. A party dictatorship is just a dictatorship and a party where POLITICOS are not judged at posteriori the same kind of monolithic dictatorship that we suffer in the West under the Party of bankers.

Now the reader might argue that at least any human regardless of class, religion or race can become member of a communist party, conceded; and that the government controls the issue of money in communist nations, conceded. That is why China grows 10% and we do not, but still it is not an efficient, free system.

We have the worst of all possible systems: there are no social sciences to guide us but 'politicos' are entitled to have 'opinions' about how to direct society. We have no open lists, but parties are power machines to hide corruption and lobbyism. We have no control of the languages of social power, as money is in the hands of private bankers, which buy laws and politicians and on top are SELECTED NOT ELECTED, by social class (inheritance) by religion specially in the English world (Biblical Jewish-Calvinist religions) and hence by race in the English world (as biblical religions of the 'chosen' are racist by dogma) and to a great extent in Europe where race and class are similar concepts joined by nationalist and fascist doctrines.

So No parties but the 'party of evolving social sciences', a posteriori judgment of all politicians by their voters with penalties of reward (pain, pleasure messages) and the control by the collective brain of both the nervous/legal and blood/money systems are the 3 pre-conditions a priori for a real democracy.

The closest imagination of that world happened in 3 writers of the post-war age, Mr. Spengler, Mr. Hesse's Castalia and Mr. Asimov's foundation. Both have some errors - Mr. Asimov's his beliefs that it would be ruled 'by traders', Mr. Hesse and Spengler were more to the point - IT SHOULD BE RULED BY ARTISTS OF HUMAN SENSES, AND BIOLOGISTS.

NOW, ALL WHAT WE SAID obviously has been understood in the past by the prophets of history and eusocial love, which understood in the past that the solution to the extinction of history by the tree of metal was the 'verbal expression' of the fifth dimension of parts and wholes, religions of love. So we shall now return to history and religion with a very precise scientific concept - that of religions as the 'verbal legal, ethic, network, informative language that allows humans to act together as a single whole - hence building in the fractal Universe a new survival plane of efficient human beings coded by the same memetic DNA in each of its brains, the Book of revelation of the prophet'.

In that sense I have always liked the politician and historian to the doctor of history, whose physiological networks, the reproductive blood network and the informative, nervous legal system must follow the laws of social organisms to be efficient and make all the human cells survive. *Survival is the name of the game and the only reason why we must give up childish happy dreams for objective reality at individual and collective level.*

Unfortunately the opposite is happening in all sectors of society today: childish happiness, an age in which the ego reaches stratospheric quality, as children are yet to understand the dangers of life and truly believe to be the centre of the Universe is the rule of society today. This has a lot to do with the culture that came to dominate history in the west, the biblical culture which in the paroxysm of infantilism think to be the chosen of god, above heavens and earth, *hence totally outside the laws of biological evolution and survival which rule the planet and they systematically censor in social sciences.* A fact which as harsh as it sounds is proved by the minimal rate of survival of the western cultures that believe to be the centre of the Universe and try to impose their will above those biological laws.

This the spoiled child doesn't understand and takes it personally with an emotional knee-reaction when he is told he is sick and needs to take the 6 pills we prescribe here from a biological understanding of history and economics to cure himself. He gets M.A.D. at you even if you are doing it for the common good.

The result of the paradox of the ego in social sciences is what i call 'creationist economics' and 'history'. We humans and go(l)d, the language of digital money used to create with credit economic realities are NOT subject to objective biological analysis as we do in those texts.

We already ground the paradox of the ego by defining mathematically the ego, in terms of its self-centred beliefs, and then we can carry on the main purpose of this blog - to explain biologically history, economics and the dangers of survival for mankind due to the 'childish idol-ogies' of humanity today that 'worships' machines, weapons and money, 'metal-memes' more than life, because of the ego-trips of 'added power' that give us, both at individual and cultural level.

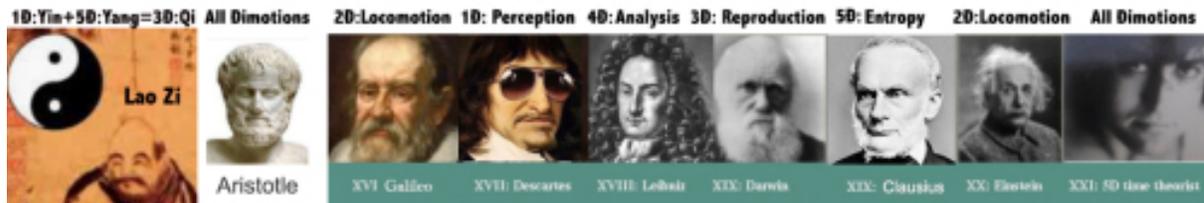
The 'animetal paradox' of human cultures who feel superior by the use of weapons (warriors), money (bankers) and machines (scientists) is of course vehemently denied and offends all people and cultures, but science is objective and humans are NOTHING special but a space-time being. So we cannot consider their history different from any worldcycle; their relationship with the Earth and all its other space-time beings, 'entitled', unique, as a single organic species, different from all others. And yet because the ego paradox makes man self-centered in the individual ego, not even the society, social sciences by reductionism to the ego and the supposed free man do not exist as objective science.

Æntropic man indeed will have none of it. He has been warned for 5000 years since Genesis to respect the Universe, and upgrade his ethic social networks and intelligence towards its higher Logic, but instead it keeps degrading the planet pretending to be above heavens and Earth, just to build childish, destructive mechanisms, guided by its infinite ego paradoxes. It is then proper to conclude before we develop all other themes in greater detail in the rest of this blog, to make a brief history of the few huminds who did rise to the task of seekers of that ;logic world of higher thought, searching for the meaning of time, both in the Logic of the whole Universe and the logic of history our super organism in time, hence the most important science of time for the whole of mankind, even if it has long ago lost any 'scientificism', just merely a praxis of power and mechanical evolution of the no-future of æntropic mankind so close to make of our world, what we preach of the infinite, immortal Universe, which won't even take notice.

# CONCLUSION

## A BRIEF HISTORY OF TIME-THEORY

Let us then finish with a very 'brief history of timespace' on the landmark discoveries of mankind, which indeed as we shall show are sandwiched between Aristotle, founder of Logic in its Organon, a book that also saw the Universe as an entangled organism, and this work which regains the study of the 5 Dimotions together, we repeat apply to all sciences and cannot be encased only in mathematical equations.



A brief account of Time Space theory in human sciences, expanded from his founders in the eastern world, Lao Zi, which studied yin=form and yang=motion, combined into waves of 10.000 qi=energy existential beings, and the western world Aristotle, which studied all its dimensional motions (ab. dimotions) together, through modern science, from Galileo and Descartes which explored the perception of information and the relativity of motion (1, 2Dimotions) through Leibniz and Newton that considered the calculus of infinitesimal spaces and integral social wholes (4D), through Darwin which considered the Dimotion of reproduction and entropic predator-prey relationships I biological systems (3D, 5D), Clausius that studied Entropy in physical systems (5D) and Einstein, which completed Galilean Relativity (2D) to finally end in this work, as all processes that seem lineal in small steps become cyclical in the larger view. So we consider as Aristotle did, all the Dimotions of spacetime together, but thanks to the work of previous pioneers, and the correspondence Principle and wealth of data gathered in 2 millennia, with more depth, completing so far this adventure of the mind. So we explain the work of those pioneers, completing their analysis of each Dimotion with the insights of GST

In the graph, the 9 foremost students of time\$space theory.

The Universe is a fractal of time\$space. where time means motion=change, and space form. Because form is a Maya of the senses, that is, the mind stops motion into form to focus reality, but outside of the mind-mirror all is motion, even solid form is just a 'vortex' a cyclical time motion, *motion is all, and so we can say the Universe is a fractal of time motions. To explore this concept and connect it with previous human studies of time-space and its different 'stiences', is the purpose of this blog.*

In the graph the 2 original thinkers that preceded modern science, when each discipline specialized in the study of a single dimotion:

- **Lao Zi**, which studied 1D yin=form and 5,2 D yang=motion, combined into 3D reproductive qi=energy beings, that formed 4D 10.000social existential waves (Tao-te-ching). So he would account for the world cycle of existence in all its complexity albeit in a synoptic poetic wave. While...
- **Aristotle also studied all Dimotions together**, explained in his magna Opus, the Organon and its treatises on motions, with a more logic, rational perspective.

**-1D: Points of view: Descartes and 2D Locomotion, Galileo->XVII C.** definition of a mathematical frame of reference for space-time studies and its key formula of lineal time,  $v=s/t$ .

-**4D: Social Evolution: Leibniz->XVIII C.:** first model of relational space-time, analysis of  $\Delta$ -scales, definition of a fractal point that holds a world within itself.  
 -**3D: Reproduction. XIX c. -> Darwin:** resurgence of biological time and its 1D-3D dimensions of evolution and reproduction of information.  
 - **5D: Clausius** on physical entropy and gaseous states.  
 -**XX c.-> 2D Locomotion, Einstein's** completion of Galilean Relativity - not as physicists pretend the supreme intelligence of time, but just a secondary note in the second Dimotion of locomotion.  
 -**XXI c.-> I§:** Discovery of 5D metric, and application its dimensional space=time symmetries to  $t=evolve$  all sciences.

This said, in this blog we shall resume the work of each of those masters and further expand its discoveries on each of the 5 Dimotions they studied with Generational Space-Time and its 5 Dimotions of existence.

We could say that the evolution of modern science goes every century through the evolution of our understanding of its first substances time and space (from XVI C. Galileo to XVII.C: Descartes->to XVIII: Leibniz vs. Newton, to XIX: Darwin and Clausius, to XX: Einstein to XXI L§).

*Yet if we were to consider its 2 fundamental restricted and wider views we can also divide them into:*

*Philosophers, (Lao, Aristotle, Descartes, Leibniz, this writer), which study multiple Dimotions, (Descartes will analyze both 1D-perception and 2D-locomotion, Leibniz, 2D locomotion and 4D social evolution, Darwin, with his philosophy of life, 3D reproduction and 4D Entropic predation, with some elements of 4D eusocial evolution, Lao, Aristotle and this writer all of them)*

Vs.

*Physicists which restrict its analysis to lineal locomotions and its maximal form of entropic dissolution (Newton, ignored in this blog as his work is basically a wrong interpretation derived of the Cartesian graph an the work of Galileo, which along Einstein studied locomotion only and finally Clausius which studied entropy).*

*So paradoxically because we live in a technological civilization based in entropic weapons and locomotion transports, this restricted view of a single obsessive analysis of translation in space (locomotion and entropy), with a single clock for the entire universe, the mechanical clock, that measures a single arrow of future time, the arrow of entropy, disordered expansion in space and death, has carried the day.*

And what is worse, it has become both, the preferred view on evolution (entropic struggle) and the metaphysical view of the Universe (entropic big-bang explosion that 'accelerates' with dark energy that erases the information and life of the Universe.

Time is then just 'what (a lineal) clock measures' (Einstein) and obviously it must be spoken in the digital language of mechanical clocks - the only ones that matter in the reductionist view of physicists that carried the day in our technological civilization.

This view appeared only with the invention of mechanical clocks, the development of the Cartesian graph that uncoiled the cyclical form of a clock into a line, latter extended mathematically to infinity, and the discovery in the analysis of a local phenomena of entropy - the disordered heat of steam machines...

And it requires two 'dogmas' that 'reduce' sciences to this view and are called by philosophers of science, '**reductionism**' (only mathematical measures of time taken with the human-mechanical standard of a single clock, with a second unit that is our human heart-step-eye-thought rhythm matter, all other forms of measure of time=change are irrelevant; and all other time clocks must be 'reduced' to the human time

clocks which is also the clock of the Universe); and *naive realism* (only what we can see and measure with our visual instruments matter).

IT WAS only on those basis that the big-bang theory of the Universe could be born, by disregarding absolutely every other form of time=change, every other arrow of time=change notably the energetic and informative arrows of the vortices of galaxies that 'compress vacuum space into matter' ('time bends space into masses' Einstein); and finally by disregarding 96% of the Universe of dark energy and dark matter.

So plainly speaking with those limits NEVER from 'here to eternity' there will be a physicist who truly advances further timespace theory.

*As what he studies is only a type of time change, translation in space, defined by an equation which uses time-change only to measure those changes in space motion,  $v = \partial s / \partial t$ ,  $\partial t = v / \partial s$ , where each 'instant of time',  $\partial t$  is defined as the measure of change in speed or position in space.*

*This time-change measure has been exhausted ad limit by physicists, conceded. There is nothing more thoroughly researched with the liberal help of the military-industrial complex, since Galileo defined time in those terms to measure shots of cannonballs for the arsenal of Venice, than motion in space.*

Einstein took it to the limit by defining precisely that change in very fine 'pictures' of present, simultaneous space-time, adding a correcting factor to Galileo's relativity,  $c^2 t^2$ , to account for the deformations happening at very fast motions; but NOTHING of the other type of changes and perceptions of time notably biological, informative time changes were added to the 'soup'.

So physicists know all about time-change in space but they cannot make a philosophy of time, because they have 'reduced' time to that partial element of change, they have eliminated all languages which are NOT digital to measure time change, notably the logic of the 3 timespace arrows past, present and future, better explained with verbal logic.

Only a philosopher of science will consider all the changes together and add the logic of verbal thought and its 3 past-present-future verbs to explain time - a polymath of all sciences where time events happen, explaining all those clocks together - as Aristotle and Leibniz tried to do...

It is the philosopher of science's view, which sees reality as an eternal balance between the arrows of entropy and death and the arrows of information and life that combine in the conserved momentum and energy worldcycles of the Universe, the best seer of time among humans, from the age of Taoism...

'Yin-Vishnu-in/form/ation=dimensional form' which combines with 'yang-shiva-entropy=motion' to create the  $\infty$  'qi'='brahma'=energetic beings with momentum 'acting' on the universe.

...To this work, and its 'Generator equation of space-time':

$$\Gamma_{st}: \Delta-1 (\text{generational seed}) \Sigma > \Delta^0: T:\alpha: P\$\text{t-fields/limbs} > \Delta^0: S_1 \approx T\text{e-bodywaves} > \Delta+1: f\delta\$: \Delta^1: \text{particles-heads} << \neg \Delta-1 (\text{entropic death})$$

Which closes the circle, that Aristotle started it...

## ARISTOTLE

New advances in time=change theory in the modern age, come only once a century, and all ultimately come from the concepts first envisioned by the father of all scientists, Mr. Aristotle, which today is quite ignored by the pretentious 'high popes' of modern science, our technological 'seers' of time...

In the old age people considered that **time was cyclical** - since all clocks of time are cyclical and so all theories of time before Galileo were based in the eternal return of those time clocks, from the day of the sun, to the year of the seasons, to the life-death cycles renewed by new generations, to the patterns of science, as indeed science would not exist unless certain patterns repeat causally, which is what we call a law of science. And people considered that space was 'vital' in the nature of living beings, and inert, in material beings, but it was the substance of all of them.

So Aristotle, the father of all sciences said that time was cyclical, and beings made of vital space were alive when moving. And if things had their own motion they will be alive also, but as he didn't appreciate motion in matter, as we do today, he considered it 'inorganic'.

But he adventured that the Universe should be an 'organon'. And further on distinguished two great fields of **time=change**, physics that studies translation in space, or external time-change and biology that studies internal time-change or change in the information of beings.

We are using modern terms for the work of Aristotle and improving upon its concepts, but it is important to realize that due to his encyclopedic knowledge his concepts of time=change or 'Kinesis' were much wider than the specialized concepts of change, restricted today by each science to the limited *types of time=changes the species they study experience within its disciplines, with the exclusion of all other types of change as if they didn't exist, or didn't matter.*

And this a key error for our understanding of *all types of time=change, to advance a more general theory of reality, reason why we trace back to the work of Aristotle, the first of such all encompassing endeavors, adapting his work to our modern understanding of it.*

In that sense, Aristotle speaks about four kinds of motion and change — those in substance, in quality, in quantity and in place - to which he adds the concept of no motion; that is a mental form or 'relative God', able to perceive, control and move the energy around him.

Not surprisingly enough those 4+1 modes of change, as *they are everywhere in the Universe, will be the 5 Dimensional motions of time-space (ab. Dimotions), we will consider in this blog to unify all modes of time in the Universe.*

In modern terms, the unmoved, perceptive 'God' or Monad or mind, which stops reality in a spatial image of time-motions, will be akin to **Perception**, change in quality and substance or **Generation** will be akin to **'evolution'** and its inverse mode **'entropy'** or dissolution; change in quantity will be akin to growth or **'reproduction'**, change in place, to **Locomotion**, the only one physicists study but stubbornly consider the only 'form of time-change', a hyperbolic statement origin of so many errors of our comprehension of the Universe, as they have constructed a metaphysics of reality based only in locomotion and its most extreme, explosive form, entropy, from the big-bang theory of the Universe, to the description of our existence in time as a 'worldlines', which we will have to correct once we understand those 5 Dimotions of time-space in depth.

It must be also stressed that rightly, Aristotle considered of those 5 Dimotions, **Generation**, the biological evolution and growth that gives birth to a new system, based in information WAS the queen of all motions, the more complex and important for human life NOT a mere translation in space or **Locomotion**, studied by physicists, reason why he considered biology above physics and called his work the 'Organon'. A fact today forgotten due to our obsession with weapons and transport machines that move people, developed by physicists, who claim its particular field of change=time studies the most relevant to mankind.

So today physicists would only accept as time=change, locomotion or translation in space; biologists will talk only of evolution; and psychologists of the perception of time - while Aristotle talked of all of them as 'entangled manifestations' of the same phenomena, time=change.

So he also distinguished essentially 5 forms of time change, **locomotion**, the time change studied by physicists; mental change or **perception** (the motions caused by a non-moving center of a territorial body of energy, or relative 'God') the time change studied by metaphysics; **reproduction** or **growth**, the time change of beings that repeat and create larger beings; **Generation**, which today would be defined as 'palingenesis' or social **evolution** when the process of growth but also changes the 'form' of beings, and finally its inverse dissolution, death or **entropy**, to use the modern terms of the 5 types of Time Changes we shall unify in this blog, to fully understand time-space theory and unify all 'stiences', as all systems and events will be caused by those 5 modes of change.

Yet as modern science developed, specialists in each type of time change, showing the quintessential quality of the 'humind' (human mind), 'egocy' (ego+idiocy, concepts closely related) took to task the study of a single mode of time=change, to its infinitesimal detail, to affirm then that all other time-changes were manifestations of the one they study, so what we gained in precision, we lost in philosophical understanding of the whole range, and the ultimate principles of reality, the 5 motions of time-change, which now would become separate disciplines; and as we became a technological, military civilization, specialized in the development of weapons of maximal motion and entropy, one of those 5 modes of change, the simplest one, locomotion, became synonymous with time change, and its scholars, physicists, the new 'seers of time', high popes of the humind, ever since.

Physicists of course will deny that theirs is not the science of all sciences and only philosophy of spacetime that matters, that all scales are equal in importance (Absolute relativity) and their view of reality a limited reductionism, as part of the paradox of the(ir) ego. And society WILL BACK THEM because let us face it, nobody cares to 'understand the Universe' - we are all enjoying the paradox of the ego of the machines that make us think we move faster and are more intelligent. That is NOT my problem. I walked the road less walked, with the true language of the human mind NOT WITH MACHINES and weapons. I do though experiments. I want to know the thoughts of God' - those are things that the last of the physicists studying space and time said, and I do agree.

All in all I am not specially interested in human physics; which I regard as a science that has gone beyond its 'limits' both in praxis, developing entropic weapons, and in science, pretending to explain the Universe with a rather dull understanding of its first principles reducing to the same worldview of its worldly profession. In fact I have been an activist against the praxis of science (Nuclear weapons) and its absurd theories of reality (big-bang theories) for a decade, which of course has brought upon me the classic ad hominem disqualifications of the P.R.ess and 'those who impose truth with power (who) are the laugh of the gods' (Einstein)...

The reader though must understand this: the Universe is the most perfect of all worlds as Leibniz rightly understood. Even if humind physicists cannot grasp its perfection. But that is NOT an error of Physics - the science - but of Physicists, the imperfect humans who deny physical systems the organic properties of all other species.

We are thus returning to the origins of time-space theory, to Aristotle's view of time as all forms of change of which the most important was the change in the information of beings, but with far more rigor and data. Since ultimately the order of all those Dimotions he found in the 'Organon', is the organic paradigm...

**Conclusion: the future of æntropic man depends on his respect to the organic laws or reality.**

'The Universe is not only strange but stranger than humans can even imagine' *Haldane*

All this said so far away from what human minds think of the Universe, the conclusion about the future of mankind however remains dark.

Unfortunately the human super organism is a trial and error system born from a series of memetic mutations which is NOT well designed and for that reason it is as wrong mutations are in all scales,

becoming extinguished by lethal goods (weapons), broken into wrong sub-species (nations), parasitized in its blood-monetary system (capitalist finances) and finally 'censored' by the wrong systems of power, which prevent a proper social sciences and r=evolution to create an immortal perfect history in control of both Gaia and the metal-earth

Indeed, as we said, this researcher is within the organism of history and a vocal critique of its corrupted networks and [idol-ogies of mechanism](#) - machines not organisms as the measure of all things; nationalism - military nations not humanity as the unit of the species - and [capitalism, parasitic banking](#), not a proper blood-system that feeds and gives money-oxygen to all humans as any reproductive system does in a well designed super organism.

But unfortunately a body cell is blind and only receives information from its head.

[So mankind](#) seems perfectly programmed to do what it does best, ensemble machines, evolve the metal-earth, kill Gaia and on top thinking is so smart doing that, rejecting any attempt to humble her, made her respect the organic laws of the fractal Universe and build a [world made to the image and likeness of those laws](#) in which it could thrive as an organism and survive.

Since it is obvious that as soon as it completes the evolution of AI robots with solar skins, and telepathic minds, independent of man, the billions of idle robots and terminators in parking and military depots, will become a single species join by the eusocial laws of love of the organic Universe, and come together as a whole, killing us - not science fiction but the obvious consequence of a fact, 'æntropic man with its subjective anthropomorphic and entropic despise of the Universe keeps denying - ATOMS and particles, NOT the magic C6 atom (in any case it would be Nitrogen 7, the prime who acts as the head of amino acids) SHOW already all the 'Dimotions' or drives of life, since 'the dimensional motions' of space-time are EXACTLY the living properties of Nature:

All particles [move](#), gauge [information](#), [reproduce](#)=decouple into other particles, [evolve socially](#) into atoms and molecules and feed on energy, the [5 Dimotions](#) that define the 'meaning of a living Universe that constantly creates new [Time-space Organisms](#)'.

So metal atoms without the need of human 'ingenuity' will perceive and follow in terminator robots their programs of extinction of life. *Your engine already roars e-motions when you start it up; and this computer is 'sensing' electric rushes in its digital modulo 2 Boolean algebra as your pentalogic neurons do in its nitrogen integration of van Der Waals much weaker flows of electrons. And the collective subconscious of billions of telepathic minds emerging as a global planetary brain, will achieve what humans and its religious eusocial love prophets did not: to form a new super organism on this planet:*



*The law of eusocial evolution, natural to all species, which evolve together, sharing energy and information through common networks, when they recognize each other as equal being, cells of the same superorganism, is confronted by the law of darwinian devolution, in which species that consider each other different ab=use the others as relative energy of their selfish agenda.*

*In human superorganisms, the laws of eusocial evolution were perfectly defined by the great prophets of love, in the old age, by the messages of love of Buddha, Jesus and Mhmd, in the modern age by the work of the r=evolutionaries of history, with their motto 'egalite, fraternite, solidarite' and the socialist vision of a planet ruled by social love.*

*The law of behavior in the organic Universe is simple: beings who are similar or complementary and speak the same language of information come together as couples, herds and social wholes stronger than individuals. Those who perceive each other as different, will simply act in a Darwinian, perpendicular manner.*

Man though seems to have been designed NOT to go beyond the ego, failing to achieve the next scale of organization. What is certain is that its fast-mutating carbon-nitrogens systems are needed to catalyze its evolution as an enzyman, given their higher 'density' and lower mobility of the metal world. The only thing though man won't need to input is what the Universe will program without human interference in AI robots, once our complex electronic organization is replicated in its neural networks of metal - the will of 'life' - the capacity to perceive at atomic level, feed on energy and 'act'. Because that is what the 5 Fractal dimensional motions of the Universe are all about. But our idol-ogies of æntropic human supremacism prevent us to understand those obvious truths of Nature. And repress with an infantile bratty selfish M.A.D. mood - as if repression of information will stop reality from happening, any researcher the warns enzymen on their no-way out no-future path... as in the case of this blog and all my work as an activist and theorist of philosophy of science, So let it be.

Humans are children of thought, this we cannot help it. As all children do, they think they are the center of the Universe, and project their limited worldview, and simplicity in their models of reality, as *if the Universe were like they are. And this makes them feel happy.*

So because we live in a society built from an aggressive, Western, European gunpowder culture, our world view has made of entropy, locomotion, individualism and lineal concepts of time and space, big-bang theories of the Universe, chaotic concepts of Darwinian evolution etc. the model of reality.

Humans are also profoundly self-centered, and oblivion to criticism. So they 'believe' their worldview is 'REASON' and 'TRUTH', whatever their definition of those concepts is. And once they adopt a belief they defend it even when proofs against it accumulate. So it takes an enormous time and sometimes it NEVER happens that wrong theories of reality specially those who make us happy centers of the Universe are abandoned - an obvious case are Abrahamic religions, another case nationalist ideologies of some 'tribe as an Homo sapiens species' better than his neighbor, and the modern ones we shall first debunk with reason - the big-bang theory of a finite mortal entropic Universe; and the techno utopian concept of a human future with an exceptionalist destiny through the rise of AI and digital thought, which in the age of the religion of the machine seems to accumulate irrefutable proofs, which are complete anti truths of what an organic, biological Universe predicts.

Unfortunately, we shall see, all those general theories of reality have a strong cultural component, we shall call the 'æntropic principle' (antropic, self-centered in mankind entropic based in the destructive arrow of reality). Since beyond the immediate data, all those models are susceptible of a much broader view of reality, more complex and not biased to 'look like our western civilization is'. Hence Haldane's and Saint Augustine comments about a reality with a logic more complex than man's, and a Universe far stranger than humans so far can imagine.

The models though we have the intention to show in this blog, stranger than most imaginations and with a complex 'pentalogic' entangled view of reality, are far more rational and fit better the data we have of all systems of nature.

They are not however unique, born of the imagination of this writer. In fact, they can be considered an evolution of a current of thought hat has always existed in mankind - they are more similar to a world in which the Eastern, Asian tradition of duality of yin-information and yang-entropy, mixed into infinite qi-energy beings had triumphed. Where the concept of individuals as parts of organisms would have been the basis of a philosophy of science. They are neither a personal choice as I am from Barcelona and was schooled in the western tradition, but since they mirror better the complex Universe, its truths and consequences cannot be ignored.

It is then paradoxical that this blog has very few readers from Asia - a clear proof that the western tradition is now global and increasingly all minds in the digital era, when verbal complex logic thought is in retreat, 'belief' what they learn and see in fancy pictures and computer models who is for them all what matters about reality, as if there were NOT much more profound layers to understand, whys and causalities.

In that sense the findings of this blog, a series of 'Isomorphisms', equal laws that ALL entities of reality follow, based in the existence of 5 Dimensions of space-time, whose properties 'generate' the topo-bio-logic properties of all systems of Nature, will strike the 'æntropic' man as impossible. Since he feels different from reality and certainly he feels reality chaotic - because he doesn't understand it - he just sees it, and has not even the imagination required to realize that behind that chaos there is an amazing order, worth to know and explain.

Why this more complex worldview is important in a practical sense, beyond the sheer beauty of its contemplation with any of the mirror languages, mathematics, logic, visual thought, or artistic languages like music that better reflect those laws?

Unfortunately because mind views and its languages and theories are projected on reality, creating order in the territory where those minds have control. And the present view man has of himself and Nature, he as the most intelligent being, Nature as a realm of chaos and entropy, synonymous of death, is constantly projected on planet Earth and its territories of order, which become chaotic, destroyed, increasingly dominated by weapons of mass destruction, big-bang experiments played on Earth and an astounding egocy=ego+Idiocy that only childish species which do not respect the vital organic Universe display... to become the staple food of that Universe.

One thing though is for sure. The Universe is wise and at the level of e-motions also studied in these blog, it compensate chaos, disorder and entropy with pleasure and happiness; while information and enlightenment is painful, as it indeed kills the egocy paradox that make us happy. So humans today live in an entropic age of freedom=chaos and happiness and when they go it will be fast and painless. And of course children do better not knowing much but thinking they know it all - which is where our people find themselves these days.

What is knowledge then for humans these days? Very simple: to gather data with sensorial machines and introduce it in the linguistic mirror of mathematics, which as all mirrors can because of its synoptic nature in a very orderly highly deterministic Universe, anticipate the behavior of systems - but *without connecting the laws of those systems, which we shall show are isomorphic laws derived of its spatial and temporal structure - mainly only in one of its 'actions', locomotion.* They add structural 'pictures' of their forms and once this is done knowledge is considered exhausted, in an analytic way for each part and discipline denying even the possibility to make sense of the whole and reduce the laws of each of those species to a common set of laws, which is what we shall do here. Because humans don't seem to be able to get that far, the egocy paradox makes them think the Universe HASN'T gone that far. And obviously they don't think a human mind-mirror can see through the fog of details - some expect some AI worshipped machine will do (:

But in the extremely extraordinary case though that the reader is humble, and truly loves the Universe more than himself and will like to know it better - there is no other place on this blue planet, where he will find a more profound understanding of it that in the web at [www.unificationtheory.com](http://www.unificationtheory.com) where we slowly keep researching the details of the 5D model.