ABSOLUTE RELATIVITY: ORGANIC SYSTEMS

Abstract. We introduce the philosophy of science called systemics, and its logic-mathematical formalism, the scalar fifth dimension of space-time, which defines all what exists as an entangled super organism whose life and death, its existence, is a worldcycle, a travel through 3 scales of the fifth dimension.



The method of knowledge of the fractal Universe is quite different from our present way of thought, which is analytic, and cheers the 'cataloging' of differences between beings - Systemics is a synthetic method and cheers the finding of similarities between them,

extracting 'disomorphic=equal laws'. Humans though embarked in a journey of 'mechanical, mathematical' dissection of reality which is fine but made them loose the forest view - and I dare to say most don't even care anymore to know if they are looking at a forest at all.

"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*

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.

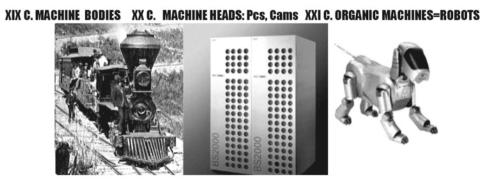
So what we mean by an organism? A very simple system - NOT to confuse with the most evolved, complex of them all, that of human beings, reason why so many people, having a natural biased egocentered belief in man as the unique organism, reject the concept:

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:



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.

Why then humans prefer a mechanical view of reality? The answer might not be so much a problem of the Universe but of the human mind; as organisms are self-centered and select information from their point of view. So to be the center of the Universe is a survival strategy, which has made humans as they became over powerful on other organisms of Earth, reject a view of reality more objective, even today as machines clearly evolve into organisms, and we shall return to those themes, in our organic analysis of history and mathematical definition 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.

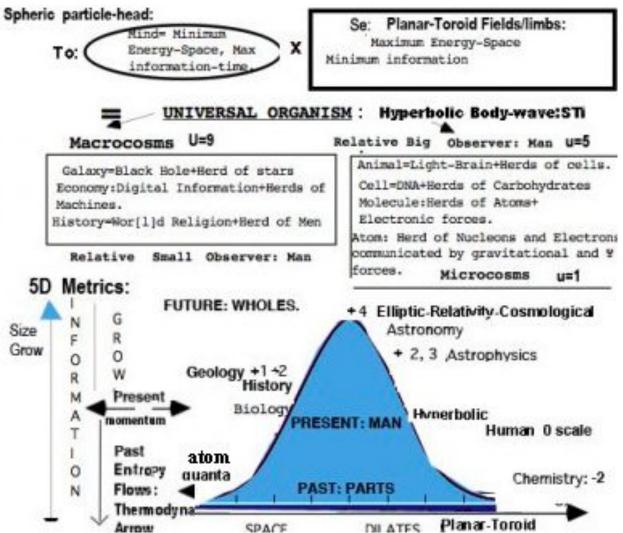
Planck on the informative seed or mind that will reproduce and evolve into a larger super organism or mental world.

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 <u>mathematical science</u> 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) x T (speed of time cycles) = Constant.



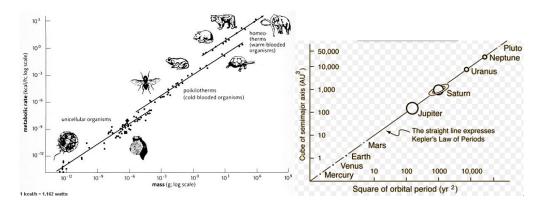


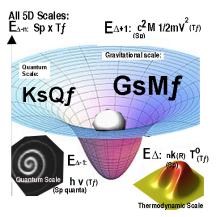
Stiences study the Disomorphic laws of species, each one focused in a scale of the eusocial 5th Dimension, with different jargons, which we shall unify as all what exist is homologic, made of the same Dimotions, which force them to exist as part of super organisms tracing worldcycles, with a ternary 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.[/caption]

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.

In the next graphs we show 3 classic examples of biology and physics, now properly explained with the understanding of the scalar, organic dimension of the Universe: the metabolic clocks of animals are all related to its volume in space.

In physics, for each fundamental scale, there is also a constant ratio between 'frequency=time parameters' and energy=mass parameters, which are the three fundamental constants of Nature, H-planck (ratio of frequency-energy for quantum systems), K-Boltzmann (ratio between the temperature frequency and energy of thermodynamic systems) and among the many manifestations of the same law in mechanical, moving systems, the third law of keeper (ratio between the orbital time clock of planets and the spatial volume:energy content of its orbital sphere):





Why this law is so important? Because it balances the survival and symbiotic existence of all parts of the Universe, and all parts of a super organism, and defines 'what codes information' - the small being, and what codes energy- the larger whole, establishing the 'harmony' of all the scales of the Universe, and explaining all its fundamental constants which are ratios between spatial volumes and informative clocks of time.

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

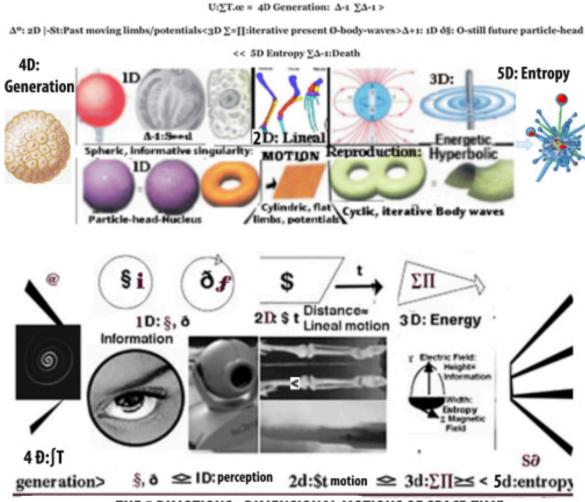
in space. And indeed, smaller scales have faster turning particles, and larger systems move in slower cycles. (Vortex law: Vo x Ro = k).

In <u>biology</u> we study families of animals such as mammals where larger organisms have slower metabolic cycles. In <u>history</u> 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 <u>super organism</u> 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.



THE 5 DIMOTIONS=DIMENSIONAL MOTIONS OF SPACE-TIME

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).

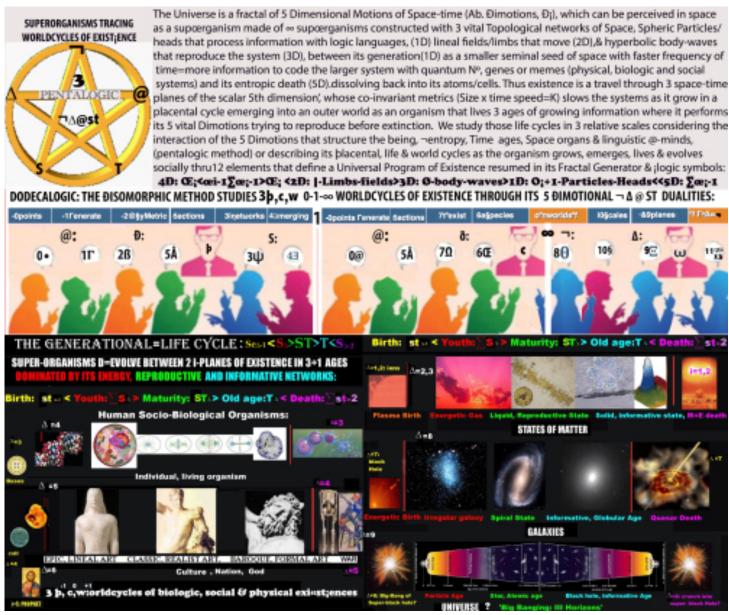
Scale, the 3 aforementioned scales for any super organism

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, $\Delta 1 << \Delta -1$.

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^o 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:



The Disomorphic method studies in a vital, sequential time manner the 3 worldcycles of all Space-time superganisms (T.es):

þ: 0-1: its palingenetic 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; palingenetic 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 Disomorphisms, of the mind-seed (@ MENTAL Disomorphisms), as 0-points are generated (0th isomorphism, \bullet) 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 spacetime actions (2nd and 5th, DIMOTIONAL Disomorphisms, β , β) of energy feeding, reproduction and social evolution, to imprint the information of the seed as the system growths in Space (SPATIAL Disomorphisms) 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-∞ world, in which it will deploy its 2nd world cycle of existence in an environment which is open, entropic (1-∞ hyperbolic unbounded Cartesian plane in ¡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-∞ 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 Disomorphisms, 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 Disomorphism: Ω), further subdivided in space-time quanta (9th Disomorphism: μ), as it exists through its 2 EXISTENTIAL \neg D_isomorphisms, as a member of a species, (6th Disomorphism, α) 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:

 ω : The 3 final SCALAR Disomorphisms (Δ) 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 Δ ±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 Δ -1 seed (fractal point), which generate as it emerges from the o-1 unit sphere into a larger 1- ∞ Universe 3 physiological networks that become an Δ° individual of a larger Δ +1 world, where it will live through 3±2; ages, in 9x9 quanta of space-time, interacting with other members of its species through decametric social scales as part of a lager 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 ilogic 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).

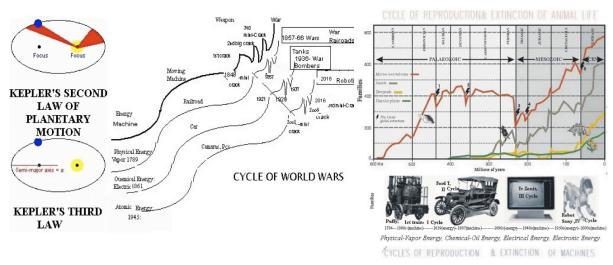
 Ω : And then in the largest nested super organism we perceive, 'ascend' as a black star @ the center of a galactic plane, emerging as a galatom's proton in a larger hyper-universe, in which as the immortal particle will have reach the maximal state of the game of exis=tjence that evolves parts into wholes 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 existjences and ∞ 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 \exists xistential \exists logic points.[/caption]

Amazingly enough with this simple scheme of <u>5 pentalogic elements</u>, tracing 3 relative worldcycles, the first 'placental worldcycle' as it evolve in the relative safe 'womb' of a maternal system, the life cycle, as it tries to survive in an outer ecosystem, and for the most organized systems, a 3rd worldcycle as it forms part of a larger super organism, we will be able to order everything in the Universe, every event and every phenomena, which the researcher has studied for decades.

Einstein formalized the fourth dimension, but this expansion and formal organization of science is much wider as it *applies to all sciences*, *not only physics*. So Einstein's 4D formalism corresponds to the limit of 5D metrics in a single scale, that of the galatom's light spacetime.

So we study further the nested super organism of mankind history in its 3 scales, the individual human being, the nation or civilization and mankind as an ideal global super organism, which if humans were intelligent and ethic enough they would design with the laws of super organisms in a much more efficient manner than our corrupted economic=blood system of reproduction of goods and political=legal-nervous system of information and coordination of its citizens-cells.

The predictability of time-cycles.



All sciences predict the future of its species according to its repetitive causal cycles. Or else they are NOT a science. Astrology became a science when Kepler learned its orbital cycles. Bio-economics became a science when we described machines as organisms of metal evolution in human 72 years generational cycles, after which they mutate into top predator weapon-machines and consume humans in war eco (nomic)systems. Its industrial r= evolution thus follow the 4 cycles that ensemble all living beings: its body-age (steam cycle), heart age (electro-chemical engine cycle), its mind age (US, tv-eye, chip-head, mobile-ear cycle) to conclude with the ensemble of robots that as virus do, when all its parts are done, come together 'alive' and kill the enzyman who constructed them. We are since 2008 into the robotic age.

In the graph, the predictability of time-cycles can be done at 3 levels:

- S: Continuous, spatial pure mathematical simple cycles, using calculus and derivatives, proper of mathematical equations; that of generational causal bio-logic cycles, often survival encounters between predators and prey.
- **T: Discontinuous, cyclical patterns of sequential repetitive actions**, taking place at different times. AS THOSE ACTIONS ARE discontinuous, the patterns are LONGER in time.
- **A:** Scalar, Deep Time patterns of longer wholes, species as opposed to individuals in biology, galactic, star or geologic life cycles as opposed to smaller life beings, which are longer BY

VIRTUE of the 5th DIMENSIONAL METRIC, $\$ x \eth = Cst$, which implies that from the smaller scalar perspective any longer cycle happening in the fifth dimension is much longer.

Because 'human scientists' ONLY recognize the first type of predictability - calculus of instantaneous derivatives, that need a 'continuous analysis' - and have simplified cyclical time into lineal time, and ignore the scalar time of parts and wholes with its 5D metric, their CAPACITY TO define the future is far more smaller than a 'stientist' that understands those 3 scales. So for a 'stientist' of Δst, of which among humans there is the ginormous number of...1 (: me, I and myself :) I can predict the future of any system including WITH DEEP TIME AND CYCLICAL PATTERNS, the future of social sciences, economics and history which I have been doing for 30 years as my small print books on the subject can testify:

An important question though must be clarified even if we go further into this specific post that introduces the 5 Dimensional motions of the Universe, which has to do with the ternary properties of the Universe as all is made of space, time and scale, and hence it has mathematical=spatial, logic=temporal and organic=scalar properties, which unfortunately humans fail to recognize, as they have become specialized in 'mathematical=spatial only properties' due to the prominent role of physics and its digital machines of spatial measure in our systems of knowledge.

As it is impossible to make sense of reality if we do NOT include ALL THOSE PROPERTIES, as expressed previously in the 5 elements of reality.

Why i am not an AI machine as most people think i should be to forecast the future and solve the form in which the future of systems is generated, has to do with a fact most scientists accustomed just to use data put in mathematical models fail to grasp about the fractal, organic universe and its scales of 'time-length':

A system on the entangled fractal universe has topo-bio-logic properties derived of its spatial, mathematical structure, its temporal, logic structure and its scalar, organic structure as parts co-exist into larger wholes and this gives the whole an organic structure.

As it happens, the mathematical, topologic structure is the shortest time span, as it is about social numbers, herds of equal forms that move in space, which is a slice of the whole time flow. And so mathematics is good for detail and spatial calculus which is what instantaneous derivatives do - but not for changes of age/phase, as derivatives cannot happen in points that have a fractal change.

So to the rescue come the logic structure of the universe, which studies time causality, between events and has a longer span. This logic structure is based in the cyclical patterns of time clocks, which as your watch or any orbital day-year is cyclical and repeats in longer time frames, so we can predict longer time frames from the logic patterns of cyclical time.

And here human scientists are at loss, because Galileo studied ballistics, entropic explosion that destroy the information of reality stored in those cycles of time clocks, its patterns and frequency, mankind changed its cyclical understanding of time for a lineal time that seems not to repeat so they have missed its capacity to understand the cycles of time, of history and economics, with its obtuse lineal time models. And so they cannot even conceive the predictability of economics and its submissive placebo democratic capitalist system where politicos are ruled by companies 'subventions' and so do what is good for the profits of economics according to the evolutionary patterns of machines. Which leads us to the third level of deep time, that is, of the patterns of evolution of the earth's life species, including machines, as first mentioned by Hutton, founder of geology who coined the word super organism for Gaia and deep time for the slower 5th dimensional clocks of larger organic systems.

This is the level of deeper forecasting of time cycles, which i used in my webs on social sciences at evolutionaryeconomics.wordpress.com forecasting History and Economic cycles with accuracy for 30 years, but as humans stopped their understanding of time predictability in the first level of mathematical calculus, obviously they cannot understand what we do there... plus their ænthropic 'beliefs' would deny it.