

How to Fix the Paradigm of Science

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This paper begins with a brief discussion of the past, the present and the potential of the paradigm of science. Upfront are a few assumptions and definitions of such controversial terms as paradigm, science, faith and religion. Among the rhetorical questions posited and explored are - What exactly is wrong with the paradigm of science? What caused it? Who caused it? How was it caused and most importantly how to fix it if it is fixable at all? A prima facie case is made that it may be fixable, if at all and if and only if, erroneous knowledge is corrected or purged especially if it originated from such icons of science as Aristotle, Galileo, Newton, Darwin and Einstein. Other methods of fixing the paradigm include LCM (Lowest Common Multiple) and HCF (Highest Common Factor) of what is harmonious in knowledge pigeon-holed or even straight jacketed into silos. Errors in both science and religion can be ameliorated if not obviated by application of empirical scientific methods to faith and concepts in faith and best practices of religion to science, which is further illustrated by a faith science interface ladder. The paramount impact and the nexus of the science paradigm is then discussed on a variety of dicta inter alia, Ockham's razor, irreducible complexity, simplicity & symmetry of the infinitudes of worlds and non-existent vestigial organs, if there be any, of the universe, for which the use has not yet been ascertained by the ever changing science paradigm and practices.

1. Introduction

Trying to fix the problems of science is like trying to solve a jig saw puzzle with dynamically shape changing pieces or only half the pieces or pieces from two different puzzles inseparably & inextricably mixed. As many of you know my vocation is intellectual property and science paradigm is my avocation. As a statement against my self interest I know next to nothing about science, yet I in my impatient, youthful and foolish (even though I am not young any more) tendencies, I am jumping into it with both feet to see if I can see far and wide enough by standing on the shoulders of someone who stood on the shoulders of giants.

2. Matter of Fact Assumptions

I am assuming that when I assume I make an ASS out of U and ME. While acknowledging that people (like me) who live in glass houses shouldn't throw stones at others, I make the following assumptions:

1. I exist, I did not create myself, you exist, and you did not create yourself as surely as I did not create you.
2. Everything is virtual particle(s) with wide range of size, duration and density, is finite, has purpose, happens in real time has infinite variety and is temporary & temporal.
3. Everything changes but not enough to violate law of biogenesis (Only Life begets Life) and neurogenesis (Only Intelligence begets Intelligence)
4. Everybody has common attributes like FREE agency (not to be confused with popular & legendary free agents in sports), is a natural enemy of God, lazy enough to take the path of least resistance, subject to same laws, entropy & extropy and scores more.
5. Unless first placed in a partitioned infinity, absolute zero and absolute infinity are synonyms. Absolute zero, one and infinity equal each other as well as their reciprocals.

6. Everything happens in real time. There are no waves without a physical medium. Nothing travels at speed of light not even light.
7. There is a panthroptimum personal God, who invisibly manages (both micro & macro management) everything through laws which he himself voluntarily obeys.

3. Definitions Matter

Paradigm of science comprises, tacit principles which guide development (or lack thereof) of all aspects of substantive science, concomitant methodologies and research & development etc. The tension between science and religion is unnecessary and can be obviated by such simple changes as a) Taking LCM (Lowest Common Multiple) and HCF (Highest Common Factor) of what is common among different silos of knowledge b) Science investigating the role of non-physical, c) Use of reason and scientific methods in faith and religion. Religion may be defined as relationship with God. Atheistic science as 'absence of God' is a religion akin to 'number system without zero' or Hindu caste system as 'absence of untouchables'. What makes it hideous is its denial. Following terms are used in this paper.

1. EXTROPY - Non-oxymoronic antonym of entropy.
2. MENCROSCALE - Human range of perception, processing and presentation in our world.
3. OMNICENTRIC - In a universe of infinite radius every point is the center of the universe.
4. PANTHROPTIMUM - (Contraction of PAN + ANTHROPic + OPTIMUM)

4. Fixing the Faults

As you would expect in any multifarious, multi-faceted, complex interdependent system the sources of errors are many and difficult to trace back. Fortunately it is not necessary as fin-

ger pointing can only hinder and delay rather than help and expedite. Compartmentalizing of knowledge and reality into silos is unworkable. In this respect science is a religion in denial. My intention is to fix the faults with an attitude of gratitude for their contributions. The list of infarctions in science is endless. For example a) there is no such thing as random (Not even random number generator) coincidence, accident, chance, serendipity and chaos; b) the concept of big bang singularity should be replaced by contemporary infinitude of singularities; For all I know the big bang was born by banging the heads of the big brain brainy homo-erectus humanoids until new branes were born and fell out to form 'Asija from Amoeba', Darwin's Dilemma and multi-verse(s) of mathematicians and the religion of science began to take hold with no purpose in sight and no hope for light at the end of the tunnel. c) Constants of nature are neither constant nor correct nor arbitrary. Following definitions and insights into fixing the underlying implied errors are included here for your kind consideration.

5. Gravity is a Matter of Gravity

Gravity is the equal and opposite reaction to any and all uncompensated orbital (Hybrid straight line Linear & Angular/rotational) acceleration, however caused in three orthogonal-motion frames as follows:

1. The Earth orbit around the Sun in a first plane;
2. The Sun orbit around the Black Hole of Milky Way in a second plane perpendicular to the first plane of earth orbit around the sun; and
3. The Milky Way orbit around the black hole of the Virgo cluster of galaxies in a third plane perpendicular to first and second perpendicular planes analogous to three (or more for redundancy & uniformity) axes (or planes) of yaw, pitch and roll of an aircraft.

Gravity is local, instantaneous, in real time and most certainly not some spooky action at a distance. Gravitational waves do not and cannot exist per se but LISA will detect some type of interaction of virtual via virtual particles and/or waves with the physical gold platinum cubes and laser beams and we/they will shape it into something at detectors, oscilloscopes and other transducers etc. Every viable and tenable theory of gravity must harmonize with our everyday experience of walking, riding a bike, driving car, launching a satellite and once in a blue moon sending a man to the moon. At any rate the theory of gravity, if based on motion at all, must also explain why don't our brothers and sisters down under fall off the planet when they, like us, have our respective feet planted firmly on the ground. In my nimble and humble mind it is a cop out to rationalize and suggest "because UGL treats planet earth as a point particle". Motion of the universe is the cause of gravity which is derived from common everyday human experience, to which we can all easily relate. Gravity does not make the world go around but world going around makes gravity go.

6. Here's Some Light on Light

Nothing travels at speed of light, not even light. No such thing as waves in non-physical medium. It is mainly an electromagnetic information collection and imparting means via virtual

particles "Photons" through a unitary whole universal medium. There is no such thing as traveling non-physical waves. E-M waves (including light waves) without a medium are manmade fiction. In vacuum light does not travel at all as unitary whole comprises zero density and entails infinite speed. Either the speed approaches 'c' or there is no travel at all. No such thing as waves in non-physical medium. Virtual light enables physical light. Light and sound speeds are oppositely related to density. Light speed decreases with density while sound speed increases with increasing density. The light appears to travel as waves in low density and interacts with the physical as photons. When the density increases beyond a certain threshold, the appearance of waves is replaced completely by photonic virtual particle interaction. Eventually even the photons are unable to get through steel or lead.

7. The Sound Byte

Light and sound speeds are oppositely related to density. Light speed decreases with density but sound speed increases with density as can be readily gleaned from the following table of metrics of light and sound speeds in meters per second in four mediums. I suspect speeds in plasma lie somewhere between those of air and water.

Medium	Sound	Light (m/s)
Vacuum	0	299 792 458
Air	340	299 460 000
Water	1,480	225 000 000
Glass	4,540	200 000 000

It should be noted that light speed is inversely proportional to density while sound speed is directly proportional to density, such that light and sound speeds are oppositely related to density. Technically at zero density the light speed is infinite because of zero in the denominator.

Will LISA space lasers detect gravitational waves? Even though there are no waves, the interaction with the physical is real and in real time. So some form of detection is to be expected. Scientists may declare that they have detected gravitational waves even though somebody else may be equally justified in interpreting the data differently as waves (light or gravitational, radio, gamma, photons, beams, columns, and wave fronts are our formulation of the interaction between the physical (detectors, sensors, oscilloscopes, eyes) and the non-physical invisible virtual universe of which we are an integral part. To be sure the interaction is continuous, real and in real time all the time. Just as for a kid with a hammer, everything becomes a nail, likewise for a physicist with the world's biggest and most expensive toy, God obliges by acknowledging their presence. In LISA a signal will be born at the three floating gold platinum cubes but shaped and interpreted according to our free agency to shape them however we desire.

8. It's About Time

Time is the ratio of distance traversed to speed of a mass in motion. Like the three legged stool, moments of time, mass and motion are interdependent and inextricably intertwined. They are born together, grow proportionately together and will end

together at speed approaching 0 or 'c' each having the same effect. The trio starts from infinite time (or infinitesimal frequency) and infinitesimal mass and infinitesimal motion. Time is also reciprocal of frequency. Time is also time period of wave or wavelength. Accordingly in range I for v_N (speeds between .00125C and C) as motion and mass approach zero, time and frequency tend to infinity or end of everything physical and end of time. Contrary to Einstein's SRT, time contraction takes place instead of time dilation. In range II (speeds between .001c and 0) the opposite takes place. As mass becomes zero, frequency becomes zero or time period becomes infinite to result in eternity. For more detailed and graphic delineation of this URL (Universal Relationship Law) available at the NPA's World Science database [1] or authors website at [2]. Please refer to other articles by this author which are also readily available there.

9. Back to Basics

Real progress can be made by going back to basics of light, gravity, mass, space, physical & virtual and correcting the philosophy, science and religion of such icons as Aristotle, Galileo, Newton, Darwin, Einstein etc and harmonizing all sources of knowledge into one reality even by LCM & HCF precision of mathematics which as a language is in many ways superior to natural languages.

1. Galileo's Pendulum formula has stood the test of time.
2. Two minor corrections to Newton's First Law of Motion are already a matter of record at NPA (Natural Philosophy Alliance) World Science Database. [1]
3. Universal Relationships Law (URL) is comparable in scope to Newton's Universal Gravitational Law in its potential to enhance our understanding of our universe which by definition is one. To be sure the URL is also God's Universal Relationship Law as my URL is still the same **OurPal** Dot Com [2].
4. Fixing the Special Relativity. Einstein simply got mass reduction and time contraction backwards. Even length contraction can also be more appropriately named as size or volume contraction, which is harmonious with mass reduction.

10. How Much Does the Universe Weigh?

Mass is anything, something and everything physical. It is the unit-less sum of atomic weights (protons and neutrons) of all the atoms in the physical and tangible "stuff" (atoms, molecules, cells, plants, pets, people, planets, moons, stars, galaxies, clusters of galaxies) in any mix of solid, liquid, gaseous and plasma states. Structure of matter in the physical universe of mass, stuff, objects etc and the structure of the universe is the dynamic [equilibrium, dead end stop or solitary mass (No other mass in the vicinity as at or near the edge of the universe) in motion] relationship between the trio of 1) mass (matter, objects or its synonyms), 2) motion and 3) time within our range of perception (with or without instrumentation) encompassing infinite variety of geometric shapes, beyond which range the structural infinite variety continues from infinitesimal to infinitude, notwithstanding a dynamic structure may appear static if beyond human perception range and/or against a STOP (AKA Dead-End). The weight of the universe is about 100 orders of magnitude greater

than one gram. It is the mass (Sum of the atomic weights of all atoms) multiplied by the gravity.

11. Space is Nothing

3D infinity of nothing physical. Three dimensional infinite incompressible irreducible non-physical volume which does not interfere with anything physical sharing the same space. It can be made finite by partitioning and "physical"-ized by adding "Stuff" (atoms, molecules, cells, plants, pets, people, planets, moons, stars, galaxies, clusters of galaxies) in any mix of solid, liquid, gaseous and plasma states as in our own known universe. If and when the partition is obviated the space shall again merge with infinity and again become devoid of any thing physical as we know it now. The virtual space interacts with our physical universe via virtual particles. Physical and virtual are seamlessly, invisibly and inextricably intertwined to infinity of unitary whole virtual light medium. From macro perspective everything in our physical universe is virtual particle(s) with a wide range of aggregation, size, density and duration. Relative zero is synonym of infinitesimal and absolute zero is a synonym of infinity. Relative infinity is synonym of infinitude and absolute infinity is real infinity. Absolute 0, 1 and infinity equal each other as well as their reciprocals. Furthermore there is NO such thing as conservation laws including conservation of mass and energy if nothing else because conservation of infinity is meaningless and our known physical universe is seamlessly and invisibly linked to the infinity of the virtual universe.

12. Nothing in the Language of Mathematics

Relatively speaking nothing is the synonym of micro-zero (AKA Relative zero or Infinitesimal). Absolute Zero or nothing is not 'a' but 'the' synonym of infinity. In other words nothing is not nothing. In relative terms it is something (AKA Infinitesimal) In absolute terms nothing is everything (AKA Infinity). More particularly micro-infinity is relative infinity or infinitude as contrasted from macro-infinity which is absolute infinity and synonym of macro zero or absolute zero. In absolute terms there are three and only three numbers (0, 1 & Infinity) which equal each other as well as their reciprocals ($0=1=Infinity = 1/0 = 1/1 = 1/Infinity$) as contrasted from physical relative numbers where zero (relative zero) and/or infinity are at the opposite end of the spectrum. Zero (Relative zero or Infinitesimal) is relative to something else like one computer v/s no computer or 6 billion people on earth and only one on the moon and that too for only a few hours; or one or a few apples v/s none or zero.

They are all finite and approximate. Of the three absolute numbers we happen to share one finite number which not surprisingly also equals its own reciprocal ($1=1/1$). One way to avoid mental gymnastics and concomitant tension, while contemplating equivalence of absolute zero and absolute infinity is to think of zero as macro zero and infinity as macro-infinity. You can then convert infinitesimal (micro or relative zero) to infinitude (micro or relative infinity) by merely zooming in and conversely you can convert infinitude (micro or relative infinity) to infinitesimal (micro or relative zero) by zooming out. Presently there is no way for us to breach this bubble of isolation between

relative (physical) and absolute (virtual) a bit like one way glass from virtual to physical.

13. Four Oxymoronic Uses of Zero or Nothing

1. 1st or Nth symbol of base N system.
2. Positional multiplier (AKA Place Holder) = $N^{\text{#ofShifts}}$ Here Number of Shifts are counted from RHS (Right Hand Side) for integers & LHS (Left Hand Side) for numbers less than one.
3. Relative Zero = Infinitesimal. Some v/s none of anything (or relative to something else). For example one apple v/s no or zero apples. It's variable.
4. Absolute Zero = Infinity. The equality here can also be replaced by identity or synonym. It's constant.

14. Real Time Universe

Universe operates, communicates and interacts with us in real time. Reality of real time universe including the real time astronomy is founded on the unity of truth and one reality. Real Time astronomy is not a look back at Big Bang. Relationship between real time astronomy and quantum physics is not a coincidence. Universe is not geocentric, heliocentric or galactocentric, but is anthropic, anthropium, omniscient and anthropocentric as well as panthropium. URL is comparable in scope to Newton's Universal Gravitational Law in its potential to enhance our understanding of our universe which by definition is one. A helpful tool in my quest for real time astronomy is purging of erroneous knowledge especially if it originated from such icons of science as Aristotle, Galileo, Newton, Darwin and Einstein. A prominent role is played by two minor corrections to Newton's first law of motion as well as two minor corrections to Einstein's special relativity theory and how engineers by trial and error made GPS (Global Positioning System) work, in spite of the wrong science. More on URL and GPS is available on the World Science Database created and maintained by Natural Philosophy Alliance. [2] Thank you, David DeHilster and Greg Volk. Further it should be noted that this is still work in progress which started with my presentation to NPA-12 at the University of Connecticut in Storrs in 2005 [3]

15. Infinitude of Nested Worlds

The concept of infinitude of nested worlds (Macroworlds, Mencroworlds and Microworlds) is somewhat easier to grasp by visualizing nested Russian dolls. Aliens in macroworlds and microworlds are not in our mencro scale and therefore are not perceptible to us, nor are we perceptible to them. From their perspective we are the aliens because they appear normal to themselves just as you and I appear normal to us at mencro scale. Macro aliens and micro aliens are endless chain of nested Russian dolls and hence the nomenclature infinitude of nested worlds. A galaxy in our universe (mencroworld) is merely a molecule in our immediate macroworld and an atom in our mencroworld is a whole full size microworld in a group of microworlds immediately downstream with respect to us. An alien in macroworld will view each mencroworld as multiverse(s) in the parlance of string theorists. Likewise we will view microworlds as multiverse(s). This relationship is valid up and down the entire hierarchy of infinitude of nested worlds. Hierarchy of laws in macro, mencro and microworlds also follows similar structures,

scales and hierarchy of infinitude of Russian nested dolls except that we have also added the concept of multi-worlds laterally to each hierarchy.

In fact all of us, from our respective perspectives, are correct and normal in our respective scales. We at mencro scale, macro aliens in macroworld at macroscale and micro aliens in microworld at microscale. For the time being only God has the ability to zoom in and zoom out from one scale to another. Each atom in our mencroworld is a full blown microworld just as each atom of macroworld constitutes a mencroworld like ours. In other words we are but ONE atom of our immediate macroworld. The perception of normal is rooted in the scales. We are normal only in mencro scale and aliens of macroworld are normal only in macro scale and aliens in microworld are normal only in micro scale. Our universe is one only for us, but for God, it is infinitude of worlds. That is what "Worlds without number, have I created" in scriptures probably means. Each alien perceives itself as created in the image of God and of right scale.

16. Conclusion

It is naïve to think that the paradigm of science can be fixed from within especially when the momentum of power, money, popularity, prosperity and time is so intoxicating. None the less it is bound to happen when the moment is right and figuratively speaking all the political, policy, economic and related stars are aligned. For all practical purposes science is what scientist in power say what science is. Likewise religion is also what leaders of practitioners of faith say what it is. Without due regards for the non-physical, gravitational waves, spooky action at a distance, quantum physics, wave particle duality, Heisenberg's uncertainty principle (which itself is uncertain and like double negative makes it certain), Schrödinger's cat and rabbits will continue to puzzle and propel physicists and astrophysicists to power and prosperity, bestow tenureship on professors, grant the priesthood of PhD to students and much more to many more.

Perception and reality cannot be harmonized without first fixing the paradigm of science and the paradigm of science cannot fix itself any more than anything else can fix itself from within without any external influence. Likewise harmonization of knowledge from variety of sources and silos cannot be harmonized except by taking the LCM and HCF of what is common among them. It is unlikely that the level of intelligence that caused the errors is sufficient to purge the errors let alone solve the problems. It is more likely to happen when the better solution is within reach. Realization that there is but ONE Reality in here and out there independent of pluralities of perceptions can provide the motivation. The reality God created may not fit into the straight jacket being used by peer reviewed mainstream science any time soon.

References

- [1] World Science Database Website, Natural Philosophy Alliance, www.WorldSci.org
- [2] P. Asija "Author's Website" www.OurPal.com
- [3] P. Asija, "Universe within Universe" Proceedings of the NPA, v2, n1, pp. 8-11 (2005).