

THE SOLAR WIND II

## SHAPEJOURNAL

THE SOLAR WIND AND MAGNETIC FIELDS IN A UNIVERSAL SUBSTRATE SOLAR WIND ATTACK! / WHAT REALLY CAUSES THE EARTH'S MAGNETIC FIELD? / SYMPTOMS OF RETREAT

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"The sky literally exploded right above our heads" - photograph by Didier Van Hellemont

### The Solar Wind II

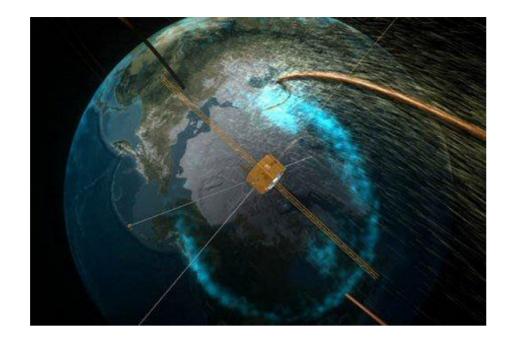
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#### Solar

#### Wind

#### **Attack**



"We've discovered that our magnetic shield is drafty, like a house with a window stuck open during a storm," says Harald Frey of the University of California, Berkeley, lead author of a paper on this research published Dec. 4 in Nature. "The house deflects most of the storm, but the couch is ruined. Similarly, our magnetic shield takes the brunt of space storms, but some energy slips through its cracks, sometimes enough to cause problems with satellites, radio communication, and power systems."

from NASA website

https://science.nasa.gov/science-news/science-at-nasa/2003/03dec magneticcracks

Welcome to the 58th issue of the SHAPE Journal entitled *The Solar Wind II.* 

Below is a recent news account of a major incident in the Solar Wind-Earth's Magnetic Field interaction. It is in the usual "reporterease" which sees such things as either worrying threats or alternatively as entertaining morsels of "science". Hence there is never enough detail to inform interested scientists to develop their own understanding!

But there is something to be gleaned from the latest event.

"A CRACK IN EARTH'S MAGNETIC FIELD: This morning, during the early hours of March 10th, a crack opened in Earth's magnetic field. Solar wind poured in and "the sky exploded with auroras," reports Kristin Berg who sends this picture from Tromsø, Norway. "The air temperature was 10 degrees F below zero," she says, "but the cold was a small price to pay to see a magnificent display like this."

The "crack" was pried opened by the solar wind itself. Magnetic fields in the solar wind interacted with Earth's magnetic field, partially cancelling our planet's defenses against the oncoming gas. In the jargon of space weather forecasters, "B sub z tipped south."

NASA and European spacecraft have been detecting these cracks for years. Some are as large as California, and sometimes they grow wider than the whole planet. They tend to form most often during weeks around equinoxes-a seasonal phenomenon known as the "Russell-McPherron effect," named after the researchers who first studied and explained it."

From SpaceWeather.com

This does indeed show dramatically two contradictory things about the Solar Wind: the most obvious is that, in spite of being 93 million miles away, and in "Empty Space" the Sun can reach out magnetically, NOT by some stable Magnetic Field, but by a Strand of Plasma carrying its own magnetism with it, and powerful energy to boot!

That the Solar Wind can 'get in' also contributes to a suggestion of where the Earth's own Magnetic Field came from, which changes over time, and actually flips to the exact opposite polarity every million years or so.

And, as this same relation has been recurring some 4,000 times since the start of the solar system, such events don't rate as ultimate destroyers, as much as significant creators, which, having endowed the Earth with its own Magnetic Field, has incidentally, by so doing, also endowed it with its defence against such powerful influences thereafter! Yet evidenced by the recurring ongoing battle, occasionally increased to deliver such events as this.

I cannot refrain here from pointing out the indisputable Holism of this situation, which, though stumbled upon here, is certainly NOT Pluralistic - as is the whole of our stances in most Sciences, the whole of Mathematics and even Formal Logic (Reasoning) too. The Struggle of Opposites is revealed here, not only very clearly and physically, but also as the consequence of Reality's natural Creative Processes, and their production of both persisting Stabilities, on the one hand, while also providing the resources for significant Qualitative Change, in Transforming Emergences, on the other.

Many important questions in Development are rejected by the Pluralist Stance, which in principle insists that Reality is as it is, due entirely to separate and eternal Natural Laws, which simply sum, in various differing amounts, to produce everything there is (and ever will be). But, it simply isn't true, and can only ever explain things within a given Stability - either temporarily naturally occurring, or in artificially constructed and maintained stable situations.

So, the real creative-dynamism of Reality is always excluded from study altogether!

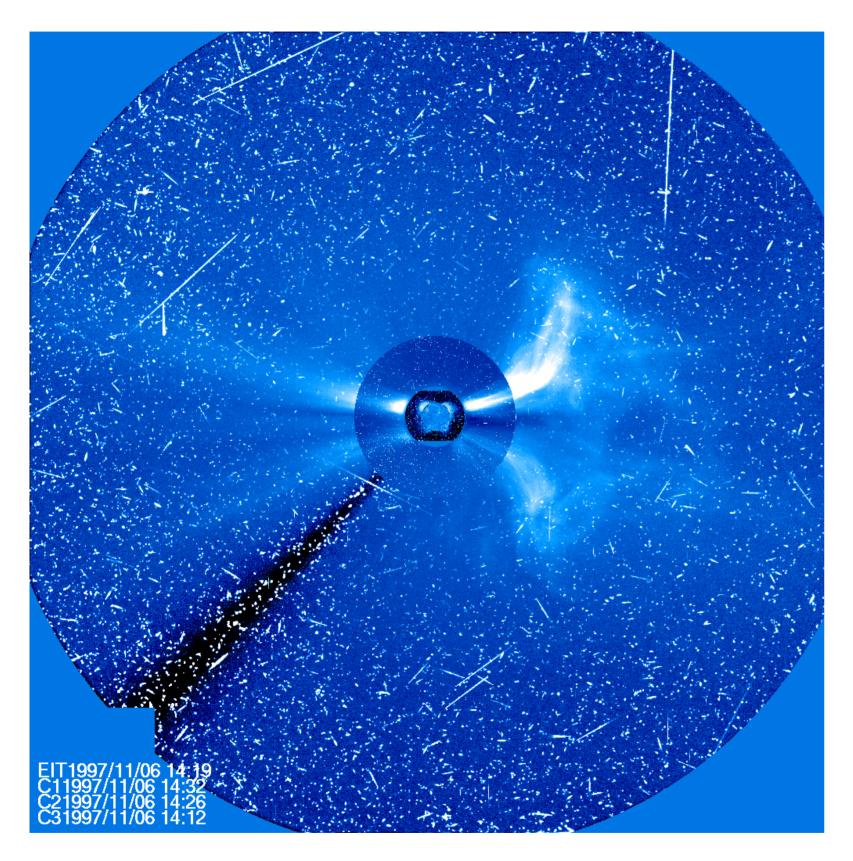
It is one current objective of this Physics theoretician and philosopher to crack the Solar Wind-Earth's Magnetic Field conundrum *holistically*!

For, it, most certainly, involves the processes taking place within the Sun, which though presenting a kind of Stability, is also clearly in a kind of turmoil too that emits energetic streams reaching far into "Empty Space" somehow travelling through it to reach a body like the Earth.

And thereafter, not only endow that body with its own magnetic field, but also regularly affect it, enough to inflict widespread damage to that field, yet also to cause it to regularly flip into its exactly opposite polarity, planet-wide. While mostly delivering its effective general protection from that same source.

Is such merely an addition of forever-fixed Natural Laws (as Plurality infers), or is it an essentially Holist process, involving both creation-of-the-wholly-new and development in the very same sort of trajectory as produced Life upon that seemingly isolated planet, and even Consciousness?

Jim Schofield March 2017



Coronal Mass Ejection

## The Solar Wind & Magnetic Fields in a Universal Substrate

#### Part I

With my assumption of a Universal Substrate filling all of Space, the usually considered interactions in this area of study are significantly altered, for the normally undisturbed Universal Substrate, consisting of an undetectable mix of all the various Substrate Particles, mostly occur in forms which keep them totally undetectable.

But, such things as the Solar Wind, composed of energetic Plasma particles, and any associated, or separately caused, subtended Magnetic Field of Magnetons, will both radically alter that formally quiescent state of the Universal Substrate.

Two factors will be involved, which will dramatically change that Substrate:

First, energetic interlopers will certainly dissociate any present, quiescent Neutritron Paving, causing driven streams and even vortices, of those Substrate Units.

Now, subtended Magnetic Fields can only be composed of the unique mirror-image Magneton Units of the Substrate, usually dashing about randomly, and hence also being completely undetectable - but here, having been linked into dipole chains (Lines-of-Force) by some pre-existing Magnetic Field or Source.

And, finally, the Solar Wind, itself, (as its title indicates) being composed of Plasma particles (mostly Protons and Electrons), previously forcibly ejected by the Sun or other involved body, will, in contrast to the static forms already mentioned, deliver great energy, involving "moving" charged particles, and hence delivering both moving electrical fields and so-called "bow-wave" magnetic strings, effectively attached to the moving

plasma particles - involving both the already well-known ones caused by moving electrons, BUT ALSO similar but OPPOSITE magnetic strings (Lines-of-Force) caused by much more energetic and positively charged Protons.

A few observations on Space must be related to this theorist's own Theory of the Universal Substrate, as no other theory can satisfactorily do this. For, detailed observations have shown that magnetic fields in that form, can be ripped out of one causing-system, and integrated into another. (Clearly, the physical nature of such Magnetic effects - as strings of Magnetons. linked via their magnetic dipoles, make this eminently understandable, though this as yet still requires a full explanation).

And, such an explanation, even of this feature, departs immensely from the usual, purely-mathematical descriptions - for it is a completely holistic and physical mix of many mutually-interacting systems, namely:-

- 1. The multi-level and multi-component quiescent Substrate
- 2 The "carried along" electrical field of the charged particles, composed of concentric shells of re-orientated magnetons.
- 3 The energetic interaction of BOTH the above, causing the unavoidable streams of detached magnetons pushed sideways, delivering them in multiple linear strings, all around the primary direction of motion, which are certain to form magnetic Lines-of-Force.

Clearly, with these fields, as rearranged features of part of the Universal Substrate, the explanations of actually-created, observed features becomes possible, and the real tester, for these ideas, will be in tackling the observed field features at the surface of the Sun, and also in the three crucial interactions of the Solar Wind with the Earth's Magnetic Field:

- 1. In the actual causing of that field originally!
- 2. In the form of the joint fields around the Earth!
- 3. The flipping of the Earth's Magnetic Field every million years or so!

Now, this paper is only identifying the problem, rather than explaining exactly what is going on: so there will be a collection of separate papers, each one focusing upon different contributions involved.

In addition, there will be an attempt to re-orientate the Physics involved away from its usual Pluralistic Approach, into an as yet poorly understood Holistic Approach.

Next, therefore, we will address the basic ideas of the nature, causes and interactions of both Electrical and Magnetic Fields as features of a material, yet undetectable, Universal Substrate!

## The Solar Wind & Magnetic Fields in a Universal Substrate

Part II: The Problems of Magnetism

It seems to me that the circular reasoning used so far is certainly incorrect, but without further information being so far available, another more basic approach might be more fruitful. So, let's try that!

The effort to reduce Magnetism into a property of a normally undetectable Universal Substrate, has, after an initially positive start, hit a difficult problem!

Clearly, Movement of Charge seems to be the crux.

But, my recent attempt to reduce it down to, at base, the movement of a charged particle, through a Substrate containing magnetically-endowed Substrate Units, has hit a major snag (or two)!

The problem is the assumption that an electrostatic field, associated-and-carried-along with a moving, charged particle, is partially dismantled by collision of that "carried-field" with the background Substrate: but that certainly does NOT simply deliver what we get. I have assumed, in that attempted explanation, that a product of the partial dissociation of the carried-along electrostatic field "by collisions", somehow delivers free magnetons which then produce the alternative "Lines of Force" type magnetic re-organisations.

It seems reasonable, but it does not yet emerge as solved! For, it doesn't explain the whole produced magnetic field, but, at best, only a part of it.

I ought to emphasize that the conception of Magneton Substrate Units, with a magnetic dipole moment have been successful in explaining both electrical and magnetic fields statically, but it is the production of the magnetic effect by a moving charged particle which it

just cannot yet deliver. I have been aware all along that I have actually assumed the electric/magnetic relation that I am attempting to prove, within the definition of the magneton itself, so such circular reasoning is bound to be flawed from the outset! So clearly, when it comes to such a basic feature, I cannot legitimately use that method.

The problem is that, with the magneton, I cannot use a "lesser magneton" to explain it - for obvious reasons of infinite-regress.

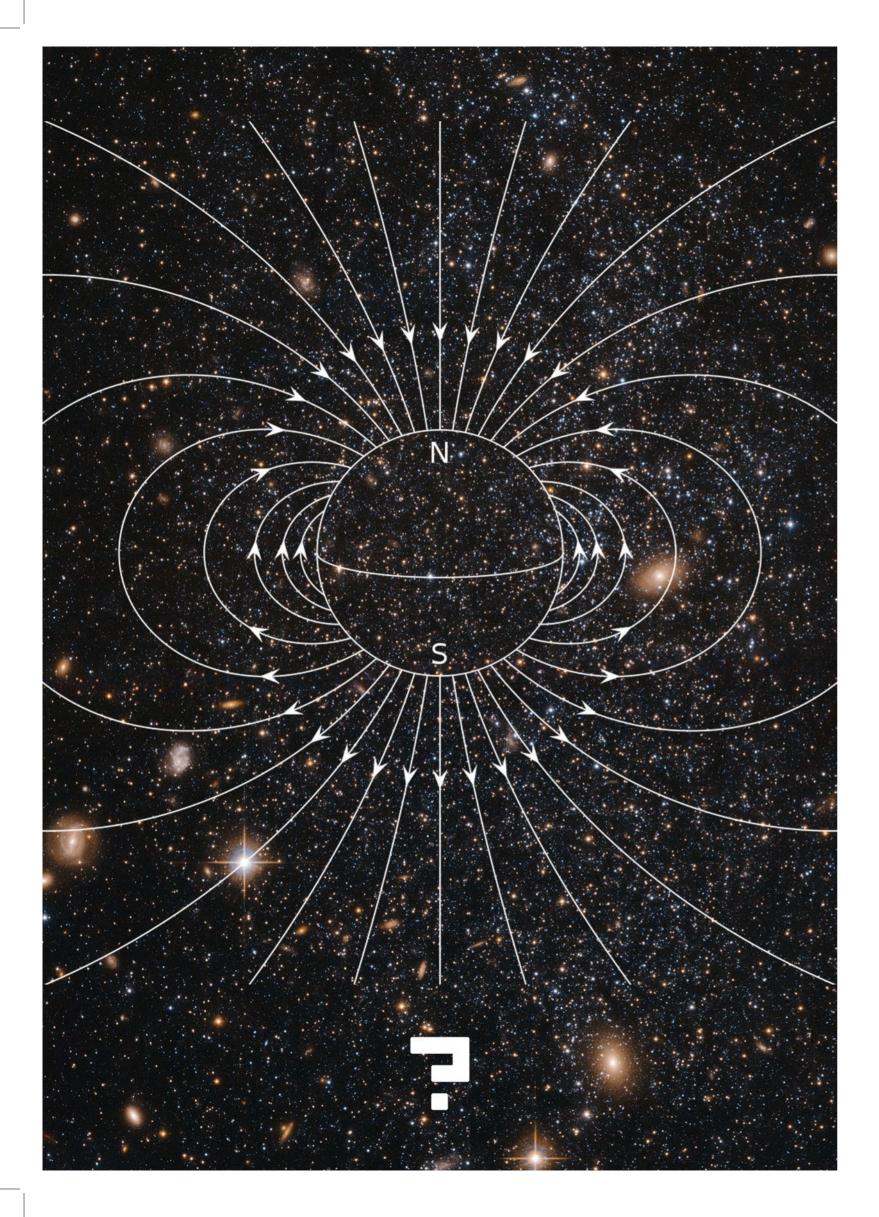
At base, the difficulty is the whole idea of a dipole.

For magnetic lines of force seem to seek a "circle-of-units" as the required stable form, when delivering a Magnetic Field, but NOT when the very same units are involved in producing an Electrostatic Field: for, in that case, one end of the string of units begins with a high energy content, in contact with the "causing" charged particle, while the other ends with literally zero contained energy.

So, any strings of magnetons in the two fields are clearly differently organised.

In an electric field they always have a declining content, moving outward along any magneton strings, whereas in a magnetic Line of Force they all have the very same content. Indeed, powerful Lines-of-Force are short, whereas weak Lines-of-Force are long!

Could it be that terminating magnetons, with "near zero" energy content have no distinction from free-moving magnetons, and hence mark the actual edge of the electrical field, whereas "higher energy" magnetons (in Lines of Force) have more magnetic attraction to link with others of its kind?



So, somehow, in Lines of Force, this property will only terminate when a full circle of such units has been formed?

Now, surprisingly, Magnetons of the same energy content in electrical fields actually form spherical shells surrounding an essential, initialising charge, but are NOT linked "magnetically" to each other: their only connections are inwards to the electrical Charge, and outwards to further added magnetons, though only rarely in complete strings!

Magnetons "seem" to be empowered by context, to attract energy from elsewhere. So, once attached to a charged particle it seems to draw in energy. But, in contrast, if a free moving magneton, somehow, receives a gobbet of energy, it will attract another free moving magnetons to join it, "at both ends", to begin to build a "magnetic string" all possessing the same contained energy.

Now, if the ideas formulated so far are correct, high energy nascent strings will form short loops then stop growing, but lower energy nascent strings will grow into larger loops, but neither of these will, as yet, be coherent parts of any actual fields.

To form an extended magnetic field, incomplete or broken strings would have to find the highest energy string with two ends available. What would make it so, would have to be a specially conducive context!

Completing the loop would always be strongly possible in the most conducive environments - like, for example, a concentrated source of recently released, high-energetically-endowed magnetons, as with a currently being-actively-dissociated electrical field of a moving charged particle, crashing into the background Substrate!

NOTE: I have to admit that this approach does not yet inform my attempt to see the impact of a moving, charged and field-endowed particle with the quiescent substrate topologically. That will still have to be cracked when considering the interaction of the Solar Wind, with the Earth's Magnetic Field: and, of course, in the problems of origins.

Clearly, any pluralistic approach can never even address the problems posed in these questions. For you cannot simply work outwards from entities with properties, obeying fixed Laws. The situations being addressed will just have to be treated holistically! For linear (formal) reasoning will never suffice.

Caused-effects can rapidly become *causing*-contexts, in themselves, and the energetic empowerment of produced patterns changes their relative dominances in rapidly changing, multi-factor situations.

The prior Legoland-type constructions will never cope: for, in such circumstances, the constructions affect their own units of construction, as well as delivering a different environment for adjacent developments.

We have been seduced by the seeming permanence of produced Stabilities, into seeing them as the key elements of Reality. But, they are not!

They indicate when the active, producing factors in Reality have been emasculated temporarily into inert, unchanging cancellings-out! We thus developed a Science of Stability, useful in naturally stable situations, OR in artificially stabilised-and-maintained situations - Pluralistic Science. But, it can only *describe* complication: it can never explain it, for that would require the study of Reality-in-Change - Holistic Science!

## The Solar Wind & Magnetic Fields in a Universal Substrate

### Part III: The Cause of the Earth's Magnetic Field?

The reason for the Earth, and many other planets in the Solar System having Magnetic Fields is not yet firmly established, yet is usually put down to the presence of a mostly-Iron (Fe) still-liquid core, due to its collisions-based-origin as a planet, producing a very high early temperature, and the planet's possibly similarly-caused overall spin! For, a metal such as Iron is very easily separated from its single outer Electrons, which can then be caused to follow closed paths in the core and "hence deliver an associated Magnetic Field"(?).

But, there is a problem.

The Earth's Magnetic Field flips-around to the exact opposite orientation, every million years or so! And, that is NOT easily explicable by such a sole-contribution. The regular flipping would require an ongoing stream of minor changes (from without), that undermines the stability of that Field, until at some point, it causes it to flip.

Now, although the majority of the Solar Wind from-the-Sun, is, indeed, deflected by the Earth's Magnetic Field, some of that Wind's High Energy particles do, in fact, manage to swoop in, at the magnetic poles - so a major contribution to such planetary Magnetic Fields might well have been the Solar Wind itself as the primary constituent to its Origin too.

Now, in addressing the major question of the interaction of the Solar Wind with the Earth, the above suggested origin and consequent history of the Earth's Magnetic Field and the continuing contribution of it to the trajectory of consequent changes, makes the addressed situation part-of-a-Movie, rather than of a stationary-Stability.

And, the dominance in consensus scientific thinking of the Second Law of Thermodynamics, actually re-directs all such trajectories downhill towards a final demise to all such processes, whereas in actuality, the more we find out, the more the *evolution of Reality* is revealed to be in the exact-opposite direction!

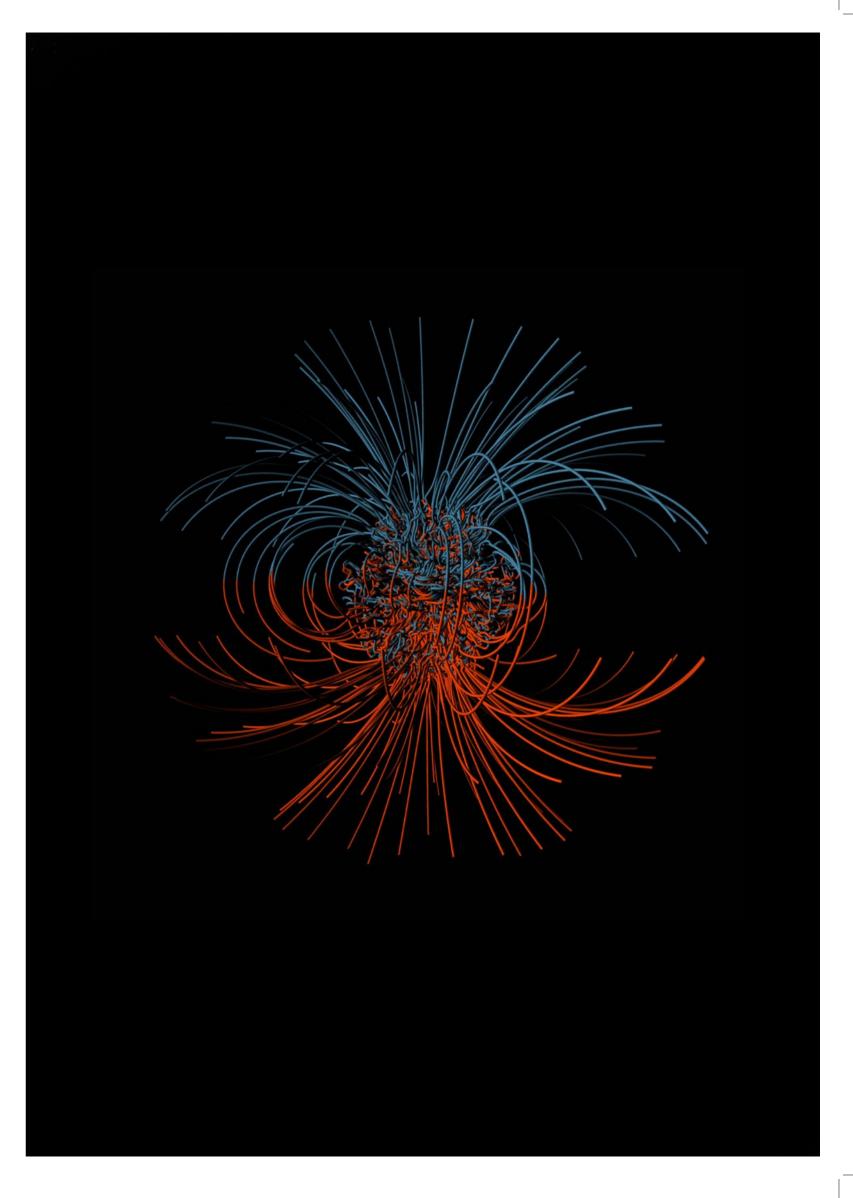
Even the Theory of Emergences (2010) sees every seeming Nadir of Dissolution NOT as a dead-end, but, on the contrary, as "the most unbridled opportunity for the Emergence of the Wholly New!"

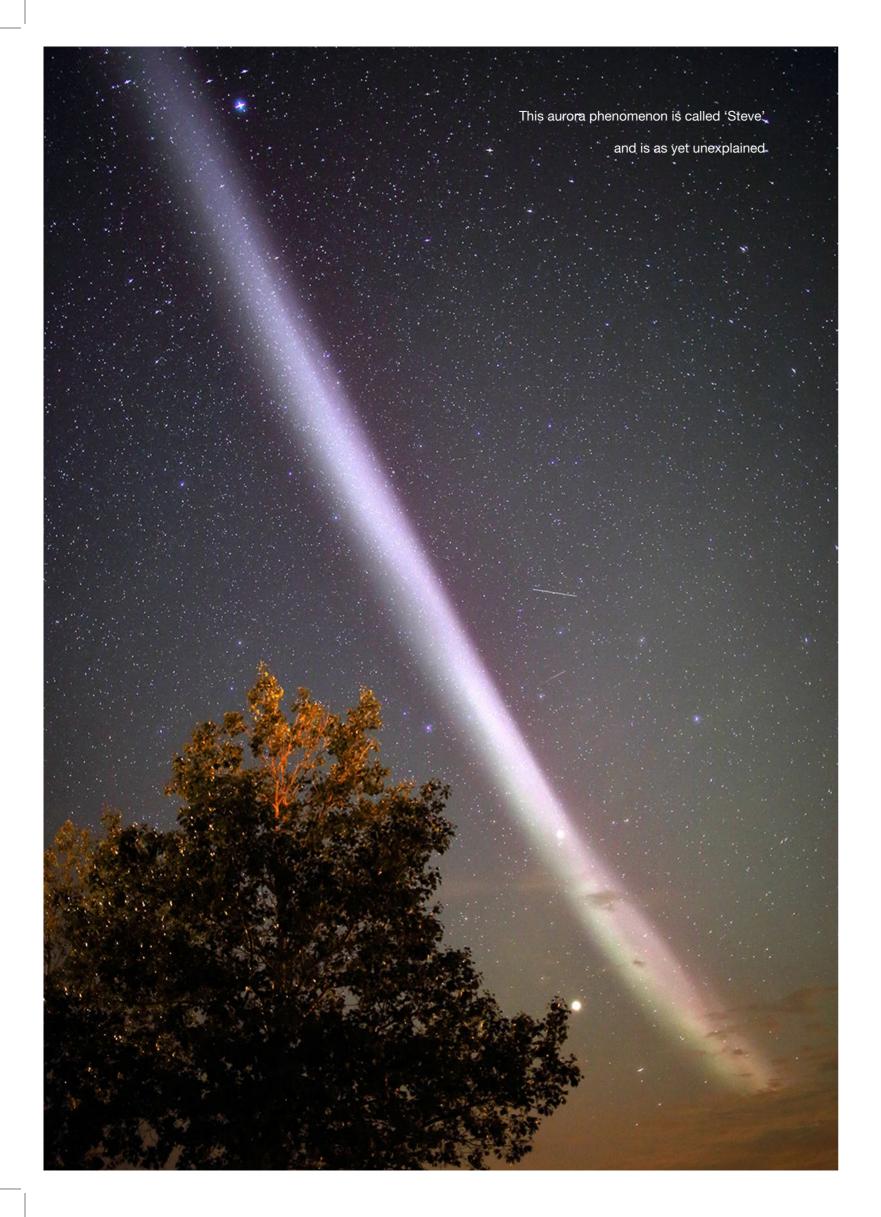
Let's face it: the Origin and Evolution of Life has been a concrete part of this *Development* of Reality - as has been Man and even Consciousness!

Downhill scenarios are inevitable symptoms of prematurely-imposed limits upon the processes of creation - usually by purely mechanistic and pluralistic conceptions of the Nature of Reality. As soon as a truly-holistic approach is embraced, development can only be self-enabling and open-ended. Literally none of the "truths" we unearth are absolute. None of the laws eternal - though some stabilities may persist for unfathomably long periods of time.

We are not revealing one-truth-after-another, to ultimately arrive at a Nirvana of Absolute Knowledge, BUT, on the contrary, moving from one set of extracted Objective Contents to a better set. Reality itself is self-moving: and the appearance of Mankind, rather late in the cosmological day, is the proof!

That being established, our study of The Solar Wind and The Earth's Magnetic Field becomes an ever-changing laboratory for delivering the nearest available place to





Study Turbulence and Creative Change in constant motion!

So, why do I give it such status?

It is not least because it is all taking place within a suggested undetectable Universal Substrate of great complexity and qualitative variety.

And, perhaps surprisingly, due to its immensely slow tempo, it has a readable history in the very rocks that still make up the Earth's current crust, which will contain evidence of past magnetic circumstances over billions of years, and even sound proof of ancient atmospheric contents and climatic conditions.

Bringing all these to bear in the intended study, involves working in a Foundry of Creation, in the context of an available History.

Now, for well over a century, scientists have dispensed with the concept of a Universal Substrate, primarily because they have never been able to detect it (let alone analyse it), so all experiments assume propagation of radiation and all the various fields, such as magnetic, can occur in basically totally-Empty-Space, and even usually insist upon conducting laboratory experiments in artificially achieved versions of that (or so they think), to enable undivided attention upon the supposed active elements involved.

But, altogether too many phenomena not only infer such a Substrate (though admittedly currently undetectable) by its possible affects upon contained phenomena, AND their effects upon it!

Indeed, the theoretical assumption of just such a Substrate (by this theoretician) has explained all the anomalies of the Double Slit Experiments, and he is currently well-advanced in a total dismantling of the whole Copenhagen Stance - on the very same basis.

Indeed, even more fundamental explanations have proved possible concerning, for example:-

- The Propagation of Electromagnetic Radiation through "Space"
- Action at a Distance.
- The nature of both Electrostatic and Magnetic Fields occurring in the "supposed Empty Space". and many others.

There is even a full explanation of why the suggested Substrate is undetectable - in terms of its composition, and the investigations and theoretical suggestions have even arrived at a detailed description of various very different Substrate Units in a very wide Hierarchy of Levels.

Now, the ideas considered in Part II of this series of papers. completely change the problem of the Solar Wind's interaction with the Earth's Magnetic Field, because of the unavoidable involvement of the Universal Substrate, AND, unsurprisingly, its physical effects upon that interaction, and, indeed, its own transformations due to the phenomena taking place within it!

And, as soon as that is accepted, the basic Physics of the Wind and Fields interactions becomes a set of phenomena of the Substrate, affected-by and alsoaffecting the colliding entities of the wind.

Now, this, in one sense, doesn't seem to be the best time to be undertaking such a task, for the assumptions and methods of Holistic Physics are by no means yet established... But, on the other hand, where else could the initial steps possibly be made? And, as previous experience concerning the Universal Substrate has proved, a theoretical approach simply must be where to start (as it always has to be in Cosmology, for it cannot be re-created in the Lab)!

The method which had to be adopted by Yves Couder, in his Walker experiments, prove the case, for he had to both dramatically minimise the contents in his experiments, use a very different liquid easily-studied substrate, and conduct them at the macro level, to enable him to throw any light at all upon what was happening within atoms at the Sub Atomic Level: and it worked! His initial motivations were certainly theoretical.

So far, I have limited such speculations to a single charged particle, ploughing through my conception of the Universal Substrate. But, the Solar Wind seems to contain equal numbers of positively-charged Protons and negatively-charged Electrons, so, as two opposite, but maybe intermingled, showers of Plasma particles will certainly be involved, and considerable numbers of particles involved, no easy complication of a pluralistically derived set of cases would be possible - even using the currently accepted methods -[ either pre-Copenhagen-Classical or Copenhagen-Probabilistic!

Yet three-dimensional topological forms are what is required, probably involving turbulences and even vortices, to have any chance of real explanations.

So, Part IV wil begin the attempt to bring all this together in a wholly new Holistic way!

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#### Part IV:

# The Ongoing Cataclysmic Interaction and Consequences both Now and Later

A brief, single-particle description of the Solar Wind's interaction with the Universal Substrate, was outlined in Part I of this series of papers. But clearly, we cannot just quantitatively-sum multitudes of both those caused by Electrons and those caused by Protons, purely statistically.

For being opposites, such a process would tend to nullify both, or alternatively flip from one dominance to its opposite as in all Dichotomous Pairs!

It will, of course depend upon exactly how such forms are produced in the Sun, as to how they relate to one another in the then produced Solar Wind (no longer intimately associated only with the Sun). But, the very fact that they don't simply cancel out, seems to infer some kind of maintained separation between them, preserving their separate integrities, significantly-enough, for them to be dealt with as distinct showers (at least for now).

But, even a distinct shower of a single kind, would involve some integration of their multiple electrostatic fields, AND crucially the effect of this phalanx upon the encountered previously-quiescent Universal Substrate.

And, quite apart from a consideration of the "front" of such a shower, there would be a continuing situation throughout the rest of the shower - presumably generating and maintaining a perpendicular magnetic field accompanying the shower -throughout its length, long before it even encounters the Earth's enormous Magnetic Field itself!

So, if these initial assumptions are correct, the collision of the Solar Wind, with the Earth's Magnetic field, will have three aspects:-

- 1. The interaction of all the magnetic fields
- 2. The effects of the shower of charged particles upon the Earth's field.
- 3. The effect of the plasmas getting through to the Earth itself, and diving in at the poles.

Now, with two kinds of plasma-particles, with their associated electrostatic and magnetic fields, as well as the reasonably static Magnetic field of the Earth, we couldn't ask for a more holistic, and potentially dichotomous event: yet unlike a classical Emergent Event, as addressed in the Theory of Emergences, this would instead be literally-continuous - though, as we already know, occasionally forcing a complete flip in the Earth's Magnetic Field (about every million years).

Clearly, if you were to choose the perfect place to study holistic, qualitative change, this would be it!

NOTE: Now, because of the actual trajectories of all the many participants in this Epic though it will display local interludes of stability, they will never be permanent, and the various crises which could precipitate an Emergent Event in one particular part or another, will only very, very rarely happen simultaneously, or be major enough to precipitate a cascade of crises culminating in a general-everywhere-involved Emergence!

But historically, if the actual cause of the Earth's Magnetic Field was indeed the effect of the Solar Wind upon the liquid core of a recently formed Earth: then the gradually building of that field would ultimately react back directly via its Magnetic Field upon the Solar Wind that caused it, while in time, still being affected by it, to, at some point precipitate a complete flip of that same field!



# **Symptoms of The Retreat in Modern Physics**

## Part I: Electron-Positron Plasmas or Interstellar Substrate

The pressure to consider both Electrons and Positrons as crucial early components of our Universe is finally elbowing itself onto the current agenda in Modern Physics and Cosmology.

But the Stage onto which it is trying to enter is already crowded with charlatan performers, with both unsound philosophies and consequent mythical "Storylines", which have been constructed merely to-fit-Reality, rather than to actually explain it.

Perhaps, the most distorting, enabling-principle is that foundation stone of the consensus tradition, which has a central role for inevitable Electron-Positron mutual annihilation into Pure Energy, as the basic engine of the Big Bang, or arleast what follows it! An article in New Scientist (3153), which is dealing with this new approach, cannot get past the inevitable Mutual Annihilation of these particles, when in their normal state, so they take the route that is also pursued by the Electric Universe Group, and consider instead, their possible "Plasma Form"!

For, taking the ions-plasma-model (as in the Solar Wind), with very high energy particles of opposite electrical charge, the Electron-Positron-Pair don't either join-together or annihilate, but, instead, surge separately as the components in a Plasma Stream!

Now, the writer of this paper pursued a much lower energy union, in circumstances where the only possibility was seen to be the inevitable mutual annihilation on contact of the particles involved, but considered, instead, the mutual-orbiting of these two particles as both possible continuing and even stable joint entities.

Kept apart by the energy and directions brought into the interaction, they would never be in contact with one another, but only in orbit around one another.

Such a joint-particle entity would be invisible to all the usual means of detection! For, it would have:-

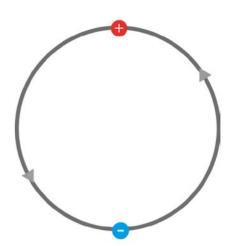
exactly equal amounts of matter and antimatter zero overall charge zero magnetic moment

But also, its joint-orbit could be promoted to carry energy - just like the electron orbits in atoms!

So, while our "co-workers" (in the article referred to above) concentrated solely upon Plasmas of these two basic particles, this researcher, instead, considered very low energy versions, actually filling Space as part of a totally undetectable but both effectible and affecting Universal Substrate.

These very different chosen paths reflected the underlying stances involved. By abandoning materialist-explanation for purely-formal-descriptive Equations, the Copenhagenists (and others) no longer sought to understand Reality, but instead find ways of using its evident features towards some achievable practical ends.

They abandoned the Science of Physics, for the Engineering of Possibilities.



Now, I contend that such "cherry-picking" of known features, without an also essential establishing of a significantly-similar context, is all that can be subscribed-to, by those who have abandoned materialist explanation, while at the same time still adhering, uncritically, to the Principle of Plurality - which always defines causality as being due to wholly separate and eternal Natural Laws - which by such a stance are therefore completely independent of context.

The opposing Principle of Holism rigidly insists that no law can be independent of its context, but is, in fact, actually determined by it! There may well be a dominant Law involved, but it never totally negates all other factors present! And, they change it, so only the full context can deliver the Law-as-it-acts naturally.

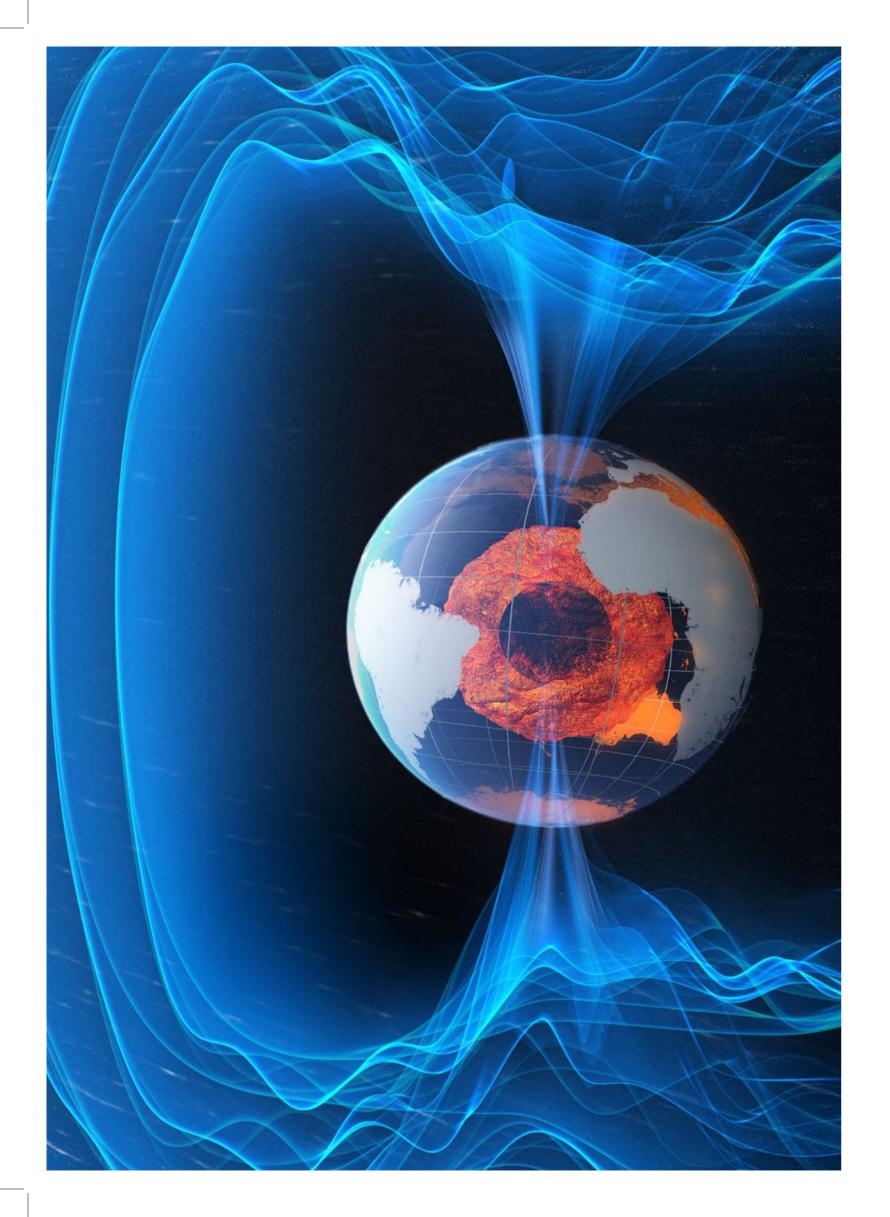
NOTE: Pluralist Science gets around this, first by the Construction, and then the detailed Farming of that Context to such an extent that the remaining dominant Law, is clearly displayed, and can be extracted! BUT, it can only be used-as-such, if that farmed context of extraction is identically replicated for use.

And, it is then also vitally important what this means for the method involved - the so-called Scientific Method: for it can never deliver the actual Law but only ever a version of it within an artificially-stablised context - Pluralist Science is limited to Stability only.

Any non stable situations are excluded from being addressed. So this is no purely theoretical assumption. Only a Holist, materialist explanation can always be totally aware of context, and, because of this, can make inferences from one situation to another, based upon that understanding,

It is crucial, because it legitimately allows the extension of understanding beyond Particular Instances: it is a generalist approach.

In contrast, the pluralist approach allows selection of causes from a "Bag of separate, and eternal Natural Laws", if-it-fits, totally regardless of context. and then, "If it works, it is right" - the always available Pragmatist tenet, allows any speculative "explanations" illegally!



### Addendum

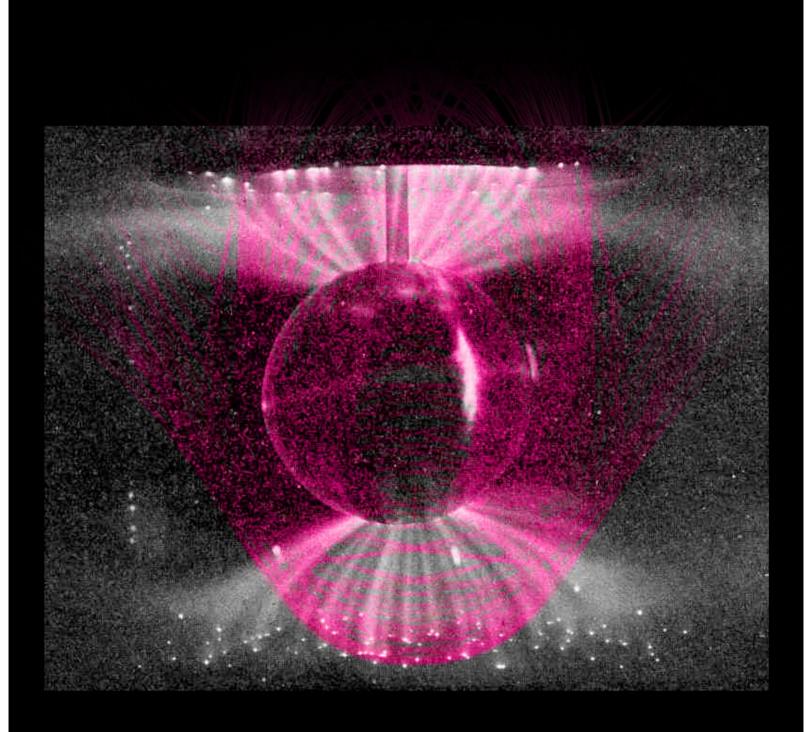
Since this issue was written, and while we were "going to press" as it were, some interesting evidence came to our attention which may support the notion that the Earth's magentic field was originally 'seeded', and continues to be supported by the Solar Wind.

A paper entitled Solar wind induced magnetic field around the unmagnetized Earth (2004) by G. T. Birk1, H. Lesch1 and C. Konz2, looks particularly relevant in this regard, as does this excerpt from Natural Resources Canada website, an article entitled Generation of the Earth's magnetic field:

"Even before the Earth's magnetic field was first formed magnetic fields were present in the form of the sun's magnetic field. Once the process is going, the existing field acts as the seed field."

There's some really intriguing, and seemingly holistic science going on in this area of physics - but further research is required to work out its veracity and its significance to our own theories regarding magnetism and the Universal Substrate.

Watch this space: The Solar Wind III is already in preparation!



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