

WORK IN PROGRESS

Threshold Science

by M I Finesilver

© Pathway Initiatives (England) 2013->
www.pathwayinitiatives.co.uk

ISBN 978-1-900034-074

CONTENTS

3	Introduction: Threshold Science is..., The primacy of consciousness
5	<i>The Becoming of Cosmos out of Chaos</i>
7	The three primal universal principles
	1. <i>Universal consciousness</i>
9	2. <i>Polarity</i> (2 diagrams)
12	3. <i>Resonance</i> (1 diagram)
15	Cosmic time: <i>Descent</i> → <i>Ascent</i> eras, current <i>Transition</i> phase
16	Science in context
17	Power, force, energy, matter...
16	The 4 Fundamental Forces/Interactions (diagram)
17	<i>Particle, Poly-rhythmic pulsation</i>
19	<i>Boysworld science</i>
20	<i>Dark matter</i> = Gravity, <i>Dark Energy</i> = <i>Levity</i> (+diagram)
21	The Quantum Dimension
	<i>Aether</i> = <i>Quintessence</i> = <i>Quantum vacuum</i>
22	<i>Four-ness</i> diagram, 4 x Aethers
23	Chaos Theory
24	D2D: Torus, Vortex
27	Electricity and Magnetism
29	Involution/Evolution: Genes, genome, genetic manipulation,
39	Sex & gender, archetypal living forms
41	Ecology - a cinderella science
42	Digital: Artificial Intelligence (AI), Secret science?
45	Have scientists been deliberately misguided?
47	Science & Mathematics in collusion: EMUs, non-repeatability
50	<i>Why is science such a turn-off...?</i>

Threshold Science

This work is essentially a small start towards investigating scientifically the significance of the interface/threshold/border between the *pre-physical* and the *physical-material* realms. A simple example of a *pre-physical* phenomenon would be the idea in an architect's mind of a yet to be physically constructed building. Which tells us that *consciousness* is an essential element of this aspect of reality called science.

The Threshold

The *Threshold* is, in essence, a dynamic transition or crossover level/zone /phase, and as such, loosely parallels the threshold levels in the physical-material world at which gaseous vapour becomes liquid water, and at which liquid water transforms into solid ice.

Conscious, incarnated human beings exist and function poised at this *Threshold* level, pulsating in rhythm with the pulsating cosmos, our minds functioning in the 'higher' vibratory realm of *consciousness*, our bodies in the 'lower' vibratory realm of physical *matter*. And it's our *vitality*, the essential quality of *livingness* that distinguishes us from corpses, that characterises the dynamic, intermediate, *pre-physical* level of being between pure consciousness and physical matter.

That level has for many centuries been known as the *aether*, and is also known in contemporary physics as *quintessence* or the *quantum vacuum*. This *aether* should not be confused with the the late 19th century idea of a '*luminiferous ether*' which was mistakenly conceived of and investigated as though it were a physical substance.

The male-dominated history of materialistic science, as a young, immature discipline, shows how most scientists have so far been unable or unwilling to acknowledge that there is a *pre-physical* realm of existence or being. Instead, they've tried to ignore it or deny its existence, while intently focusing on the physical-material phenomena of our world, as if this were somehow more 'real'.

Which is historically understandable, given the persecution of the early pioneers of physical science. But it is nonetheless an inadequate, unbalanced and therefore flawed outlook.

A psychological approach

Given the primacy of consciousness, ***Threshold Science*** is a psychological approach which views the whole discipline of materialistic science and its practitioners within their greater cosmic context, and thus as a sub-culture functioning within wider spheres of influence. So, issues within orthodox science are approached from beyond its own established limits and criteria.

Threshold Science principally offers a radically different, coherent and all-inclusive way of perceiving, understanding and dealing with this world. In this respect, the practice of *Threshold Science* be seen to resemble the way a psychologist might be asked to investigate why a particular organisation or individual is under-performing, even though the psychologist is not a specialist in the particular field of activity in question. In these situations there may well arise some resentment within such an organisation at an open-minded, inquisitive outsider entering a previously enclosed world – to assess its shortcomings and perhaps suggest improvements in how it functions.

Threshold Science is not an alternative discipline in opposition to current orthodox science.

However, it does (a) enable the whole range of contemporary science and its practitioners to be observed doing what they do in their greater cosmic context, and (b) allow for some re-interpreting of phenomena observed by scientists.

That's due to the powerful **overview** and penetrating **insight** gained from the *Threshold* perspective. Thus it involves investigating what influences the way scientists tend to think and behave. And that includes, querying to what extent they have questioned the assumptions, implicit or explicit, behind their commitments and conduct as scientists.

Coherence rules

The subtle power of the *Threshold* perspective has enabled various mysteries, enigmas and paradoxes of orthodox science to be resolved, which implies that other findings can also be re-interpreted, complemented and enhanced in various ways. The result of which is a realisation that **there is an overriding and underlying coherence in the functioning of the whole cosmos**, despite all the superficial 'chaotic' so-called 'randomness' and non-predictability. *Threshold* science could be seen as offering a kind of '*grand unified theory of everything*', but that's not the way *Threshold* thinking works.

The Becoming of Cosmos out of Chaos

Universal consciousness, beyond the scope of limited, earthbound, human minds, focused on a point within itself – for reasons beyond present human understanding. This focal point then instantly became the centre of a *pre-physical*, radiating, spherical wave, in the way that a pebble hitting calm water creates a circular radiating wave.

The spherical wave extended outwards, creating a sphere of a magnitude proportionate to the power of the initiating impulse within its medium. At maximum expansion, there began a contracting inwards, and the sphere became a potential **cosmos** (which means 'order') within that pre-physical medium of **chaos** (which means 'formless void, space or matrix'). So between the periphery and centre of this primal sphere, a vital **dynamic** was set up, a rhythmic pulsating of waves, inward/outward, generated by the tendency towards reunion. That primal two-way dynamic *is* pre-physical, potential **ENERGY**.

This raw, primal energy powers the universal rhythmical pulsation of **contraction** and **expansion**,

driven by the two primal cosmic forces, inward, contractive **GRAVITY** and outward, expansive **LEVITY***.

From that primary **polarity** arise secondary polarities, such as **density** and **rarity**, gravity-dominated, contractive **magnetism** and levity-dominated, expansive **electricity**.

These forces represent universal consciousness in both its **manifesting** and **redeeming** modes.

The continuous rhythmic interaction between the two primal forces creates **spherical standing waves**, like the 'static' circular standing waves formed in water. Within the primal cosmic sphere, these create a series of concentric sub-spheres, each of which resonates according to its size, relative to the primal sphere. So the primal cosmic sphere and each sub-sphere are all **resonant cavities**.

Resonance is thus the governing principle in this formative process.

Consonance is harmonious resonance and the discordant polar opposite is **dissonance**.

Inertia: stability and inflexibility

Towards the cosmic centre, energy is impeded by the **inertia** of the increasing density, as the 'weaving' of the alternating inward/outward energy, ie the **warp**, with the static **weft** of the standing waves creates the pre-physical fabric of space. And as the process of densifying and **amassing** reach a critical degree, **matter** is formed. So, inertia brings stability, solidity and structure, but also increasing inflexibility and rigidity.

A living, conscious cosmos

The original pre-physical sphere, the **cosmos**, is thus a conscious, living energy phenomenon. It's a pulsating, rotating, spinning sphere of influence – not a fixed, physical-material entity.

All the vortexing, spiralling, spinning forms occurring within it, organic and non-organic, are expressions of **energy**, the dynamic between cosmic periphery and centre, ie between contracting **gravity** and expanding **levity**.

So, within the intermediate **Threshold** zone, **potential** energy is of the **pre-physical** realm and **kinetic** energy is of the **physical-material** realm.

The **Threshold** zone itself is, essentially, '**the world**' of all human experience and knowing. A **vortex** is essentially a distorted sphere with its centre point drawn outside its perimeter.

So, it's a dynamic phenomenon in the form of a narrowing/widening spiral, generated when levity and gravity interact in a fluid medium. In linear diagram form, a vortex resembles the spiralling rotational path traced out by a point shifting between the periphery and centre of a sphere –

wider towards the rarity at the periphery, narrower towards the density at the centre.
The point of a vortex is thus the centre point of the relevant sphere.

* **Levity**, the vital, essential counter-balancing cosmic force to gravity, was arbitrarily decreed an invalid concept and banned in the 17th century by the then ruling science establishment, the Accademia del Cimento in Florence. Consequently, today most dictionary definitions corrupt the meaning of levity, reducing it down to a light-headed, trivial, flippant, frivolous, ie non-serious attitude. So, scientists now call levity 'dark energy' or 'Einstein's cosmological constant'.

'Gravitational waves'

The existence of *gravitational waves* – as 'ripples in the fabric of space' – was proposed by Albert Einstein, who also openly affirmed the existence of the non-physical **aether** and the universal expanding force of **levity**, which he presented in mathematical form as a *cosmological constant*.

In seeking to find ingenious ways of moving physics on from its limited mechanistic Newtonian paradigm, his *mind experiments* gave scope for some mental trickery – typically through imagining physically impossible situations and converting them into the form of abstract mathematical formulations, such as equations. For example, his $E = Mc^2$ is based on the assumption that there is a constant velocity or speed of light, something soundly refuted by other scientists, including Dr E. Bilimoria and N C Thomas in *Aether: the Transcript* ISBN 1-900034-10-7.

From the *Threshold* perspective, the attempts to detect so-called *gravitational waves* appear to be based on a materialistic misinterpretation of pre-physical *levity/gravity* pulsation.

The Three Primal Universal Principles

The power of the *Threshold* perspective is realised in the way it reveals the three basic *Threshold* principles according to which the cosmos functions: **consciousness**, **polarity** and **resonance**.

1. Universal consciousness

Universal consciousness is the primal, originating essence, the *no-thing-ness* beyond which our limited human minds cannot at present think. The *cosmos* (the Greek word *kosmos* means *order*) can be thought of as a pre-physical bubble, a spheroid rhythmically expanding and contracting around a central *focal point*, established by and within universal consciousness.

Within the cosmos, each human being, each *individual I*, is a subsidiary *focal point*, a unique animating centre or unit of consciousness, clothed in a range of layers of vibrating energy and matter. The basic dynamics of the whole formative process are outlined in *The Becoming of Cosmos out of Chaos*, a short section within *The Threshold Perspective*.

Science is ultimately about consciousness

The original meaning of the word 'science' is 'knowing', in its broadest sense, but it has gradually been narrowed down to the study of just the physical-material realm. Yet while the physical cells of the physical body are constantly dying and being replaced, consciousness persists, throughout waking and sleeping.

It follows that the so-called 'universe' is ultimately **universal consciousness**, and each individual being is one vital part of a universal conscious being, given that the root of the word sci-ence is the same as the 'sci' in con-sci-ous-ness, and essentially refers to 'knowing', in its broad sense.

For there would be **no science** without there first being curiosity, enthusiasm, willpower, perseverance and discipline... all aspects of *consciousness*. And further:

- **no technology** without the intention to apply scientific knowledge,
- **no invention** without technical know-how and awareness of need and desire,
- **no theories** without creatively recognising patterns of phenomena observed,
- **no mathematics** without abstract, logical, systematic, consistent thinking.

So, **consciousness**, in its many forms, is the foundation of all scientific activity. And the very practice of science is 'consciousness in action', directed towards understanding the origins, composition and workings of this living cosmos. Here are just a few pertinent quotes.

"...the content of consciousness is the ultimate reality."

20th century physicist, Professor Eugene Wigner

"...consciousness is a gift and we wouldn't be here without it."

21st century physicist and mathematician, Professor Sir Roger Penrose

"Consciousness is the ground of our being."

21st century theoretical nuclear physicist, Professor Amit Goswami

"...individual cells act with purpose, a higher order responsiveness, beyond chemistry, that all living things have..."

Biologist, Sir Paul Nurse

It follows that a materialistic discipline that is unable to handle this most fundamental, essential experience of the human condition can hardly itself claim to be a fully fledged science. Yet many who call themselves 'scientists' readily denounce the work of other investigators who are striving to reconcile the limited materialistic outlook with non-physical consciousness as 'pseudo-science' – a term that could justifiably be applied to themselves.

The primacy of (universal) consciousness

Once seen this way round, the primacy of consciousness becomes obvious. Yet orthodox Western science still persists with the delusion that consciousness is somehow a secondary phenomenon, a by-product of electro-chemical processes in the physical brain. Which is a bit like imagining that your television set creates the programmes you watch. This kind of thinking represents the self-deception, inertia, anxiety and arrogance resulting from an era of lost intuitive knowledge, a not knowing, passed on through many generations such that it has become institutionalised.

So, although an undeniable fact, the primacy of consciousness has become a self-sabotaging taboo, which requires scientists to keep coming up with devious ways of avoiding this truth. Consequently, imaginary entities such as 'genes' and 'memes', ie discrete units of instructions, information and memory have been conjured up and substituted for consciousness, including a 'God particle' – as if that somehow does the trick.

Universal consciousness can be acknowledged as a primal, essential, scientific fact, an undeniable reality that does not need to be characterised in recognisably human terms, for example, by religious organisations presenting themselves as agents for accessing it. Yet materialistic science continues to be vigorously defended, promoted and funded, since it doesn't question the hands that feed it and presents no threat to the political status quo. So, from a psychological perspective, it's obvious that this charade continues because many eminent careers, reputations and fortunes depend on its survival.

From the *Threshold* perspective, orthodox materialistic science has become a dangerously detached world, with its own arcane language that conceals from the rest of humanity much misguided, unbalanced thinking and dogma... a situation that has the potential for disastrous consequences, affecting all life on this planet.

That mentality also tends to discourage investigation into the world of science by outsiders. For much scientific research is sponsored and supported by financial, commercial and political interests who have their own agendas, and clearly do not have as their priority the wellbeing of humankind as a whole.

Seeing the world of science in its greater **context** and investigating the **motivation** behind all 'scientific' work therefore has to be a major priority... since cultures steeped in the values of the *descent era* lack certain vital knowledge, such as the *Threshold* basics. Therefore, the thinking of most scientists, as a result of their indoctrination within such cultures, has been severely limited and distorted.

Consequently, their notion of what is and what isn't 'proper science' has been compromised, such that **they have omitted from their investigations at least half of the total reality naturally experienced by all human beings...** ie the non-physical world of *consciousness*.

There's also a fundamental psychological flaw in the whole approach of Western-style materialistic science with its many branches and sub-branches. The problem here is a false

assumption that has evolved into an institutionalised *emotional reflex*. It results in scientists rejecting any ideas about nature and the cosmos that have any conceivable connection with transcendent notions such as divinity, mysticism or religion... although there are always notable exceptions.

That deeply embedded prejudice reflects an entirely understandable yet misguided, unbalanced, reactive attitude. It dates back to when the early pioneering scientists were persecuted by the then powerful but inertia-bound and bigoted Church authorities. And that historic conflict is what accounts for the deep, long running split in Western culture between the two camps... and the continuing materialistic indoctrination by the science authorities.

The existence of this attitude today echoes the *pre-adolescent masculine* tendencies that were predominant during that phase of the *descent* era when materialistic science first emerged in the western world. And the continuing prejudice and rivalries among scientists still leave them easily manipulable by State ruling elites and financial/commercial interests.

All of which refutes the so-called 'hard problem' of those Western scientists and thinkers who continue to ask: "*How does the brain give rise to consciousness?*" Consciousness is not a by-product of electro-chemical processes in the physical brain. It simply is the primal essence of the universe from which and within which physical-material forms have emerged. Without consciousness, there could be no science or any other mental activity.

The Identity Continuum (page 427 of *The Threshold Perspective*) hints at how an individual, a single *unit* of consciousness, can become aware of being part of the limitless, all-inclusive *universal consciousness*.

2. Polarity

Polarity, in its primal sense, is the dynamic two-ness of the complementary relationship between the periphery and centre of the one cosmos. This results in the poly-rhythmic pulsating, ie the *expanding* and *contracting* of the cosmos, as a whole and of all that it comprises, powered by the complementary polar opposite cosmic forces, expanding ***levity*** and contracting ***gravity***. The dynamic between the two forces is primal, potential ***energy***. And this understanding becomes clear and coherent in the context of ***D2D, dynamic 2-dimensionality*** (page23).

Polarity is a kind of duality that implies a greater all-inclusive oneness or wholeness, unlike the idea of ***binary*** duality, which is a dividing, 'either-or' concept that ignores the oneness or wholeness that incorporates both parts.

The universal principle of

P O L A R I T Y

Contraction **Expansion**

Gravity ***Levity***

Yang ***Yin***

Masculine ***Feminine***

Focusing *Radiating*

Probing *Yielding*

Penetrating *Accommodating*

Centralising *Decentralising*

Uniformity *Diversity*

Density *Rarity*

Magnetism *Electricity*

Containing *Releasing*

Inhibiting *Expressing*

Descent *Ascent*

Systole *Diastole*

Alkali *Acid*

(Universal ***masculine/feminine*** polarity is not the same as individual ***male/female*** gender)

Binary duality, by contrast, involves two opposites being treated as **mutually exclusive** by ignoring what's common to both, **as if** nothing unites them.

Polarity

the primal cosmic dynamic



The Three Universal *Threshold* Principles (in D2D space)

(D2D: the dynamic 2-dimensionality of *expansion/contraction*)

1. **Consciousness**: the original animating principle of the cosmos
2. **Polarity**: the dynamic between the primal inward and outward cosmic forces, *gravity* and *levity*, creating raw, potential energy.
3. **Resonance**: the vibratory rhythmic interaction between different parts of the Cosmos, *consonant* ie harmonious, or *dissonant* ie conflicting.

The universal principles of *masculine* and *feminine* are not the same as *male/female* gender.

POLARITY

of

Pleasure/Anxiety

via the autonomic (involuntary) nervous system

Expansion	<i>Tendency</i>	Contraction
Opening up, outreaching	<i>Attitude</i>	Closing down, withdrawing
Retarded	<i>Heart action</i>	Accelerated
Decreased	<i>Blood pressure</i>	Increased
Dilated	<i>Peripheral vessels</i>	Constricted
Constricted	<i>Pupils</i>	Dilated
Increased	<i>Saliva secretion</i>	Decreased
Relaxed, toned	<i>Muscles</i>	Paralysed
Bright	<i>Eyes</i>	Dry
Dry, smooth	<i>Skin</i>	Cold sweat, goose bumps
Slow	<i>Pulse</i>	Fast
Inhibited secretion	<i>Adrenalin</i>	Stimulated secretion
Increased	<i>Sexual sensation</i>	Decreased
Pleasure	<i>Experience</i>	Anxiety

Experiencing levity

The Hatha Yoga posture called *Tree Pose* is one simple and direct method of experiencing the polarity of *levity* and *gravity* in a very basic physical way. It involves standing erect on one leg

with the other foot tucked up against the inside of the standing leg, above the knee and pointing down, with hands palm-facing-palm, and arms extended upwards above the head.

Now, if you experience difficulty balancing and tend to tip over one way or another it's because you're being pulled 'down', ie towards the centre of the Earth. That is to say, the inward/downward force called *gravity* is overpowering the outward/upward force, *levity*, that draws us away towards the cosmic periphery. Letting yourself be raised by levity, you can experience an effortless sense of lightness – as opposed to wilfully exerting physical force in pushing against the Earth's gravity.

When you're anxious, fearful or cold, you physically tense up and contract, which makes your body more dense and more gravity-bound. So you feel heavier and are more likely to topple over.

Also, if your mind is chattering away and distracted from simply being here now, this too is likely to result in imbalance and gravity will prevail. The interplay of *levity* and *gravity* is thus the universal principle of **polarity** in action, and that dynamic is the essence of of primal **potential energy**.

This exercise also relates to one in *Threshold Mathematics* ('I breathe the cosmos'), both being concerned with spatial awareness in terms of **D2D**, ie **dynamic 2-dimensionality** (p23).

3. Resonance

Resonance occurs when a vibrating tone evokes a corresponding vibratory response – whether in music, in minds empathising, or when two physical bodies in orgasmic sexual union pulsate 'as one' and feel 'at one', ie in *resonance* with the cosmos.

Many kinds of *resonance*, physical and psychological, occur or are used in a variety of different ways, natural and man-made. In humans, resonance is experienced when there's *sympathy* or *empathy* between hearts and minds, and in the *aesthetic* vibratory effects of music, the other arts and design.

Chladni patterns (see YouTube) demonstrate visibly how musical tones can cause randomly scattered iron filings to form corresponding patterns when the surface on which the iron filings rest vibrates in *resonance* with the musical tones. The resulting rhythmical waves of energy passing across it organise the particles into a particular pattern.

Healing can be understood as a *reconfiguration* in tune with the harmonics of the cosmos. Thus an important area of enquiry regarding **resonance** is the subject of **wellness** and **illness**, and whether or not people, individually and collectively, are living in harmonious **resonance** with the rhythms of nature and the cosmos, as well as with other creatures. That is to say, do their ways of living create a more harmonious world or are they *dissonant* and clashing, causing discord, division, conflict, damage and pain?

Resonance is implied when, for example:

- Mentally, people are said to be 'on the same wavelength' or
- Politically, people are 'singing from the same song sheet'



RESONANCE

The Polarity of Resonance

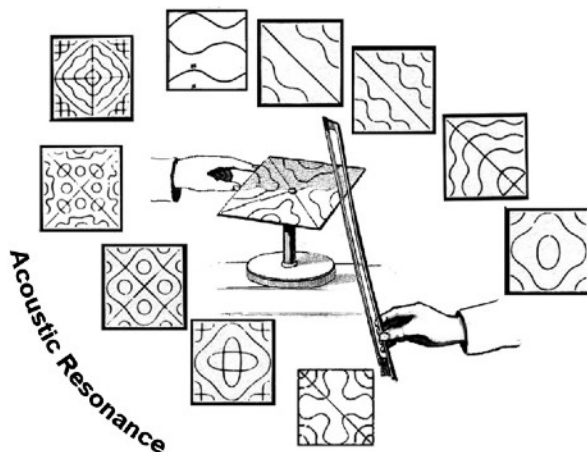
	Consonance	Dissonance
Physical:	Attraction /	Repulsion
Emotional:	Harmony /	Conflict
Mental:	Agreement /	Disagreement
Spiritual:	Unity /	Division

Psychological Resonance



Chladni Patterns

Sustained notes played with a violin bow against a metal plate cause fine particles to form patterns according to the pitch.

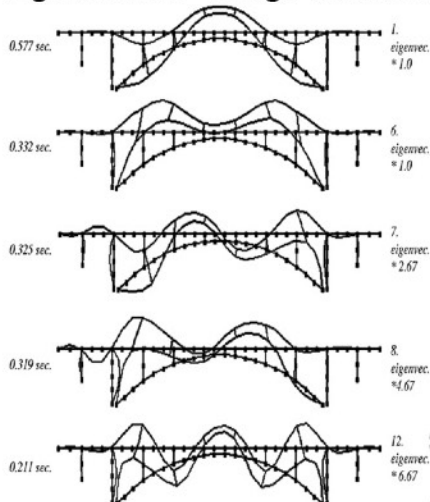


Shattering a glass



An appropriate and sustained note can build up vibrations with the resonant frequency of the glass - and shatter it.

Eigenvectors - bridge vibration



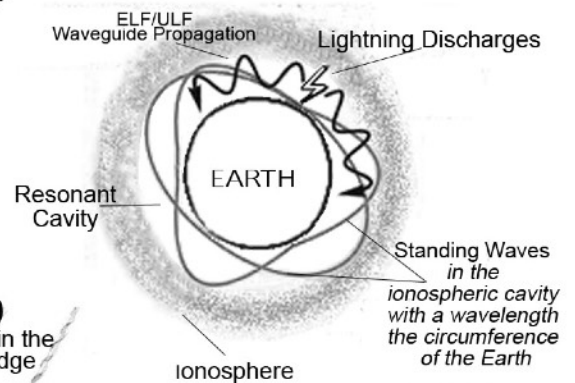
Mechanical Resonance

Tacoma Bridge (1940)

Winds caused resonant vibrations in the structure to increase until the bridge eventually broke up.



Schumann Resonance



Nuclear Magnetic Resonance (particle physics)
Magnetic Resonance Imaging (medicine)
Optical Resonance (mirrors and light)
Electrical Resonance

Cosmic Time

– alternating eras of ***descent into matter & ascent out of matter***

The ***descent into matter*** of universal consciousness refers to an ongoing era of cooling, slowing, solidifying and fragmenting. This ***involution*** of universal consciousness into matter is the process of ***manifestation***, and has given rise to all the temporarily separate phenomena that constitute the cosmos. The process is paralleled in such earthly phenomena as hot liquid volcanic lava cooling and solidifying into rocks.

The ***descent into matter*** has been an era in which the universal *masculine* principle, in all gender denominations, has been predominant, and is characterised by focusing, penetrating, consolidating, enforcing etc. But that era is now being superseded by its polar opposite, an era of ***ascent out of matter***. This is the gradual ***evolution*** of consciousness out of physical matter into an amorphous pre-physical state, and eventually back into consciousness, a process of ***redemption***, the polar opposite of *manifestation* and implicit in *entropy*.

The present time of ***transition*** is characterised by the more subtle, complex, fluid, radiating and less focused qualities of the universal *feminine* principle. This again is to be found in all gender denominations, since these universal principles are not the same thing as individual instances of earthly gender.

Thus the increasing emphasis today on subtly exerting influence the *feminine* way, for example by 'winning over hearts and minds' and through the manipulation of money and debt – that is, instead of the threat and use of physical force, ie the old *masculine* way. And there's also the ongoing disintegration worldwide of many previously 'solid' institutions such as the nation state, formerly the domain predominantly of men but no longer so.

In physics, Einstein proposed the necessary existence of a '*cosmological constant*' as the complementary, polar opposite, *expanding* force which counterbalances contracting *gravity*. That, essentially, is ***levity*** which has long been a taboo word in materialistic science. Since then, the increasing of cosmic *levity* relative to *gravity* has been corroborated by physicists observing the expanding, 'inflating' universe, and the weakening of Earth's magnetic field.

So, levity is essentially the tendency of the cosmos to revert to its default primal state, as the fluid, pre-physical *quintessence/aether/quantum vacuum*. It only becomes a force as a rebalancing response to centres of gravity being established.

The current shift out of an era of *descent* into one of *ascent* also explains why the overwhelming emphasis of Western medicine and medical science – predominantly *masculine* in character – has been on the *physical* aspect of disease. This has been a legacy of the *descent into matter* era of human evolution, while the rapid growth in *psychological* treatments and studies is another indication of the increasing recognition of the primacy of consciousness or mind... over matter.

Meanwhile, the present phase of shifting from one era to the next on Earth represents humanity's collective adolescence – and at least partially explains the turbulence, volatility and uncertainty on all levels of life currently being experienced worldwide, as deep, fundamental changes work through. This especially applies to people's sense of *identity*, individual and collective.

Science in its greater context

Threshold Science views materialistic science from way beyond the restrictive limitations which *physics* has imposed upon itself and the other physical sciences. Those limitations amount to an unquestioned assumption that the ultimate reality is a combination of *physical matter, energy* and *forces*. But, as certain eminent scientists have confessed, science is still unable to explain what it means by *matter, energy, force* or *power*. By contrast, the *Threshold* understanding of them is simple and straightforward (see below).

Power, force, energy, matter (and quantum physics)

Eminent scientists admit ignorance

*"Science fails to admit that it has not the slightest clue what **energy** is..."*

*"I think it is safe to say that no-one understands **quantum physics**."*

Physicist and Nobel laureate, **Richard Feynman**

*"Western science still doesn't know what **mass** or **matter** actually are..."*

as UK physicist **Brian Cox** admitted in a 2005 BBC radio tribute to Einstein.

*"Physicists don't really understand the concept of **force**..."*

according to Professor of Physics, Ian J Thompson, in 2004.

Power, in physics, is officially defined only in terms of **quantity**,

ie *"the rate of doing work, the amount of energy transferred per unit time."* (Wikipedia)

*"What **sex** is, why it evolved and how it works
are the biggest unsolved problems in biology."*

Steve Jones, eminent UK biologist.

Taken all together, that's a lot of 'not knowing' in contemporary science. By contrast, here's the *Threshold* perspective, briefly, on four of those basic concepts... plus a new one.

Threshold Science: four basics redefined

- **Power** is the capacity to effect change by directing force or releasing energy.

- **Force** is the directed exercising of *power* or *will*, in a physical or a non-physical way. The primary force exerted in the cosmos is the tendency towards *equilibrium* between *levity* and *gravity*, a stage on the way to the *redemption* of energy back into universal consciousness.

- **Energy**, in its most basic manifestation, is the dynamic, the *potential* between the two polar opposite, complementary, pulsating, cosmic forces, *levity* and *gravity*, observable as *expansion* (*yin*) and *contraction* (*yang*) as they naturally tend towards an *equilibrium* state.

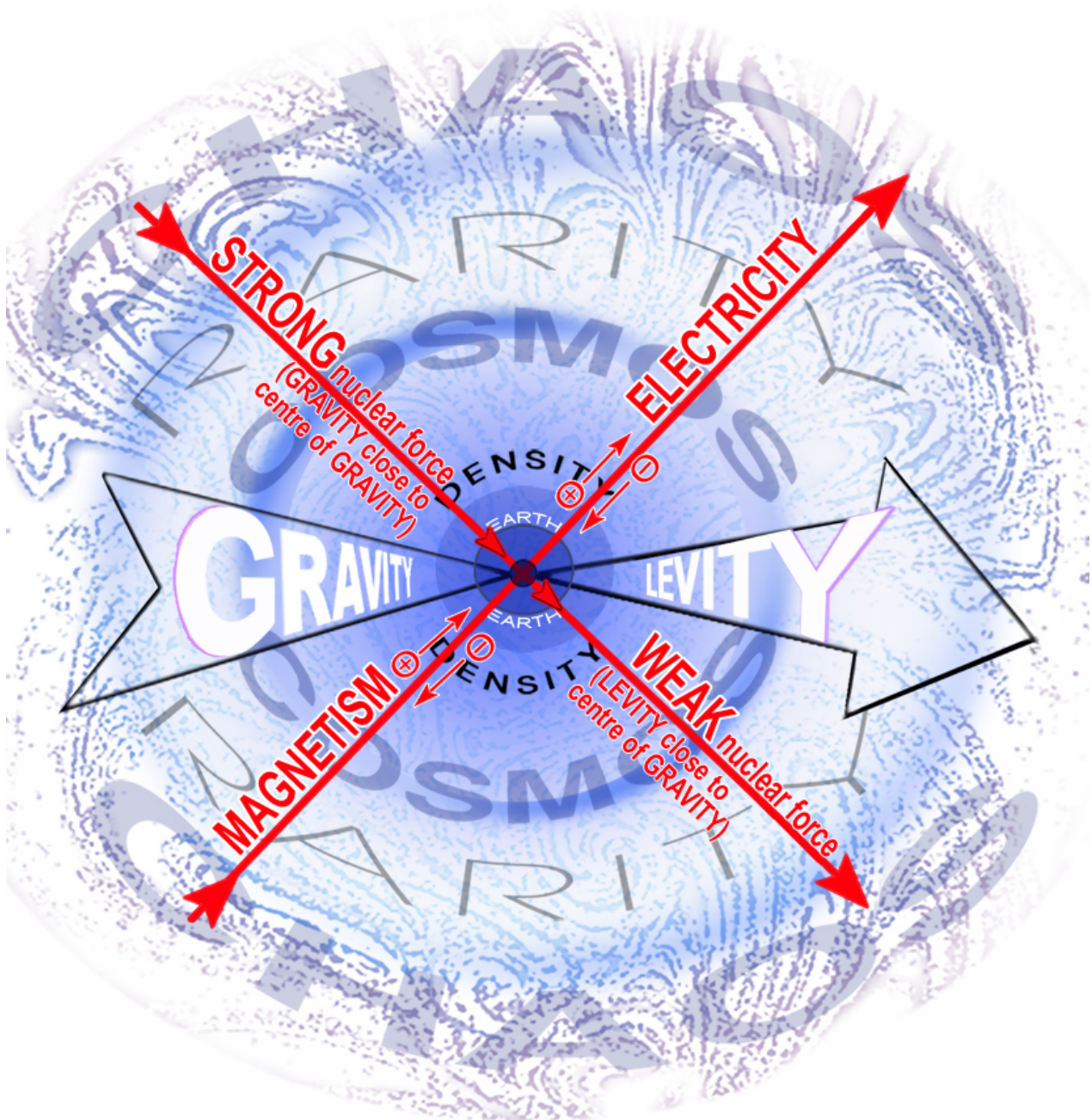
- **Matter** is created through spherical standing waves of pre-physical, potential *energy* being 'woven' by the inward/outward pulsating of *gravity* and *levity*, a-**mass**-ed and con-**dense**-d into physical form.

The 4 'Fundamental forces or interactions'... reconfigured

Defined in current physics as *gravity*, *electromagnetism*, the *strong nuclear force* and the *weak nuclear force*, these can, from the *Threshold* perspective, be reconfigured in a more coherent system. That is, as variations of the two primal, polar opposite cosmic forces, *levity* and *gravity*.

Here is a simplified diagram illustrating the universal principle of *polarity* in the cosmos, with regard to the so-called '4 fundamental forces or interactions'.

The 4 Fundamental Forces/Interactions of Physics - reconfigured from the *Threshold* perspective



Particle: a minute part or portion of...?

The phenomena called *elementary particles* are essentially micro energy patterns resulting from the interaction of *levity* and *gravity*, as observed with highly sensitive detecting equipment, able to register minimal transient physical traces of pre-physical activity. From the *Threshold* perspective, such so-called 'particles' are the focal *centre* points of primal spheroidal energy fields. Taken together, these central points and their fields constitute D2D forms which are parts of and vibrate within their greater pulsating cosmic environment.

The context or environment of particle physics is the so-called *quantum* level of being. From the *Threshold* perspective, this is the border between:

- (a) the dense physical-material realm where gravity exceeds levity and
- (b) the all-pervasive pre-physical level of rarity where levity prevails.

This accounts for the physicists' problem of the 'missing' *quantum gravity* with regard to the so-called '*4 fundamental forces or interactions*'.

Polyrhythmic Pulsation (PrP) is the universal principle of **polarity** in action, ie *expansion* and *contraction*, creating multi-rhythmical waves of primal *potential energy* in **D2D** space. Recognising this universal phenomenon brings vital insights into science, medicine and healing. The idea of *biorhythms* appears to allude to this spectrum.

The new version of science will necessarily include studying the *qualities* of different phenomena, for example the impressions, feelings and intuitive thoughts evoked by encounters with different aspects of the manifest world. For example, directly sensing *blueness* is not the same experience as recognising certain symbols that represent a particular range of wavelengths and frequencies in the electromagnetic spectrum.

The problem of dogma in science today lies not with the inventive, practical *experimental* scientists, but with the *theoretical* scientists. Why? Because they've been indoctrinated in a materialistic- mechanistic culture that tends to produce fragmented thinking, focusing on component parts and mechanisms, all translated into abstract mathematics. It's an approach that fails to appreciate the relationships between those parts and the greater living wholeness which they comprise and, beyond that, the unlimited potential of universal consciousness.

Threshold Psychology, which starts with the primacy of consciousness, emerges as the basis of all scientific investigating, and re-integrates science with all other areas of investigation, including the creative arts.

Boysworld science: groping in the dark

'Boysworld science' refers to the way some contemporary scientists still display certain characteristics of the early male scientists back in humanity's pre-adolescent phase. They were fascinated and excited by this new field of opportunities for experimentation, discovery, fame and fortune. But there was also fierce rivalry and a lack of responsibility for the many unfortunate outcomes resulting from their endeavours.

That was a few centuries ago, in the depths of the *masculine*- dominated *descent into matter* era. Yet contemporary materialistic science is still characteristically *masculine*, *dogma-bound*, *machine- minded* and politically impotent, despite humankind progressing in other ways.

Western science emerged as a distinct discipline during that *pre- adolescent* phase of human evolution on Earth, when people were increasingly thinking for themselves in ways that did not conform with those of the dominating 'parental' Church and State authorities.

As a result, current science can be seen as still broadly reflecting the mentality of a curiosity-driven, clever, *pre-adolescent boy*... obviously with many exceptions to that caricatured image. Typical characteristics of *pre-adolescent males*, across many cultures, are:

- a fiercely **competitive** drive to be a '**winner**', with the biggest, fastest, strongest, loudest, smartest whatever... a carry over from natural boyhood *pecking order* rivalries;
- a craving for **approval**, applause, prizes, admiration, authority and wealth;
- an insatiable 'What if?' **curiosity**, for example, 'What if I smash this or set fire to that?';
- a denying, ignoring or masking of any 'soft' **emotionality**, so as to appear more manly, sometimes coupled with a rebellious attitude;
- a **cop-out** tendency of irresponsibility, implying that science has nothing to do with morals, ethics or spirituality... and that involves adopting a fake neutral, '**value-free**' posture; a child-like passive **deference** towards strong, authority figures.

In Westernised cultures, the natural enthusiasm and curiosity of youngsters has been hyped up through education systems and the mass media, promising great opportunities and a glorified 'digital future'. Thus a fierce sense of competitive rivalry, along with a hunger for material wealth, have been continuously promoted as admirable traits. Selfishness in childhood is a natural part of growing up. However, when encouraged as 'normal' behaviour in adults, it becomes counter-productive, both to their societies and to humanity as a whole. Yet most people still seem unaware of how selfish greed is being promoted by ruling elites as a classic divide-and-rule strategy in order to control, distract and exploit whole populations... including scientists.

Thus, many young 'wannabe' scientists, desperately wanting to be *winners*, have grown up indoctrinated with a pathological craving for approval, prizes, applause, fame and worldly rewards for their efforts. Which, in science, may mean being the first to discover, achieve or produce something new. Seen in that light, certain less than honourable behaviour by various eminent scientists now becomes understandable, although not admirable, in retrospect... for example, the race to complete the so-called 'human genome'.

All of which has nothing to do with seeking *wisdom* and helping humankind to achieve an ideal state of *equilibrium* between the cosmic forces of *expansion* and *contraction*, and thereby a natural harmonic *resonance* with the cosmos and nature.

Dark matter = Gravity, Dark energy = Levity

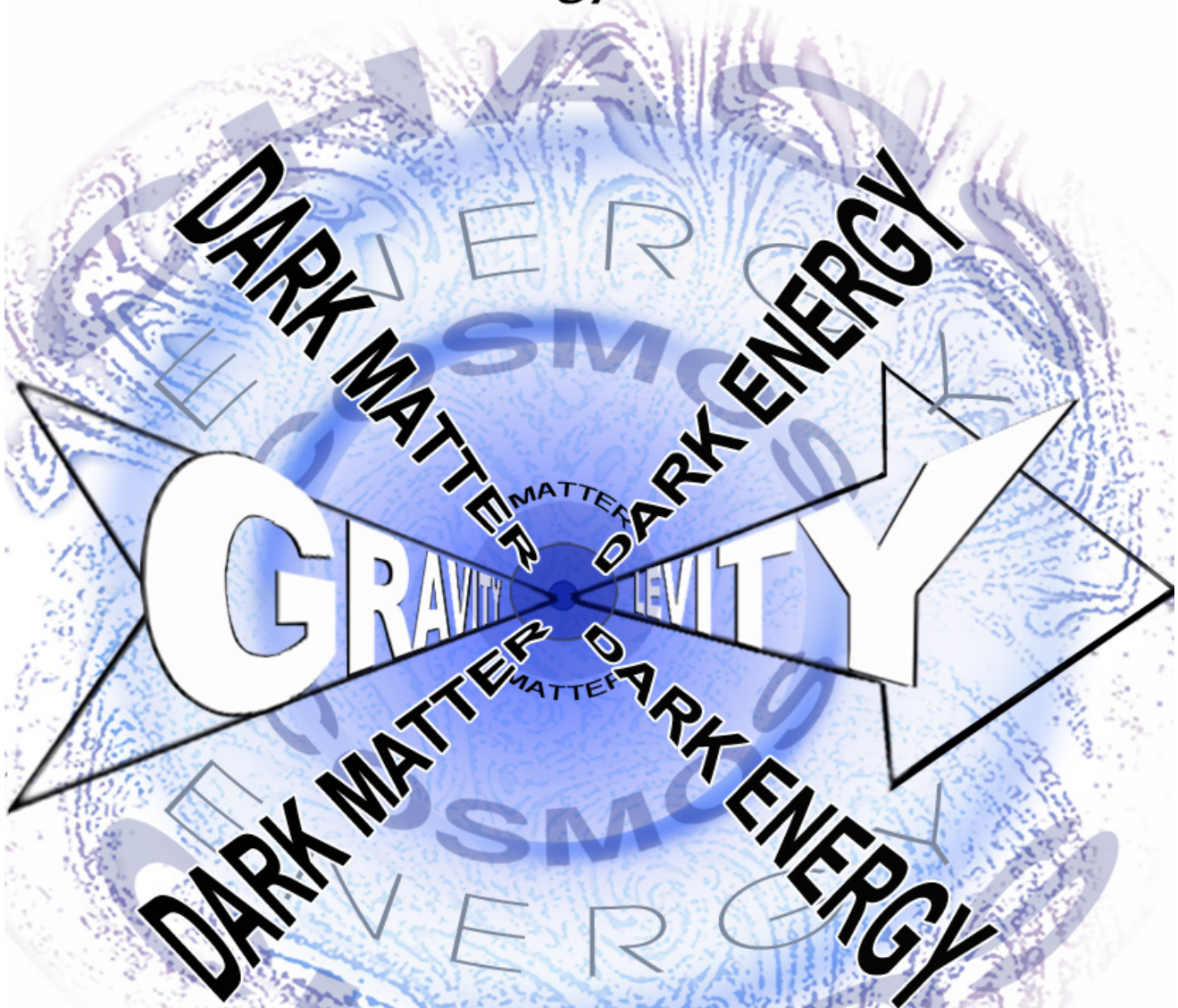
Gravity and *levity* are the two primal, complementary polar opposite forces of the cosmos. The dynamic of their continuous expanding/contracting interaction is primal cosmic ENERGY, ie *potential* energy, from the physical-material perspective.

So-called **dark matter** can be understood as a misconceived acknowledgement of the universal force of *gravity*. Conversely, **dark energy** can be understood as a misconceived acknowledgement of the universal force of *levity*.

From the *Threshold* perspective

***Dark Matter* is GRAVITY**

***Dark Energy* is LEVITY**



***Gravity* functions centripetally in physical space**

***Levity* functions centrifugally in pre-physical space**

Threshold Science is a free-to-download PDF at www.pathwayinitiatives.co.uk

The Quantum Dimension

essentially is the pre-physical *aether/quintessence*

Physicists may well be the last people to acknowledge this. Why? For a start, two key concepts, the pre-physical ***aether*** and ***levity*** (the polar opposite of *gravity*) remain excluded terms, and are thus still absent from orthodox science – for long outdated and redundant reasons, explained in *Threshold Science*. However, the artificial barrier separating physics from metaphysics is dissolving.

The existence of the ***aether***, long known by various names in other cultures, was explicitly affirmed by Einstein and Max Planck. Its most recent pseudonym in physics is, ironically, the ancient term, ***quintessence***, which literally means the 'fifth essence or element', ie the timeless *aether*.

This refers to a state of being **prior to physicality**, ie the ***pre-physical*** medium from which emerge the four traditional archetypal **elements** (*earth, water, air, fire*) which incorporate the physical qualities of the physicists' **four states of matter** (*solid, liquid, gaseous, plasmic*).

The *aether* also inherently has the quality of *four-ness*, two secondary polarities, as the following diagram shows. And one distinguishing quality of the *aether/quintessence* – which exists prior to physical, gravity-dominated 3D space – is its **D2D (dynamic 2-dimensional)** character, a primal expression of the universal principle of *polarity*.

The pioneering quantum physicists had penetrated, in a *masculine* way, to the ultimate central point and 'portal' of the spheroidal torus-shaped physical world, which is where quantifying ends. They then peeped through, and what they glimpsed was the pre-physical *aetheric* dimension in which everything appeared to them, paradoxically, to work in a counter-intuitive way. *Chaos Theory*, which emerged a few decades later, provided further clues as to how the pre-physical *aetheric* dimension functions.

So, trapped within an inertia-bound physical-material mindset, they came up with various quirky labels for the unexpected features of the quantum world, which, being non-physical, exists in a dimension more subtle than physical matter and energy. And not surprisingly, these features correspond with known characteristics of the timeless *aether*, for example:

- ***Entanglement*** affirms the immanent, all-pervasive presence of universal consciousness.
- ***Nonlocality*** indicates how *D2D* space is a subtle, pulsating, living, conscious continuum.
- ***Superposition*** implies the fluid, circulating, spatial and temporal *continuity* of the *aether*.
- ***Tunnelling*** exemplifies how *aetheric* forms *inter-penetrate* one another like pure light.

Aether = Quintessence = Quantum vacuum

In physics, *quintessence* refers to a hypothetical manifestation of the hypothetical *dark energy*. A brief re-interpretation from the *Threshold* perspective goes something like this. The original meaning of the word, *quintessence* is the pre-physical *fifth essence* or element that transcends the 'lower' traditional four elements: *fire, air, water and earth...* which themselves correspond to the four states of matter: *solid, liquid, gaseous* and *plasmic*. Meanwhile, the very names *dark matter* and *dark energy* imply that physicists are 'in the dark' as to what these imagined phenomena might possibly be.

Levity is the polar opposite cosmic force to *gravity*. But levity has been a taboo word among scientists since the 17th century when it was officially decreed unscientific by the Accademia del Cimento in Florence, despite Newton referring to it as the 'universal expansive force'. Consequently, scientists have had to keep coming up with new names for it.

Whereas *kinetic energy* is of the physical-material world, *potential* (unrealised, unmanifest) *energy* is of the *pre-physical* world of *quintessence*. The traditional **four-ness**, ie the four-way system of four elements, temperaments, humours, states of matter etc, also includes four aspects or levels of the aether/quintessence, known as the *four aethers*. These are explained in detail by Dr Ernst Marti in *The Four Ethers* (ISBN 0935690026).



Chaos: another kind of order

The emergence in the 1970s of ***Chaos Theory*** clearly affirmed the ongoing *transition* from an era of *masculine-dominated descent into matter* into one of *feminine-influenced ascent out of matter*. It did so by showing unmistakably how ***chaos*** involves qualities which are characteristic of the universal *feminine*.

Chaos is an ancient Greek word which refers to a womb-like, seething realm of *living energy* and potential before it has taken on a recognisable form. It's the polar opposite of ***cosmos***, a Greek word which means *order* – that is, 'order' as it has come to be understood during the *masculine-dominated descent* era of centralising, uniformity, straight lines, numbers etc.

Chaos Theory arose out of the practical realisation that trying to predict the weather could never be a precise science, because very small variations in initial circumstances can lead to big variations in outcomes. More generally, that idea plays out in how one small word, look or gesture can radically change the whole tone or atmosphere of any situation.

Chaos Theory is based on four main characteristics:

1. *Non-predictability* - inherent *disorder* at the micro-level, regardless of any order at the larger scale macro-level, makes precise predicting unreliable.
2. *Non-linearity* - the consequences of any event ripple outwards in all directions, and not simply in *lines* or *linear* chains of cause and effect, linked in a mechanical way.
3. *The Butterfly Effect* - a reminder of how tiny events can have enormous consequences if the 'ripples' build up through *resonance* into big waves.
4. *Fractals* - in apparently random or disorderly situations, fractal- type patterns can reveal a hidden inner order of repetitive replicating on an ever-decreasing scale. Generated by computer software using a particular formula, *fractal graphics* can powerfully magnify one detail of an image, artificially 'revealing' exact replicas infinitely 'inward'.

These appear to be why it was not welcomed by many scientists whose thinking, careers and reputations were based on the old *descent* era, *masculine*, mechanistic models of science – whether Newtonian or quantum mechanics.

Chaos Theory, by contrast, provides a deep understanding of various principles involved in Nature's workings, for example, revealing insights into the *random mutating* of Darwinian evolutionary thinking.

D2D

A dynamic 2-dimensional reality behind the 3D world

Contracting, expanding, contracting, expanding... everything, everywhere is *pulsating*: inward towards the centre, outward towards the periphery, in multiple coordinated rhythms. Everything is thus vibrating, but in another dimension, a different kind of space from the familiar physical 3D *box* space with its height, width and depth, corners, angles and edges.

That primeval medium is ***D2D*** (*dynamic 2-dimensional*) space, the ***pre-physical*** space of primal *expansion/contraction*. It's a spheroidal world of continuous pulsation between the centre and periphery of the cosmos and of each sub-spheroid. (A *spheroid* here means something approximately spherical)

These pre-physical spheroids function as *resonant cavities* – producing the legendary *music of the spheres* – like tuned, earthly musical instruments or other vessels, as Pythagoras demonstrated some two and a half thousand years ago.

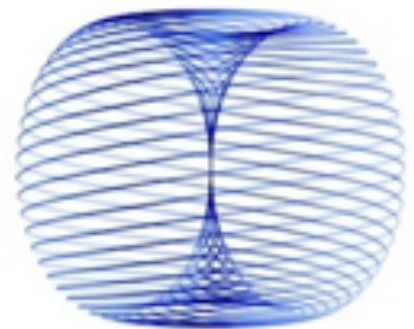
So, *pre-physical* space, as a manifestation of universal consciousness, can be inferred as being conscious and responsive in ways beyond the current comprehension of earthbound humans... who can, however, read and measure certain physical signs and gain a limited understanding of it.

That kind of awareness implies the existence of a range of levels of consciousness in the cosmos and, therefore, the possible presence of non-physical, conscious beings. These could be accessible to certain incarnate humans whose minds are not locked into a limiting, materialistic mindset, and could be benevolent, neutral or malevolent.

At the limits of human comprehension, where the terms ***infinity*** (space) and ***eternity*** (time) serve as signposts to an unknown ***beyond***, further questions arise which cannot as yet be answered in worldly terms. For example: '**What prompts universal consciousness to focus in on itself and create focal points?**', ie centres of *gravity/contraction* which in response *expand* with the polar opposite force of *levity*, according to the universal tendency towards *equilibrium* between the two forces.

The archetypal ***torus*** form (see below) offers a clue as to how energy is shaped by the dynamics of the two universal forces into temporarily distinct forms, which may then materialise or not.

Torus and vortex: archetypal natural forms in D2D space



The **doughnut/ring torus** represents a degenerate version of the primal **spherical torus** – abstracted by mathematicians into an idealised, static 3D form, and therefore more inertia-bound, tending towards materialisation.



The torus form, from the *Threshold* perspective, represents a transitional phase/state between the pre-physical and physical-material states of being/existence. It serves to illustrate how the pulsating **D2D** nature of primal **energy**, resulting from the basic dynamic between *levity* and *gravity*, forms a sphere around a centric *focal point* of **UC**.

Within this transient sphere, the pulsating energy creates a series of pre-physical concentric *spherical standing waves* which form *resonant cavities*. So, towards the centre, density increases as *gravity* overpowers *levity*. And the line of force created by the interaction of *levity* and *gravity* forms the *axis* of the torus, as a column of spiralling energy.

The resulting double vortex *funnel-tunnel* which passes through the centre point of the torus-sphere, with its two apertures/orifices, is thus a continuation of the 'outer' surrounding pre-physical space.

So, the centre point serves as a portal, uniting 'outer and 'inner' space in accordance with the universal tendency towards *equilibrium* between the primal forces of *levity* and *gravity*. And the main enclosed body/space of the *torus-sphere*, between its timeless periphery and inner *funnel-tunnel*, can be taken to represent the space-time, physical-material world.

Black holes, as defined by contemporary physics, can be understood as *focal points* of universal consciousness. Thus condensed, they exert immense power over their surrounding, pulsating spheres, including galaxies etc.

So, the physical-material cosmos and all that it comprises are derivations of the primal, pre-physical *cosmos-torus*. Which is why the torus – when extended, compressed and otherwise distorted – is an archetypal image, incorporating the essentials of all living forms.

Realising that the cosmos is essentially a pulsating, rotating spheroidal torus, ie an approximately spherical torus, can help in visualising its **D2D** nature. The torus is a self-contained dynamic form which demonstrates unity and continuity of: (a) the inward/*centric*/*gravity-driven/masculine/yang* tendency and (b) the outward/*peripheric/levity-raised/feminine/yin* tendency.

The central crossover point of the double vortex '*funnel tunnel*' in every spheroidal torus form serves as a *quantum portal*. And through that threshold, that critical point of maximum *gravity* and minimum *levity*, passes **energy**, transformed from *pre-physical potential* energy to *physical kinetic* energy and vice versa in the opposite direction.

The vortex

The *vortex* is an archetypal dynamic phenomenon, formed by rotating energy being drawn inwards towards the centre of the *torus-shaped* cosmos, and outwards towards the periphery. Physical examples are tornados and water rotating down the plughole of a bath. They are also central to the idea of *black holes*.

Atmospheric vortexing energy

The huge and rapidly evolving subject of atmospheric *jet streams*, *climate* and *weather* could benefit from being viewed in the greater context of (a) the pulsating, living, *D2D* cosmos, and (b) the current *transition* phase from an era of *gravity-dominated descent into matter* towards one of *levity-dominated ascent out of matter*. However, the elegant simplicity of

D2D remains as yet too radical for orthodox scientists to adopt, although change is inevitable as the cosmic *transition* phase proceeds.

The mathematical **Fibonacci Sequence** is derived from the spiralling ***torus*** patterns that can be found throughout the natural world – eg in cones and nautilus shells. It results from the interaction between *contracting gravity* and *expanding levity* in the pulsating, spinning and orbiting of the planet and the formative effects of this.

Electricity and Magnetism

Electricity is essentially the centrifugal pull of the force of *levity* towards the cosmic periphery overcoming the centripetal force of *gravity*, as the cosmos tends towards an *equilibrium* state. In that process energy flowing from a weaker levity-charged field towards a more powerful levity-charged field along a line of least resistance is what is called an electric *current*. The path of the discharge is normally called a *conductor*, whether natural or artificial. And since electricity is a 'lower' form of primal, pre-physical, invisible *light* (see next section), electric technology is very much involved with the generating of light.

There is also a range of grades of electrical energy – from the gross *mineral* electricity, exclusively focused on by materialistic scientists, through the more subtle *bio-electrical* activity which occurs within living organisms, up to the *cosmic electric plasma*, detectable in the rarity of the atmosphere and beyond, and physically visible in the aurora borealis.

Living organisms experience, in all kinds of physical and mental excitation, electrical charges very different from that of a crude, disturbing, mineral electric current. For example, there's the pleasurable streaming of energy through the body when sexually aroused, what we experience in the heart or solar plexus as 'emotions', and the thrill of making a significant mental connection.

Magnetism

Magnetism is the polar opposite of electricity. In opposition to *expansive* levity, it's an expression of the *contractive* centripetal pull of gravity towards the centre point of any amassed matter where *density* and *weight* are at their maximum. Thus magnetism-based technology is often involved with the exertion of mechanical force.

Artificial electromagnetic and microwave radiation can, for humans, be an invisible, insidious and harmful form of pollution, well known to many scientists and engineers. But this unavoidable consequence of EM technology is widely ignored because of commercial pressures and professional career constraints imposed by entrepreneurs competing in a world where selfish greed tends to take precedence over concerns for human welfare.

What happens around mobile phones and their base station towers, around remote controls and around power cables is *not nothing*. The kind of waveforms they generate are affecting the subtle bio-physical receptors of many organisms, and thus human consciousness, in ways which have hardly begun to be understood. Some investigative joining up of dots here is long overdue, to link up the increases in various unexplained contemporary disease conditions in humans, animals and plants.

Light

Light, in its primal pre-physical state is a form of energy invisible to physical eyes, only becoming visible when interacting with physical matter. That fact has been clearly demonstrated through a simple 'light box' device, designed by Professor of Physics, Arthur Zajonc, at the beginning of his book, '*Catching the Light*'. This would be well known as a classic, elegant demonstration of a fundamental principle... if it weren't so potentially embarrassing for the physics establishment.

It follows that a *photon* is not simply a tiny point of light energy, but includes the whole vibrating field around the point, pulsating with waves of energy. Directed or focused light energy forms a vortex, widening out from the source point. Acknowledging this dynamic

polarity between centre and periphery, resolves both the 'wave or particle?' dilemma of physics and the apparent paradox of the famous 'two slits experiment'.

Also, just as there is no universally constant speed of air, **there is no constant speed of light.** Light itself doesn't travel, except for the 'front' of a surge of expanding light energy filling a space. There its velocity depends on the density of the medium through which it's passing... after which it simply and dynamically occupies the space, like air or water.

This is explained by scientist and former RAF electrical engineering officer, N C Thomas, in the book, *Aether - the Transcript* and on the CD-ROM, *Aether - Knowledge is Power*, in which a re-interpretation of Einstein's $E = mc^2$ is also expounded.

Psychologically, the scientists' notion of a fixed, constant 'velocity of light' is an example of the old *descent* era masculine urge to 'pin down' or 'nail' something, in order to fix it, name it, quantify and claim dominion over it... as in the capturing and killing of living butterflies in order to classify and display their corpses.

Involution/Evolution **and the futile, divisive 'creationists vs evolutionists' distraction**

The subject of *evolution* raises some of the deepest questions we can ask about our human existence, such as: *Who are we? What are we doing here? How did we come to be here?* and *How did we come to be the way we are now?*

However, addressing these questions in a clear-minded way is made all the more difficult by a long-running divisive conflict. That is, the dispute between those religious fundamentalists known as *creationists*, who take the biblical 'Seven Days' story literally, and those secular materialists, known as *evolutionists*, who deny any kind of meaningful creative processes driving Nature.

The materialists fear a return to worldwide domination by religious organisations, given the Church's history of dogmatic and cruel suppression of freethinking. The creationists, meanwhile, reject a 'value-free', secular world culture which denies any purpose or design behind Nature by reducing it to a series of random events, and teaches that life itself somehow arose spontaneously from nonliving matter. So, the subject has ended up being more about politics than science or spirituality.

One of the effects of this set-up is to distract minds from true scientific enquiry. So, the futile and distracting conflict can be and needs to be transcended. For there is a more mature, all-inclusive approach which reaches way beyond such limited alternatives, both of which are based on fear.

And this kind of fear itself arises ultimately from vulnerability due to a lack of certain vital knowledge.

Your journey from home to work could be analysed as a sequence of steps which add up to the particular route you took, with the result that you somehow happened to arrive at your workplace.

This is the materialistic view, which completely excludes one crucial factor: you intentionally made that journey, and that's what gives the whole process coherence. On the other hand it seems totally unbelievable that the wondrous garden that is this planet was delivered complete and up-and-running in six days flat... like a TV gardening makeover.

The transcendent *Threshold* view shows that all creatures are parts of an evolving creative process AND a creatively evolving process. And it does not rule out reading, say, the Book of Genesis as an encoded record of real processes unfolding over long periods of time.

In Darwinian evolutionary science – whether initiated by Darwin or others – there have evolved two major misconceptions. First, the false conclusion has been reached that humankind is the end product of a selective breeding process – somewhat like, but on a grander scale than the highly bred homing pigeons Charles Darwin himself studied. And, second, going further back, the idea that life on Earth arose 'spontaneously' from non-living matter – that is, from a primordial soup of chemicals. Attempts to come up with a recipe for this in the laboratory, however, still remain purely speculative.

On the origins of humankind...

Darwin simply said that '*Light will be thrown on the origin of man and his history...*' He said nothing about humans being direct, bloodline descendants of apes, although he foresaw

this as one controversial conclusion some would draw. Heated arguments for and against this notion have been going on ever since then.

'Natural selection'

Darwin himself said that he used the expression *natural selection* only as a metaphor. Which leaves unexplained:

- (a) what or who is actually doing the 'natural' selecting, and
- (b) the *motive* behind the selecting, which expresses an apparent 'will to survive'.

Darwin described the actual origin of species as 'the mystery of mysteries'. And it's significant that Darwin himself wrote that he used the expression '*natural selection*', which implies Nature purposefully choosing, only as a metaphor. As a metaphor for what or who doing what is not made clear.

Yet Darwinists continue to proclaim that there is an unbroken chain of heredity connecting humankind with apes of an earlier time – which would make them our direct, bloodline ancestors.

And this despite the fact that there have been unanswered questions all along about the so-called 'missing link' between apes and humans – which would have to consist of some conclusive fossil evidence of transitional ape-to-human forms. However, none has yet been found.

'Missing links' and fossil records

In the all-inclusive *Threshold* perspective, the post-Darwin dispute looks increasingly like an irrelevant distraction, the two opposed factions each exploiting Darwin's legacy for their own purposes. He had concluded that there is one naturally evolving creative process going on, and that through time it does leave traces as a pattern, a sequence of fossilised forms. BUT... such *physical* evidence as exists cannot explain the unfolding of the more subtle process, the continuing evolution of human *consciousness*.

The neo-Darwinists cite as their evidence a sequence of increasingly large primate skulls collected and collated by many researchers over many years, from which they deduce that increasing brain size is significant in the overall process. So far, so good. But then they jump, with naïve, speculative optimism, to the flawed conclusion that an apparent series of fossilised ape forms 'proves', in a simplistic linear way, that humans must be direct bloodline descendants of apes...

and so, humans and apes must share one common ape ancestor. Drawing that false conclusion is a critical error Darwin himself never made.

A different way of thinking about all this derives from the *Threshold* perspective. Projecting our consciousness back in time, the earliest evolving life forms would have had similar characteristics to their vaporous, fluid, aethereal environment, when Earth too would still have been solidifying. Which is why there are no fossil records of very early human forms, since these would not have been sufficiently solid to survive in any recognisable way. Thus, from the *Threshold* perspective, there emerges a more coherent picture of the common ancestry of humans and apes.

In Darwin's time

Charles Darwin was an ingenious, careful and genuine seeker into the workings of Nature, but also very much a man of his time. As an Englishman in the nineteenth century, he was inevitably influenced by the ethos of the all conquering British Empire, powered as it was by

the technological successes of the British-led Industrial Revolution. This would seem to explain his quest to come up with a mechanism, a machine-like account of how some species seem to victoriously survive while others fail and disappear.

And his heightened awareness of rivalry, competition and conflict is hardly surprising – when seen in that political context of dominance through divide-and-rule backed up with the threat of violent force... and all that within an economic context of fiercely competitive capitalism. Hence his theory of species ‘adapting’ to their environment through so-called ‘natural selection’, resulting in the ‘survival of the fittest’.

He also described a world of apparently ‘random mutations’ which appear in each new organism. And as a superficial description of the physical evidence, it does seem, more or less, to fit the observable patterns through time. But that kind of nineteenth century ‘winners and losers’ thinking again only addresses the physical dimension of life on earth. It lacks an all-inclusive overview and any sense of the other, more subtle, pre-physical and consciousness dimensions of our lives.

To this we can also add the historical-religious fact that the idea of reincarnation had been decreed heretical by the Church over a thousand years earlier, and by Darwin’s time this denial had become established belief. That gave rise to the short-sighted outlook of ‘one-earthly-lifetime-only’, in which to succeed or fail. In such a context, physical survival takes on a much increased importance. Thus he found himself caught between, on the one hand, his own realisation that species adapt and evolve, and on the other, the Church’s freeze-frame view, that species were created by God for all time in their present forms.

A more inclusive, longer view

However, just as the seed carries the blueprint for an ‘ideal’ tree form, to be continuously regenerated, so humankind continues evolving through successive generations towards some ideal state presently beyond our capacity to imagine. With this broader perspective, we can see how the Darwinian view completely fails, regarding the bigger and more subtle questions of human evolution. For it doesn’t provide a valid explanation of humanity’s distinctive and more advanced modes of consciousness – that is, compared with creatures whose physical resemblance to humanity suggests that their consciousness should more closely resemble humanity’s.

The crucial error has been to notice a pattern of physical similarities and progressive changes, and then rush to interpret these as a particular kind of sequence, as a direct chain of causes and effects,

linking the latest model to the long-passed original version. And here we encounter one of the fundamental misconceptions of the Darwinians. It is that we, humankind, are direct bloodline descendants of apes – ie that the common ancestor of humankind and today’s apes is an earlier ape – when, in fact, the apes are spin-offs, having branched away from the main line or stem

which is *human* evolution. Such mistakes arise from seeing only the physical level of life as real and significant, and from ignoring even the possibility of a more all-inclusive scientific explanation.

From vaporous liquid to solid matter

To take our line of thinking a step further, once it's accept that life existed in some form before the cooling and solidifying into the physical-material universe, a vital clue presents itself.

And the clue is, that early humanity evolved first as an aethereal proto-organism, which then evolved into our present dense physical form *John Wilkes's* pioneering scientific research into the vital properties of water affirms this understanding.

In ***Aether - the Transcript***, he said:

"Things move from life processes towards mineral processes, so to speak. Everything was much more vital earlier on. The whole Earth, as we see through our geological research, the whole Earth was more plant-like. It was softer...."

Which opens up a path of enquiry very different from both the Darwinists' and the creationists' approach. And it doesn't have 'missing links' or non-adapting, non-evolving species.

Dr Margaret Colquhoun is a biologist and ecologist, head of The Life Science Trust, a pioneering ecological educational project in Scotland. In the same publication, she said: "I've spent my whole life studying evolution, so I could talk about it for hours and hours. I was first a Darwinian evolutionary biologist; I respect Darwin and his place. But I think there's more to it than he said. It's only part of the story. I think life was first and the physical came afterwards, condensed out of life. And that is the opposite way round, I suppose. You can almost see that happening in embryology."

In the fossil record you can see earlier forms of animals, and then primates, and then the human beings are at the end physically. But if you think of the physical stuff in the fossil record, the ones that got left behind hardened and we have stayed neotenuous, young. And we are like an earlier stage of development of apes. We haven't got old yet.

There are still other animals that are evolving as well. And plants. The less specialised ones are going on evolving. It seems to be important to understand that time is not linear. And if you can experience time moving in two directions, then evolution starts to be easier to understand. It's possible to think in other dimensions about it. The future is transforming the forms of the present.

So it's organised from in front rather than from behind."

Involution/Evolution

So, the fundamental *polarity* that characterises evolution is a rhythmic alternating between an outward and an inward movement, an expanding phase and a contracting phase: an *e-volutionary* phase and an *in-volutionary* phase.

The universal principle of *involution* is about how consciousness involves itself in earthly matter through incarnating into a physical body, creating a living organism. The *evolutionary* phase is the outward movement from the hidden, inner *potential* to manifesting in earthly physicality – ie from seed to plant. The *involutionary* phase is then the movement inwards – from plant to seed – to contain, conserve and prepare the potential for its next emerging.

Understanding this cyclic process resolves those riddles, such as '*Which came first: the chicken or the egg, the oak or the acorn?*' That's because such questions only arise from ignoring the continuity of the whole process within its greater living context, and from just focusing on the separate, physical bits and pieces within it.

'Random mutation'

Random means 'of a degree of complexity beyond the limited human ability to comprehend, calculate or predict'... and is thus taken to mean by 'chance'.

Mutation means change, variation in adapting to changing circumstances.

Prejudice admitted

The *Threshold* perspective reveals that humankind adapts to changing circumstances in ways not fully accounted for by the current orthodox physical biology teaching on *random mutation, natural selection, genes, chromosomes, DNA chemistry* and so on. As such, it marks a profound shift away from the old mechanistic-materialistic mindset, a shift highlighted by the frank and wise words of Harvard professor of biology, Richard Lewontin.

'We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failure to fulfil many of its extravagant promises of health and life, in spite of the tolerance of the scientific community for unsubstantiated 'Just So' stories, because we have a prior commitment, a commitment to materialism...'

And that's about as clear an admission as there could be of prejudice in Western science. Professor Lewontin then also says: *'It is not the truth that makes you free. It is your possession of the power to discover the truth. Our dilemma is that we do not know how to provide that power.'*

The *Threshold* perspective does provide that powerful knowledge.

Darwin misrepresented

'I am inclined to view the world as if it were the result of designed laws, but with the details left to chance.' (Charles Darwin)

From the *Threshold* perspective, there is a fundamental flaw in what has become the post-Darwinian orthodoxy, but it's not to be found in what Charles Darwin himself wrote or said. It's a psychological flaw in the whole approach of Western materialistic 'hard' science, a false assumption which has permeated right through biology.

It amounts to an institutionalised emotional reflex of rejecting outright any notion about nature that has any conceivable connection with divinity. As such, this prejudice reflects an entirely understandable, yet flawed, position. Deeply embedded in the whole culture of Western materialistic science, it dates back to when the first pioneering scientists were cruelly persecuted

by the then all-powerful, trans-national Church authorities. Thus the deep, long running split in Western culture between the two camps.

Although today the balance of power is very different and the arguments more refined, behind all the rationalising on both sides, that divisive, highly politicised split remains. It's a telling symptom and a stark reminder of how easily humans can be divided and ruled by those who know how to exploit the weakness and fear resulting from deep ignorance, in order to preserve the overall status quo.

The symbolic tree of evolution

If we use the symbol of the tree to represent natural evolution in a much simplified way, humankind would be its *growing tip*, its *apex*, the avant garde of the main stem or trunk. Then, given the rhythmic rotational relationship between Earth, sun and galaxy, all the other species would be branches, spin-offs from the main stem. As such, their potential for evolving 'higher', ie towards the sun, would be strictly limited. So their development more quickly become inertia bound, dried out, aged and hardened, their physical forms not the same as their earlier 'young' predecessors.

The Tree of Evolving Human Consciousness

Involution: pre-physical consciousness 'descends' into *dense* physical forms because of *gravity*.

Evolution: living forms 'ascend' towards the *rarity* of pre-physical consciousness because of *levity*.



The growing tip is where humankind (collectively) remains soft, young and evolving (neotenous).

The branches represent earlier outgrowths away from the vertical thrust of the main stem/trunk. They continue to evolve in limited, non-vertical ways, hardening and ageing, due to gravity and inertia.

Charles Darwin: "I am inclined to view the world as if it were the result of designed laws, but with the details left to chance." (He noted the coherence behind the apparent 'randomness' of 'mutation')

By contrast, humankind, always at the apex, the growing tip, is physically softer and younger, ie 'neotenuous'. The apes, being the most recent and 'highest', branchings away from the main human line, are, in that sense, our closest evolutionary relatives, but can only evolve in limited ways. They are, in that respect, 'failed' offshoots of the ongoing, 'vertical' evolutionary process.

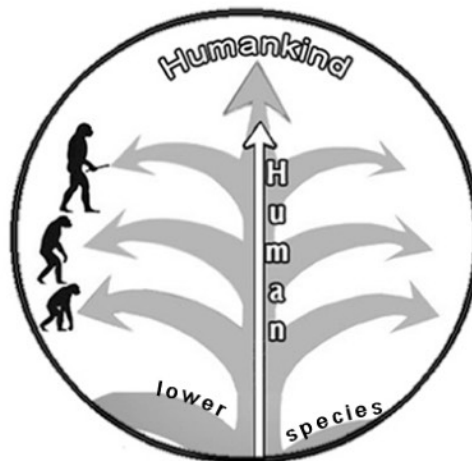
Meanwhile, calling humans 'naked apes' is to see the process the wrong way round. Yet career success in the current academic or educational world of biology is only attainable for those willing to promote the doctrine that humans are little more than apes. This undermines human self esteem and stirs up the old futile 'science vs religion' conflict. Also, it's divisive distractions such as these that enable ruling elites to stay 'on top', confident of their superiority.

A Fundamental Flaw in Darwinian Evolutionary Theory

This misleading image
implies a direct line of descent
from apes to humankind.



Each kind of ape existing today
is the end product of a particular branching away
from the main thrust of evolving human consciousness,
which is represented by the main stem or trunk in the diagram below.



Conclusion:

1. **The common ancestor** of apes and humankind would have had a 'younger', softer, more fluid form than today's creatures.
2. **Humankind** is neither 'the finished product' nor an evolved ape.

The Back Story

Primal universal consciousness, which existed prior to physical manifestation,
(a) became *involved* in dense physical matter on Earth, and
(b) has been *evolving* progressively out of the density of physical matter

Also, still no '*primal soup*' recipe has been concocted after many years trying, because life did not mysteriously emerge from a blend of inorganic chemicals.

Genes, genetics and memes (+ Gene pool, Abiogenesis??)

Genus is an old Latin word meaning a particular class or type of object.

Genera is its plural form, from which many other terms have been derived, including *general*, *generic*, *genealogy* to name but a few.

In biology, two more recent additions have been the **gene** and **genetics**.

A **gene** is no more than an idea, a concept, an imaginary entity, a fictional 'unit of heredity' presented as if such a thing physically exists. It's meant to indicate the intention that a living being should manifest in a particular way. The gene is an attempt to *objectify* and *quantify* a specific *quality* of an organism by reducing it down to chemical *chromosomes*, composed of DNA configurations. So a gene is a 'virtual' entity, supposedly representing a specific trait of a living being.

The psychology behind the make-believe, purpose-driven 'selfish gene'

The Selfish Gene was first published in the 1970s. It expressed a rational, secular, Western liberal, intellectual viewpoint, in trying vainly to reconcile two opposed views of the world. One view is the random, brutal, 'red in tooth and claw' picture of Nature in the wild, in which all living forms are seen as mercilessly competing for survival – as rival species, individual creatures and as imaginary so-called 'genes'. The other view is of various creatures displaying harmonious, altruistic, empathetic, and compassionate behaviour, with humans as the most refined exponents of this.

The fictional creation to resolve this dilemma was an abstract, imaginary micro-being called the *selfish gene*. Such entities, it was suggested, use real organisms as their 'survival vehicles' to advance the process of evolution. The job of the genes was to deliver information, ie consciousness work, in the form of instructions about particular characteristic traits to be manifested in newly emerging organisms.

So, these imaginary little entities called genes represent particular units of purpose, the artificially divided up bits of one greater, all-inclusive purpose, ie the will-to-evolve of one living being.

And one pseudo-technical sounding name for this living, evolving being, much used by biologists, is the *gene pool*.

The *selfish gene* fantasy was intended to supplant the earlier Darwinian theory, which focused on the 'survival of the fittest' organisms and species.

The **genome**, for any species, is supposed to be a complete catalogue of its genes, ie its particular set of DNA sequences. These are supposed to correspond to and thus 'produce' particular traits or characteristics. However, it's being increasingly found that:

- the same chemical combinations are associated with different traits
- different chemical combinations are associated with the same traits.

Thus the basic 'genetic' principle of a definitive classification system is invalidated.

Memes are supposedly non-physical, discrete packages of 'information' which circulate through groups of real organisms in the way that 'selfish genes' supposedly colonise their 'serial vehicles' in a ruthless survival quest. So, the *meme* is essentially another attempt to reduce *consciousness* down to imaginary, discrete, quantifiable units.

So, it's all about consciousness

So, the essential, central theme in the whole evolutionary process, as revealed from the *Threshold* perspective, is the **evolution of consciousness**. *Universal consciousness* physically

manifests in the most advantageous ways for physically surviving and thriving on Earth. In this process the physical mechanisms of evolution that Darwin proposed do work out and result in an increasingly evolved, conscious human form. A more accurate term for *random mutation* would thus be exploratory mutation.

Darwin himself chose to suffer and live with honest doubt and uncertainty. But the neo-darwinists, like the creationists, seem to crave certainties in the way that children and insecure adults do. Their crucial misconception is an exclusive focusing on physical forms, while ignoring the prior, more fundamental pre-physical reality, *consciousness*, also known to some as mind, thought, awareness, spirit etc.

Evolving creation and ***creative evolution*** are thus two complementary views of **one** conscious, living process, from the perspective of the all-inclusive *Threshold* science.

How did physical *male/female* gender originate?

"What sex is, why it evolved and how it works are the biggest unsolved problems in biology." Steve Jones, eminent UK biologist, in *The Language of Genes* (1993).

But first...

The *polarity* of the complementary cosmic forces, contracting *gravity* and expanding *levity*, is a fundamental working principle of the cosmos. In the living world this polarity manifests as the complementary relationship between the universal *masculine* and *feminine*. So, each creature, of whatever gender – *male, female* or *other* – is a unique combination of both.

How did biological *male/female* gender originate?

Physical life forms first manifest at the *pre-physical* level of existence - that is, the dynamic intermediate level between pure consciousness and the physical-material world. It's the timeless dimension that has been known for centuries as the *aether*, or more recently in physics as the *quantum vacuum* or *quintessence*. It's the realm of potential energy.

A *pre-physical* living form is thus a kind of 'blueprint' design of what may later become a physical creature. And the biological emergence of *male, female* and less clearly defined forms has naturally evolved from the primary *polarity* of centripetal, penetrating *masculine gravity* and centrifugal, accommodating *feminine levity*.

In the accompanying diagram: (a) The archetypal spherical *torus* form unites *inner* and *outer* surfaces, symbolising a continuously circulating *inward/outward* flow of energy, expressing the most basic motion of pulsating living forms, *contraction/expansion*. (b) the point within the spherical *torus* where the two vortices connect represents one particular *focal point* of universal consciousness.

The two vortices on the axis of the torus are being pulled in opposite directions: (a) **Inward** - drawn towards the centre of the cosmos by the force of *gravity*, and

(b) **Outward** - drawn towards the periphery of the cosmos, by the force of *levity*.

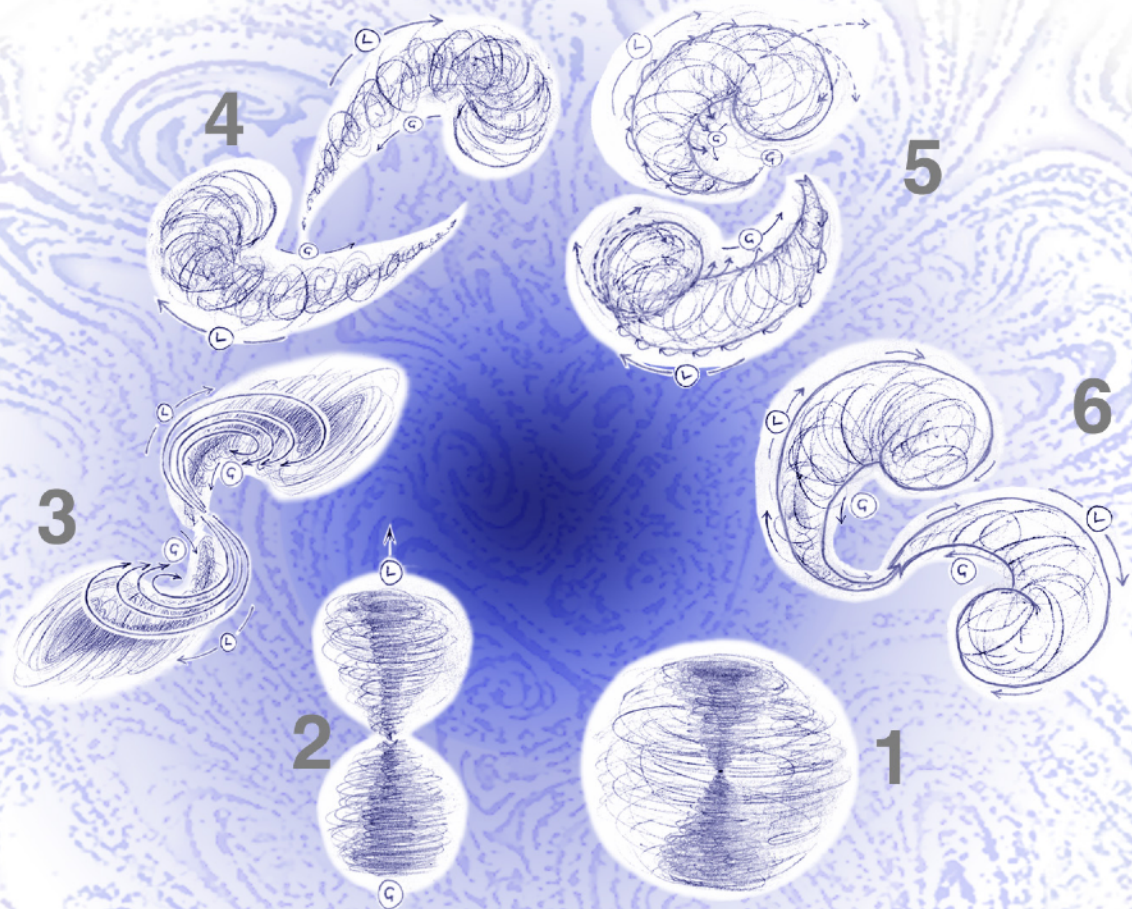
At a crucial stage in the *descent into matter* process, the two vortices are pulled apart by the opposed forces of *levity* and *gravity*. And so, two separate, polar opposite entities are formed, the one drawn towards the cosmic *centre*, the other towards the cosmic *periphery*.

These two *pre-physical* forms are manifestations of the complementary polar opposites: (a) the outer, *gravity*-powered, inward-probing and penetrating, universal **masculine** and (b) the inner, *levity*-powered, outward-opening and accommodating, universal **feminine**... both of which subsequently become physicalised into a range of physical gender forms.

This *polarity* in separate physical bodies is demonstrated, for example, in the *outer* genital organs of males and the *inner* genital organs of females, and the dynamics of **expansion** in the erectile penis, clitoris and nipples when *charged up* with energy and fluids, and **contraction** in the polar opposite *discharging* mode.

Diagram warning: The accompanying static, flat 2D diagram is not a pictorial representation of any particular physical forms or living processes. It's intended to portray symbolically the *dynamic* interplay between contracting *gravity* and expanding *levity* in the formative process. The **polarity** of these two universal principles applies at all scales, from macro to micro.

Gender: the Evolving of Male and Female Forms from pre-physical energy-flow patterns



This static 2D diagram comprises a sequence of dynamic pre-physical energy-flow patterns, showing the evolving of archetypal male and female forms within the living, pulsating cosmos.

Gravity, the universal contracting, inward force becomes the universal *masculine* principle.

Levity, the universal expanding, outward force becomes the universal *feminine* principle.

Pre-physical: the intermediate dimension between consciousness and matter.

Torus: an archetypal, dynamic energy form with a single surface that unites 'inner' and 'outer'.

Vortex (vortices): a spiralling form contracting into and expanding from a point.

NB The universal *masculine* and *feminine* principles are uniquely combined in each individual of whatever gender.

- 1 A primal, pre-physical, spherical **torus**, formed by the polar opposite cosmic forces of **gravity** and **levity**, creates along its axis two pre-physical vortices, joined at its centre point. (The basics are explained in *Notes from the Threshold/The Becoming*)
- 2 The two vortices are being pulled apart, one drawn towards the centre of Earth by *gravity*, the other towards the periphery of the cosmos by *levity*.
- 3/4 As the 2 vortices begin to condense, separate and evolve into distinct forms, in the one closer to Earth the predominant 'inward' force of *gravity* opens up an aperture/orifice at the point of separation. Correspondingly, this inward pull results in a protruding extension of the other evolving form as it is pulled away. The functional difference between them marks the origin of the 2 complementary forms of genitalia and the 2 archetypal biological genders, **female** and **male**.
- 5 Energy patterns of a potential male and female, with their potential for growth and forward movement.
- 6 The reunion and fusion of penetrating *masculine-gravity* and accommodating *feminine-levity* forces into one temporarily complete circuit of living, pulsating energy flow.

Earthly sex has a cosmic dimension

One universal factor is the constant tendency of the cosmos towards establishing a state of balance or **equilibrium** between the two complementary polar opposite forces: focusing, penetrating *gravity* and radiating, accommodating *levity* – just as organisms tend to maintain an ideal body temperature while adapting to inner and outer changes.

In the **Origins of Gender** diagram the inward-spiralling, *gravity*-dominated, pre-physical vortex form represents '*masculine*' energy being drawn towards the centre of the cosmos. Its most direct and attractive route is through the *levity*-dominated '*feminine*' vortex form, which opens up as it reaches out away from its own and the cosmic centre, drawn towards reunion with the wider cosmos. In performing this function, it draws into itself the inward-spiralling *masculine* vortex form. The outcome is potentially a state of *equilibrium* between *gravity* and *levity*.

When these *pre-physical* energy forms manifest as living, physical- material creatures, the cosmic significance of the *male* and *female* roles in sexual union, ie copulation, is obvious. Then, if the energy flow between the two organisms is not obstructed by muscular tension, emotional inhibition or other factors, the two pulsating cosmic forces mutually combine in an act of rhythmical union. And the climax, as they temporarily fuse into one natural energy circuit, is what's known as **orgasm**.

To understand the magic, vital ingredient, ie the true reality and power of sex and sexuality, is to realise how the universal polar opposite forces of the cosmos rhythmically interact in a natural energy discharge and flow between two aroused and willing individuals, ie in full, uninhibited, unfaked orgasm.

Orgasm has nothing to do with outer, physical appearances and dramatised performances, and it's not about shape, size, cosmetics, gymnastics, marathons or vocalising. Nor is it about wealth or social status, since it's not something that can be bought or stolen. And it's not about personal power politics... or shallow, instant gratification, like junk food.

Orgasm is a peak experience of **resonance** with the rhythmic pulsating of the cosmos. It's when the universal, complementary cosmic forces of gravity and levity, as the universal *masculine* and *feminine*, temporarily fuse into one complete circuit of free-flowing bio-energy.

So, this shared moment of supreme, pulsating climax is no trivial, insignificant event, despite all the embarrassment and jokes, due to the associated inhibition and frustration. It's when the power of the inner fire is physically expressed and fully experienced... or not. For that experience can be drastically limited by the inhibiting and de-sensitising effects of emotional wounding and *muscular armouring* (see *The Threshold Perspective*).

Ecology: a cinderella science?

Ecology is a vital branch of science which has so far been much neglected – subordinated both to the *masculine* 'defence' spending of national governments and to the more *feminine* promotion of greed-driven financial *economics*. However, along with *Threshold Psychology*, Ecology is due to become a major branch of science in the ongoing transition into an era of *ascent out of matter*.

That's because it's essentially concerned with how human consciousness and life on Earth can harmoniously survive and flourish best by being in *resonance* with the rhythms of nature and the cosmos. For such coordination is the key to a sane, balanced, healthy human species, consciously maintaining a natural state of *equilibrium* on planet Earth.

The current major ecological challenges for humanity are well known, including most recently the *waste plastic pollution* of land and seas. There's also a connection between the ongoing **cosmic transition** phase, outlined in the Cosmic Time chapter and **global warming/ climate change/extreme weather**. Physical scientific evidence of this has yet to be accumulated.

Ecology presently, however, is a semi-stifled, much inhibited discipline, corrupted by the monetising and commercialising strategy of the financial elite and by State militarism. Consequently, only 'financially viable' ecological initiatives tend to be supported.

An outstanding example of this twisted mentality has been *carbon emissions* trading. It amounts to the gross pretence that *polluting* is a tradable commodity. In this way, *wealthy* polluters evade their ecological responsibilities by paying *poor* polluters to claim that they are reducing their polluting emissions. The dubious amounts recorded then create the **false impression** that total emissions have been reduced by the officially required amount.

This is somewhat similar to clever, well paid accountants assisting the wealthy in avoiding paying their fair share of taxes. Given this devious practice, **pollution** in its many forms and the responsibilities of polluters have largely been ignored by the mainstream corporate media... in servile deference to their ultimate sponsor, *Mama SCAB*.

In the great cosmic *redemption* process, on the long journey of return through many generations, the next major 'milestone' for humanity could be the implementation of something like the project labelled **One Humanity**. This points to a future phase in which, as a priority, all real, natural, human needs are routinely met so that nobody has to live in deficiency and, simultaneously, no one lives way in excess of their real, natural, human needs.

For by then a more sane and balanced value system will have evolved, under which all surviving humans will be able to live and thrive together on Earth... because it will have become clear that no other way is *ecologically* sound or viable in the long run.

However, here and now, humanity urgently needs to be aware of some secretive planning going on for world **population reduction**, intended to make it easier for a neo-feudal, fascist style global government to be set up and operate. This is an idea that many people are not yet willing or perhaps able to take on board as a real possibility: ie that some human beings have become so callous and corrupted as to be actually plotting a drastic reduction in the overall human population on Earth - in effect, a **cull**.

Who are these conspirators? Who are their targeted victims? Where? When? How?... Many unpalatable questions that nevertheless urgently need to be answered. A range of clues can be detected from the Threshold perspective. Meanwhile, one of the great distracting delusions misleading humankind is the rapid, out-of-control growth of digital technology.

Digital: a 'smart' but fundamentally flawed system

Because all digital technology is based on *binary* logic, as such systems grow increasingly complex or 'smart', they tend to run into increasing trouble. Why? Because *binary* computer logic starts from the broad assumption that everything can be thought of as being composed of standardised, *micro-building blocks* of information called *bits*. ... just as in physics the world is assumed to be reducible down to various micro-particles.

These *bits* can then be organised and processed by computer software to resemble and exactly replicate any desired form - either as a 2D *virtual* entity, eg a printable image on an electronic screen, or as a potential physical-material form by using a 3D printer.

Binary thinking is an indicator of the *pre-adolescent* stage of humanity's collective evolving. It's the product of a self-centred, exclusive, 'us v. them' mentality that lacks a sense of identity with the greater cosmic wholeness of which each individual is a vital part.

Correspondingly, the currently deteriorating world situation, regarding the reliability of digital technology, has the character of **a pre-adolescent male's desperate attempt to impress the world with his cleverness** – successful at first, but then failing because it was not built on sound foundations. The logic of this sterile, emotion-free, mathematically encoded discipline has an irresistible fascination for the pre-adolescent still 'present' in many adults.

A major problem is that in any major digital system today, no human mind can hold the quantity of encoded information now involved. And it's this inherent weakness that leaves humankind vulnerable to hacking attacks, major shutdowns and the failure of systems now completely dependent on digital technology and so-called *artificial intelligence*.

This parallels the way a bridge, building or machine with a built-in, fundamental design flaw, is doomed eventually to fail. So, there's a major inherent problem here. In this age of ever faster, more powerful, digital computers, all codes based on these identical *bits*, however complex, can eventually be de-coded. And in a world still largely run by *Mama SCAB* and *Papa State*, deception, cheating and fraud are very much the norm.

And that's attracting ever more people to **cyber crime** of one sort or another. Thus the continuing series of major cyber incidents, followed by temporary 'fixes' – a situation somewhat like being stuck in a deep hole and digging oneself ever deeper, rather than finding a way of climbing out.

For the whole shaky idea of '**security**', regarding 'confidential' information held by the State, commercial organisations or private individuals amounts to little more than a wishful fantasy. And with humankind already confused, politically powerless and passively consenting to become ever more dependent on digital technology, more of the same means the problems can only get worse. So, is there a sane way out of this man-made trap?

Human ingenuity, given some inspirational motivation, is capable of coming up with a range of ideas that could benefit all humankind and help create a more balanced and sane world. But first, the path has to be cleared of some major obstructions: not least, the fierce resistance of some to any radical changes to the status quo... that resistance being essentially the *inertia* resulting from the departing era of *descent into matter*.

The *One Humanity* chapter addresses these issues and proposes a new generation of **analogue technology** – ie analogous to nature and the cosmos.

Artificial Intelligence (AI): a dangerous, delusional fantasy

Viewed from the *Threshold* perspective, **AI** is a contemporary example of cutting edge, digital technology racing ahead on a pioneering but deeply flawed venture. Despite its optimistic promises of technically impressive and commercially successful outcomes, in essence, **it's an attempt to invent and evolve artificial, programmable and therefore conveniently controllable substitutes for natural human intelligence.**

However, it's also symptomatic of the worldwide confusion and disorientation resulting from ignorance (a) of how the cosmos works, and (b) of the ongoing shift from a cosmic era of *descent into matter* to one of *ascent out of matter*.

Algorithms are the sets of precise instructions for computers to follow in any operation they are programmed to perform. Therefore, all kinds of human prejudice, bias and errors can be built into an algorithm, and then become part of whatever outcomes follow. *AI* equipment normally processes an uninterrupted inflow of digitised data. So, it depends on reliable, 'secure' digital technology and a consistent electricity supply, neither of which can presently be guaranteed, since both are vulnerable to human error, technical failure and sabotage.

AI is a prime example of the *boysworld science* mentality and *super-smart* technological inventiveness. Significantly, it's also a commercially well funded and officially encouraged area of research – which suggests darker, hidden purposes than some of the hyper-enthusiastic pioneers may realise.

The predicted '*singularity*', refers to a typical pre-adolescent male fantasy of digital technology merging with human consciousness to produce super-intelligent beings, 'smarter' than current humankind... by the 2040s. Its proponents also assume an immature, 'value-free' attitude, which means ignoring any moral or ethical constraints, while trying to avoid any responsibility for unforeseen bad outcomes. The protagonists of *AI* have tended to be, although not exclusively, enthusiastic males, enticed, manipulated and fired up with fantasised aspirations for fame and fortune – to be achieved through making world-conquering discoveries or inventing commercially or militarily successful products and heroic, life-saving, medical fixes.

AI, as applied to medical diagnosis and treatment options, amounts to calculating probable outcomes, based on whatever data is being fed in – data normally selected according to orthodox materialistic assumptions. This is somewhat like analysing and classifying the flotsam and scum on a polluted river – with no consideration of the wider, deeper and long term factors creating those symptoms.

An AI health warning

Don't be charmed by AI smartness into passive complicity in your own disempowerment. In any *AI* system the whole repertoire of automated responses has been pre-programmed in advance to cover all predictable situations, according to their mathematical probability, based on various unspoken assumptions. Therefore, if the wider circumstances change in unexpected ways, those assumptions will be rendered invalid, and the relevant *AI* systems will automatically respond inappropriately and perhaps dangerously.

Robots, trans-humans and electricity

The *Threshold* perspective reveals that sensitivity to the qualitative difference between natural, animate beings and artificial, inanimate systems is crucial. For one purpose of those funding much current *AI* research seems to be to make humans increasingly remote-

controllable through implanted micro digital devices. So, some penetrating investigation into the unseen influences and factors at work here is urgently required.

It's all part of an envisaged merging of human and artificial intelligence into **trans-human hybrids** or **cyborgs**... "*when humans transcend biology*". This is the so-called **singularity** which, inevitably, will bring many unforeseen and unintended consequences, as certain humans try to outsmart nature in the pursuit of a range of delusional ambitions.

From the *Threshold* perspective, humankind appears to be heading for deep trouble in accepting and complying with that general trend towards a scenario which suggests many conflicts of incompatibility, severe disturbances and long lasting damage.

For example, some robots will be small enough to circulate within the physical body and be programmed to self-replicate, as well as take over other digital devices and collectively swarm to protect one another. So, how can this self-perpetuating trend be countered?

The key to answering that question is the bigger question of what 'higher' knowledge will be needed to halt and reverse the process that has now begun – as in the legend of *The Sorcerer's Apprentice*. For it may no longer be the case that whatever processes some humans may set in motion, others will be able later to terminate and dismantle.

The programming of 'intelligent' robots is inevitably based on them 'learning' from the past, ie *memory*... which is essentially 'dead' data/information. And the overall *direction* of the logic that's built into their design is pre-set, expressing the unquestioned assumptions and purposes of those who fund and sponsor their development, eg to maintain the status quo.

What AI robots cannot access is the vitality and spontaneous wisdom of the timeless, living, *equilibrium-seeking*, pre-physical *aether/quintessence/quantum vacuum*. So, the prospect is a sterile, imprisoning AI world.

A flawed 'futurist' agenda

Certain techno-fix futurists appear to be attempting to establish an irreversible agenda and schedule through preaching self-fulfilling prophecies, just like some religious manifestos. People are then judged by them to be either positive supporters of the current wave of new info-tech, OR negative, resistant opponents, intent on preventing its further progress.

Meanwhile, the majority of humans remain only superficially aware of and therefore mostly unconcerned about this extremely hazardous and largely hidden area of human activity. Exponentially accelerating progress in AI is presented as inevitable, and the techno-fixing of all diseases and of poverty are still being fraudulently sold as part of this package.

A more mature approach would be first to investigate the motives, ie the hidden agendas, of those behind the concerted push to develop the AI industry, which does require significant financing. Meanwhile, much re-thinking is needed in order to appreciate the *qualitative* differences between *natural* and *artificial* intelligence before the situation runs out of control.

Crucial questions therefore arise about AI's connections with the State, commercial corporations, mass religious organisations and the materialistic science establishment... and how much complicity there is, one way and another. For privileged, well-funded scientists are usually unwilling to bite the hands that entice, protect and generously feed them.

And all the while, this is being acted out within the 'house of cards', assembled and controlled by the global *syndicate of central and arch-banks, SCAB*, which has its own dark agenda. All of which is a reminder that behind the glamour there are shadowy, malevolent forces behind much of today's science.

What about the ongoing *secret science* research?

Humankind in the 21st century is still being indoctrinated with childish 'us v. them' attitudes. Why? Because this serves the distorted, immature ambitions of ruling elites, eager to demonstrate their fantasised power through weaponry, whether labelled *defensive* or *offensive*. It also serves the purposes of the smart, financial elite who are playing *divide-and-rule* by stirring up those rivalries, and then lending money and selling weapons to the various competing factions.

Consequently, there's an ongoing hidden **arms race** of evolving technologies, radically different from and more powerful than nuclear weapons. It's part of a secret world of unorthodox, unconventional science and technology, currently being researched and tested. Joseph P Farrell has made this a special subject of his research in various books.

One clue to that technology is the Large Hadron Collider (LHC) at CERN, the world's largest and most powerful particle accelerator. An outstanding feat of engineering, it also serves darker, unspoken motives. It's based on a system of powerful counter-rotating magnetic fields, a technology closely associated with (a) the German WW2 *Nazi Bell Device*, a pre-nuclear weapons project, and (b) *anti-gravity* research.

Given LHC's technical troubles right from the start, this connection raises many questions, not least concerning the complicity, naive or knowing, of the scientists allowed to experiment with that formidable piece of potentially destructive technology. Meanwhile, propaganda documentaries about CERN create the impression of a happy, well funded, exclusive club of clever scientists, dedicated to a cult of super-high-tech '*smash-it-and-see*' research.

In the ongoing arms race, the various rivals are **relics** of the departing *descent into matter* era. Which is why their aims and 'games' now constitute a grave danger to all life on Earth, as the remaining time to prevent critical levels of global toxicity and damage is running out. The challenge is how much damage they'll be allowed to inflict before their inevitable demise.

Meanwhile, they're still able to pursue their deluded fantasies of world domination. And in this they're callously treating the rest of humankind as an expendable, disposable resource, kept in ignorance and fear, divided and ruled, distracted and pre-occupied... until it's either waking up time or too late to prevent major catastrophes on Earth.

Alternatively, LHC, with its hyper-sensitive detectors, could be re-dedicated to investigating the *Threshold*, ie the *zero point field*, the border zone between the *physical-material* and the *pre-physical* aetheric dimensions, as a potential resource for greatly enhancing life on Earth.

Why the unquestioning compliance of scientists?

Why do contemporary physicists doggedly persevere with deeply flawed ideas such as the so-called 'standard model', which clearly fails because it cannot reconcile the *macro* with the *micro* scale, ie the gross *physical-material* world with the subtle *pre-physical* dimension?

It seems that having been inducted and groomed, at an impressionable age, into the belief system called 'science', and having been enticed into following that through into a career, many later find the idea of radically revising that flawed worldview too disturbing to contemplate.

So, in order to pursue a path in science, they comply with the prevailing **dogma**, ie the unofficial set of restrictions on what is and what isn't acceptable 'scientific' thinking. And that regime is maintained through various incentives and disincentives, imposed by their invisible sponsor, *Mama SCAB*. For what purpose? There seems to be a clue in the following.

Have scientists been deliberately misguided?

Whether *The Protocols of the Elders of Zion* is a genuine record of certain discussions or a well informed piece of satire is of little practical significance – just as the merit of certain plays, allegedly written by a William Shakespeare, doesn't change according to whether or not they were written by someone with that name.

Either way, *The Protocols* is a master class in mass mind control, given that it was first published over 100 years ago, before radio and TV. The following excerpt is from an early 20th century translation from a supposedly Russian original text.

Regarding how scientists are easily misled into believing whatever 'the authorities' decree... "The goyim* are not guided by practical use of unprejudiced historical observation, but by theoretical routine without any critical regard for consequent results.

We need not, therefore, take any account of them - let them amuse themselves until the hour strikes, or live on hopes of new forms of enterprising pastime, or on the memories of all they have enjoyed. *For them let that play the principal part which we have persuaded them to accept as the dictates of science (theory).*

It is with this object in view that we are constantly, by means of our press, arousing a blind confidence in these theories. The intellectuals of the goyim (see Glossary) will puff themselves up with their knowledge and, without any logical verification of them, will put into all the information available from science (that) which our agentur specialists have cunningly pieced together for the purpose of educating their minds in the direction we want.

Do not suppose for a moment that these statements are empty words: think carefully of the successes we arranged for Darwinism, Marxism, Nietzscheism. To us Jews, at any rate, it should be plain to see what a disintegrating importance these directives have had upon the minds of the goyim.

The Protocols of the Elders of Zion 2.2

Science and mathematics in collusion

Mathematics is a language of symbols which represent abstract, idealised, standardised entities and functions. The eminent 20th century mathematician and scientist John von Neumann, said:

"When we talk about mathematics, we may be discussing a secondary language, built on the primary language used by our central nervous system... (which) cannot fail to differ considerably from what we consciously and explicitly consider as mathematics"

As a discipline, it has evolved ways of systematically working with patterns of order in a logically consistent and precise way, and is presently much used by scientists. Its qualities, as an abstract, detached, pure, logical and emotion-free discipline of orderliness, precision and control, seem to be the attraction for scientists – in contrast to the messy, tangled, changeable and unpredictable natural world with which they have chosen to work.

Thus their collusion with the clean, elegant world of mathematics, once they've been seduced by its apparent facility for handling complex information in an orderly, systematic way. However, as a result of reducing the continuity of natural chaotic complexity down to discrete, symbolic, artificially standardised units' or 'bits', physics began to lose touch with the 'real' world it was trying to understand.

Equations are an example of abstract mathematics creating a convenient but illusory notion of precise 'equality' between the entities symbolised either side of the 'equals' sign. However, in the ever-changing physical-material world there is no absolute equality – only relative approximation.

Science consequently became fundamentally flawed in at least two main respects.

1. It adopted an abstract idealised language for dealing with the physical-material world.
2. It failed to realise that the level of reality it called the 'quantum' world is not physical, but is a pre-physical state of being.

The result has been an inconsistent, less than coherent, unbalanced discipline, afflicted with enigmas, conundrums and paradoxes.

And by dogmatically continuing to ignore *levity*, it has become *gravity*-dominated, as well as materialistic and mechanistic. Thus it has adopted terms like *anti-gravity* and *anti-matter*, denying their polar opposites, as if labelling *south* 'counter-north' or *female* 'non-male' – unbalanced and inappropriate expressions of the universal *masculine* principle.

The *Threshold* perspective implies a focusing inwards from the whole continuous periphery, thereby identifying distinct subsidiary centre points of the greater cosmic wholeness. These are what materialistic scientists interpret and define as discrete 'fundamental particles', the supposed micro-'building blocks' of everything in the universe – even though all is now officially acknowledged to be *energy*, while energy has itself been described by eminent scientists as an indefinable mystery.

Yet the *Threshold* understanding of *primal potential energy* is simple: it is the dynamic between the complementary polar opposite cosmic forces, contracting, *yang gravity* and expanding, *yin levity*.

The *Equal Measure Unit (EMU)* number system

From the *Threshold* perspective, a key psychological factor in this misguided tendency is the appeal of an artificial but extremely useful system of *equal measure units*, **EMUs**. Number systems are normally based on the assumption that in all circumstances one specific *unit*, as represented by a number symbol, is exactly equal in value to any other such *unit*, ie they are rigidly standardised. In *Threshold Mathematics*, such numbers are referred to as EMU (*equal measure unit*) numbers, and they are the basic, familiar cardinal numbers such as 1, 2, 3....

Since humans have been able to reproduce standardised material objects, such as bricks or coins, there has been a strong temptation to look at the world around us as though the cosmos and all in it were made of minute, identical *building blocks*. However, this view does not coincide with the fluid continuity, the pulsating, ever-changing reality of cosmic and natural *expansion/contraction* into conditions of relative *rarity* and *density*. Neither does it coincide with how minds and feelings function.

Given that the cosmos is not an assembly of cubic unit measures of *space*, or units of 'time-line' duration, there is a fundamental incompatibility here. An imaginary grid of squares can be 'placed' around or through any object or space to enable it to be measured for calculating, in terms of squares and cubes, but that only gives a quantified model, map or diagram of the actual reality.

So the EMU number system, in conjunction with the *binary* digital bit system, is essentially an ingenious psychological artifice for simulating and modelling reality. It is ultimately an illusory trick, a deceptive device, which requires our suspended disbelief in order for it to work.

As such, it can be likened to the trick of cinema (the Greek word *kinema* means motion) where a sequence of still images is 'seen' as movement and life.

This defining characteristic of current mathematics is thus the illusion, the required mental shift between the physical actuality and the imaginative perceiving, that enables much of mathematics to work. The EMU trick is, therefore, both its strength and its 'fault-line' weakness.

It has proved a very useful device when applied within the physical-material realm and the range of scales, large and small, to which humans can readily relate. However, the psychological incompatibility becomes increasingly problematical towards the extremes of the human scale of comprehension, in both time and space. Here a growing sense of meaninglessness is experienced in trying to come to terms with extremely large and extremely small numbers. And then, pointing beyond the vanishing extremes of what we can conceive, are those signposts labelled *infinity* and *eternity*.

No situation is precisely repeatable

'*Repeatability*' is an important part of the 'scientific method', ie the verification process in orthodox science. But the continuously shifting configuration of subtle influences of the solar system, galaxy and cosmos create a constantly changing set of circumstances. So, given today's ultra-sensitive detecting and measuring equipment and nano-technology, repetition of

any experimental situation can never be precisely 'identical' – at best, only an approximation.

And the validity of the **peer review** system for assessing new discoveries and theories, from a psychological perspective, has many potential weaknesses. Not least is the human personality factor: that scientists, like many other professionals, are affected by '*career fear*', '*funding fear*' and '*reputation fear*', which can make them unwilling to step out of line and question official dogma.

They're also often very competitive, viewing others as rivals for prizes and financial rewards. Which is a typical *pre-adolescent* trait in humans, as they recapitulate in each lifetime an earlier phase in human evolution – in this case, the phase of striving to establish one's place in this or that pecking order.

A few examples of the new coherence

The Primal Code is a short paper demonstrating how *Threshold Mathematics* provides a resolution of the oldest (2000+ years) and best known mathematical enigma – that is, the pattern, meaning and significance of the *prime numbers* sequence. It has done this by approaching it from outside the conventional EMU mindset, ending up with a mathematically sound, consistently logical resolution which delivers the relevant numbers. In so doing, it highlights the need to extend radically current mathematical thinking, a need implicit in Gödel's *Incompleteness Theorems* of the 1930s.

That achievement was partly based on Pythagoras's practical scientific approach to the principle of physical *resonance*, later reinforced by the mathematics of Euler. *Threshold Mathematics* also demonstrates how the so-called '*irrational numbers*' are rational when viewed from the *Threshold* perspective, given its own coherent rationale.

Why is science such a turn-off for so many people, yet fascinating for a few?

The simple answer, from the *Threshold* perspective, is that having emerged during the *masculine*-dominated era of *descent into matter*, physical science soon lost the youthful, magical excitement of inquisitive, open-minded experimentation and discovery. It became, instead, inertia-bound, institutionalised, dogmatic and corrupted by money, politics, status and professional rivalries - ie by the typical human attitudes prevailing at the time.

That context gave rise to the ruthless seeking of material wealth, power over other people, superiority in status and fame, all of which were, and in some situations still are, considered acceptable and admirable behaviour. It also inevitably encouraged cheating and fraud over honesty and integrity. For example, the supposed 'checks and balances' function of 'peer reviewing' is now widely recognised as susceptible to abuse, rivalry and carelessness.

The result, broadly, has been the misguided, amoral, sterile and typically *masculine* kind of materialistic, mechanistic science already described. The turn-off seems to begin with the teaching of science at school, despite the wide appeal of science fiction as entertainment.

And after the initial glamour of hi-tech equipment and the fantasy of making great new discoveries starts to wear thin, the idea of a continuing interest or a career in science only seems to appeal to a small proportion of young people, ie those who feel that those qualities suit their personality, preferences and curiosity.