

ABSTRACT

Cell Replication is the key to unfolding the Zygote in forming the body -of which a century later its coherence is still seen. This needs to be explained - using more fundamental principles than regarded by MD's. Considering the fundamental conservation laws of physics, the principle of "Cooper Pair" is proposed.

KEY WORDS

Zygote, Cell Replication, 4D Phase Coherence/Change, Conservation Laws, Singularity, Soliton, Tetronics, Cooper pair.

INTRODUCTION

From the moment of conception on, a body is formed which can preserve its integrity (even in changing circumstances) for a century or more. "Probability" (and "Relativity") does not explain that. The preservation of coherence is so strong it must be founded at a deeper level.

Cell Replication of the Zygote takes place in 4D: 'Matter Dissolves, Molecules Evaporate, Atoms Discharge' - then a reflection takes place in phase space resulting in a 'Cooper Pair' of cells. This might be a key to achieve optimal stability to maintain coherence as the Zygote unfolds onto a body composed of 30 billion ($30 \cdot 10^{12}$) cells.

MD's regard the body anatomy as the basis of cell cohesion. Embryology {Jaap v d Wal} shows that body anatomy is a consequence, not a cause.

Body formation starts with the Zygote, formed from a converging-fractal of sex cell fusion, involving more ancestors than there are now people on Earth.

By Cell Replication (Division=multiplication; differentiation=integration) the multiplicity of body cells is explained, but not their cohesion.

System Theory and Cybernetics help understand that accumulated error in this process would fairly rapidly, and rather 'explosively' lead to decay and collapse of the system.

Medical history started with the study of anatomy, then physiology, then neurocrinology (still ill understood) and finally the brain (consciousness still not being understood).

Still MD's are first taught anatomy,
then physiology (without understanding its link to psychology, sociology and ecology),
then learn about neurocrinology (without learning anything of its electromagnetic aspect, nor its dual, the immune system),
but still do not learn about consciousness (nor its essence, Freedom of Choice), but are led to believe that we resemble computers (which in a very limited way reflect us) and are even told that computers will outsmart us (forgetting that they can only replicate, not create).

Medical knowledge is as yet very incomplete, as is classical science on which it is based.

Ayurveda has better understanding of how our body processes link to the cycles of nature; as relativistic science started to understand.

Acupuncture has better understanding of the calibration of the inner and outer cycles, as probabilistic theory seeks to understand.

Spiritual healing understands that our health/integrity is based on our integral integration with/in our environment (in selecting our course in the web of circumstances); as field theory intuitively.

Modern medicine is in many ways obsolete.

Relativity, Probability and Unified theory (all a century old) are not taught in medical schools.

Ayurveda, acupuncture and spiritual healing have better understanding thereof (respectively).

Integral Health Care resolves this by integrating the world healing traditions of the Far West, the Far East, the East and the West (in that order).

The way to heal health care lies in seeing how Modern Physics is applied in Traditional Health Care. More importantly: to see how Modern Physics can be recognised at all levels of our body. This can not be seen by looking at the body as if defined by classical science and anatomy. Instead it must be seen that consciousness in/and/of the quantum field is our foundation, as Tetryonics shows.

This essay connects the principle of cell replication of the zygote to the principles of cosmic creation. Cosmology recapitulates the development of science, step by step, in reverse. Science studied matter, discovered molecules, discerned atoms and understood how quanta move them. Tetryonics showed that everything science has discovered can be re(dis)covered from the quantum level up.

For the purpose of brevity of this essay it is assumed that the reader knows the fundamental Conservation Laws of physics. More important: how those conservation laws follow ... from the principles shown by Tetryonics. While realising that all those same principles of cosmic creation also operate in our body. But they must now be understood Not from the perspective of energy *physics* but as instance of (large scale) quantum coherence in phase space (*phasics*).

For those we were trained to believe in material electron energy physics, fundamental premises must be reconsidered. It is never the electrons that define energy, but the electric gradients that drive the electrons. (Unified/Super) Field/String theory realised that 'the orbits' are more crucial than 'the electrons'. Thanks to Tetryonics the electromagnetic nature of the unified/unifying field became clear.

At the core of Tetryonics is the fundamental quantum field dynamic:
A 0D charge in 1D motion trails a 2D magnetic wake with an associated 3D (Right Hand Rule) vortex. Although Tetryonic geometry is denoted in triangles and tetrahedral, it can be seen as vortical. And, that the Tetryonic quantum is at the core of all creation - an integral vortex complex.

What Tetryonics shows as a geometry of triangles, acting on tetrahedra (Tetryons), can also be understood as a 4D interplay of vortex systems. The particular view quantum mechanics cannot grasp this; it requires a view of quantum holography to appreciate the complex 4D coherent vortex networks. This complexity is of the kind of systemic laser coherence as shown in the Tetryonic light ray (which includes all its wave envelopes, together forming a soliton). This understanding needs to be combined with the understanding of "the Zipper of Manifestation": photon-leap \Leftrightarrow electron-leap \Leftrightarrow electron-oscillation \Leftrightarrow electron-bonding.

This defines the relationship between *quantum-change* \Leftrightarrow *atomic change* \Leftrightarrow *molecular change* \Leftrightarrow *Material change*.
A 0D dis/re-location of a bound electron in matter requires a change in 1D molecular electron flow, which requires a 2D change in the electron cloud of all involved atoms, which requires a 3D field calibration in the (Tetryonic) quantum (phase information) field. This is the principle (alchemical) transmutation (= Transmaterialisation = Zipper of Manifestation). This is most explicitly and clearly seen in the dynamic of Cell Replication.

In Cell Replication '*matter dissolves, molecules evaporate, atoms discharge*', followed by a reversal in phase space.

This is equivalent to a vortex inversion dynamic.

It is however not enough that this vortex is the Zipper of "the Zipper of Manifestation", while the Zygote ('like a zip file') 'unzips'.

It is necessary for the zipper to 'hold' for a century at all levels of 4D body (soliton) materialisation.

Bert Verveen showed that the cells formed out of Cell Replication turn the internal cell cycle of the Zygote inside-out to form the feedforward-feedback loop between the ensuing cells which preserves their unity.

These feedforward-feedback loops operate between cells, between organs, between bodies.

All these cycles must interlink and interlock in full (4D 'holographic') dynamic adaptive phase-lock.

Preservation of Momentum is not just at the superficial material cellular anatomic level.

All external feedforward-feedback cycles are (Möbius-loop) linked to the internal cell cycles.

Together they form a coherent set of Borromean Rings, variably coherently phase locked interlinked.

From the material to the atomic to the atomic to the subatomic (Tetryonic quantum) level.

The simplest model which can serve as a foundation for this long-lasting systemic phase coherence is the concept of Cooper Pairs.

What "Cooper Pairs" describes for fundamental particles, will be used here to describe the fundamental oneness originating from Cell Replication of the Zygote, that links and unites all body cells (into a Soliton).

This essay proposes that all cells formed by Cell Replication are a "Cooper Pair".

This is because they are formed by one single vortex inversion dynamic.

In this inversion the internal cell cycle is turned inside-out to form an external feedforward-feedback loop.

The universal principle of conservation of momentum must apply; in 4D at all levels.

To describe this, the principles of the Conservation Laws must apply.

But they are meaningful only if understood in a holographic perspective; nor from a "particular" viewpoint.

Science is essence 'made a wrong turn' in the Copenhagen Convention.

At the end of the convention it was decided that 'reality is particular' and 'scientists are not involved'.

At the start of that convention it was however clear already that particles are wave nodes, and humans (like the universe) are composed of protons, neutrons and electrons (and interwoven with/in the uniVerse).

It meant that the logical conclusion of the Copenhagen Conference should have been to replace quantum mechanics by quantum holography.

Tetryonic has now achieved this by relating the quantum field to electromagnetic dynamics.

Tetryonics shows how (Tetryonic) quantum fields can form and move matter.

It also provides a geometry (by which e.g. Schrödinger numbers can be read out instead of calculated).

In doing so it has unified the 4 branches of science and corrected errors in its models.

What we need to acknowledge is that, as it describes the uniVerse, it also describes us.

All models of science must apply to all scientists also; all of them, always, in all ways

Scientists are not outsiders of, but subject to the universal laws of creation.

The models that we use are incomplete if they do not describe how we, and our body, are created by those same laws.

MD's do not learn those laws well enough and are not trained to look into the physics of cell replication. Bio-physicists are not trained to look into the mathematics of complex systems. Bio-mathematicians do not systematically use Radio Element Circuit Diagrams to analyse the bio-electromagnetic dynamic of the bio-material they seek to describe. Such an analysis is incomplete if it is not based on a clear logic (4D Dynamic Logic is used here).

In the case of Cell Replication a full description is needed, requiring the expertise of all these (and other) disciplines to describe the fundamental 4D Logic which is at the core of Cell Replication- and the universal interconnectedness of all cells. In which the body materials, inter- and intra-molecular dynamics, electron clouds and currents, and all electromagnetic and light fields are totally interconnected.

This is not based on material objects (cells) being connected by processes, but on radio information field integrating electron leaps and -currents, which form the physical body structures. All body materials are selectively responsive to electromagnetic radio information fields and produced and positioned for the optimisation of cell communication (locally and body-wide).

This local-and-non-local connections therein cannot be described from a '*particle*' perspective; it requires a *holographic* perspective. The best fusion of those approaches which physics can offer is that of a "Cooper Pair". In essence, it is a representation of a two-sided vortex, where the vortex funnels are regarded as (if) 'particles'.

The vortex is a dynamic represented by Tetryonics as the two sides of a (Tetryonic) quantum change. They may appear as if physically distinct, but in essence they are (still) part of the same dynamic. If one side changes, the other side changes in the corresponding complementary way. The laws of conservation of momentum apply. Also (at all levels) in Cell Replication (again and again).

This is not operated by the principles of material physics; there the connected *process* dynamics are relativistic/fuzzy, and there the *transformation* dynamics (relationships of relationships) are probabilistic/indeterministic; and totally unpredictable at the yet deeper level of information *integration*.

In biology we see the opposite: autopoiesis and ('4D gyroscopic') self-correction, at all 4D levels.

Cell Replication takes place in 4D, via a 4D vortex dynamic, in/by which the movement of Matter, Molecules, Atoms and Quanta are 4D logically dynamically interlinked. Tetryonics shows in detail how Quanta form Atoms forming Molecules forming Matter - as this is supposedly universally valid it must be valid for our Zygote also.

Within this Logic the principles of physics must all apply: those of electromagnetism, and the ensuing principles of conservation of momentum, conservation of energy, and so on. This also means that when the Zygote/cell 'turns inside-out' ('forming a Cooper Pair'), then the 4D vortex rotation of Cell Replication, preservation of Momentum/energy/... must take place at every (interconnected) level of this 4D Dynamic.

One of these "Cooper Pair" dynamics is the connection between the cell cycle and its ensuing complementary ("Cooper Pair") 'inside-out' form: the feedforward-feedback cycle which keeps the units in unity (which, as Bert Verveen showed) is the basis of health.

Not just the feedforward-feedback loop formed by the inversion-eversion rotation of the Zygote (in Cell Replication) but also all Cell Cycles of all ensuing cells (resulting from Cell Replication) are thereby likewise interconnected. Daniel Dubois presents the excursion/incursion/recursion/hyper-incursion mathematics for this purpose. All body cycles form a hyper-complex set of nested, embedded, and concatenated Borromean Rings.

The cell-cycle 'turned inside-out' becomes the feedforward-feedback loop, that links both cells (keeping units in unity) but (by the laws of preservation of momentum) is still ("Cooper Pair") linked to the cell cycle from which it was formed, and of which it is an expression. (In MatheMusics the cells cycles are regarded as 'notes', the ensuing feedforward-feedback cycle as the ground-tone, and the pivotal inversion point in phase space as the 'overtone'.)

The internal Cell Cycle and the ("Cooper Pair") feedforward-feedback loop together form a Möbius Loop (on which the link between the External Food Chain and the Internal Food Chain is based).

The hyper complex network of internal/external cell-cycles/feedforward-feedback-loops forms a hyper complex mesh/network which serves as a 4D Vortex Gearbox linking each cell of the body with/in/within the environment, life on Earth, Earth and the uniVerse.

All these interlinked internal/external cycles are exactly intercalibrated. As described by Bert Verveen, the continued coherence of the feedforward-feedback loops is the foundation of Health; the Cascade of Disease (from Health to Adaptation to Compensation to Decompensation) sets in when feedforward-feedback continuity is ailing/failing/lacking/lost.

As all these hyper-complex interlinked loops-within-loops originate from one cell (the Zygote) and as all internal/external cycles are interlinked and interlocked, they function as coupled resonators. Every ring molecule, circular DNA, electric current loop and cell cycle forms part of that integral dynamic (systemic harmonic resonance; as described in MatheMusics).

The counterpart of circular DNA and ring molecules, is linear DNA and rod molecules. They together form the set of linear/translation and circular/resonant antennae described by Rudi Labadie. As with the feedforward-feedback loop (which can 'capture'/'transform') and the cell-cycle (which can 'store'/'resonate'.) This makes it possible to use the Möbius aspect of the "Cooper Pair" cycles to internalise, store, transform and release information/Matter 'from outside to inside and vice versa.

This operates at all 4D levels of our body: cells can internalise/store/transform/release molecules/atoms/electrons/photons.

All of this takes place in exacting exact accuracy and precision; nothing happens by chance.

Our body is not material/deterministic, molecular/relativistic nor atomic/probabilistic; it is integrated/unified in/from the quantum domain (as Tetryonics describes).

Nothing happens by chance: every atomic assembly and molecular transformation is exactly calibrated in/by the cells - all of which are interlinked/interlocked by the hyper-complex (hyper-incursive) system of Cooper Pair Borromean loops.

Another way to look at interlinked loops is in the form of hyper-pendulums.

- 1) A single pendulum has a fixed/deterministic trajectory/rhythm.
- 2) two pendulums (one hanging to the other) create variational rhythms
- 3) three pendulums (hanging one after the other) can create 'cusped' motions.
- 4) four pendulums (concatenated) can create 'unpredictable' motions.

These are the 4 aspects of the 1st, 2nd, 3rd and 4th Order of System Theory.

These were understood and described by Arthur M Young (Geometry of Meaning) as "position, velocity, acceleration and coordination".

Tetryonics has shown the larger complex/complexity of the geometry involved.

This implies that in our body, Hyper/Newton Pendulums are integral part of the interlinked/interlocked system dynamic.

This is also what we see in our sensory system

1) 0D sensory cells selectively respond to environmental vibrations by a (Dirac Pulse) charge discharge.

2) 1D neurones relay this charge discharge via ('domino stones') concatenated cells resulting in a Fourier coded relay.

3) 2D Neural plexus then aggregate and selectively amplify/suppress oscillations by a Moiré Matrix operation.

4) 3D Brain cells (a colony of Conscious living cells) then integrate the information in a Gabor Hologram.

Note that living cells are *conscious* and aware, intelligent and response-able (using freedom of choice); also in our brain, as in any organ.

Organ cells are *subconsciously* co-joint aware of what the other organ cells are experiencing/processing.

Body cells are *unconsciously* aware of what cells in the other organs are experiencing/processing.

Cells in the body have only *out-of-conscious* awareness/experience of what happens outside of our body (there is no direct contact and the only sensation originates from vibrations sensed by sensory cells in/on the surface of the body and 4D Dynamically relayed from the cortex to the core via the interplay of 0D Sensory cells, 1D Neurons, 2D Plexus to the 3D Brain).

Important is the realisation that this 4D (dis)integration/metabolism of information/vibration operates under a strict 4D Dynamic, in/by which all vibration/cycles/cells are 4D interconnected. Therein the dynamic of every cell connects to, and can be traced back to, the first cell (the Zygote). Via a Vrobel Time Fractal.

Note that 3D Space Structure (Material bound-electron "Standing Wave") is based on 2D Time Cycles (Molecular Electron-flow "Travelling Wave") based on 1D Energy Transformation (Atomic Electron-leap "Shock Wave") based on Quantum "Phase Change" (Tetryonic Field quantum change).

Tetryonics shows how phase change in quantum space is the foundation of the formation of Atoms, Molecules and Matter. It is the only 'force' which can move tetryons/electrons/protons/ neutrons.

In our body this too is the case. Quantum change can (dis)lodge electrons in atoms, thus change electron flow/availability in molecules and thereby determines electron binding/release in/as Matter.

Cell dynamics are based on that. By selectively using linear/rotational quantum flux to s(p)lice and reposition molecular fragments each cell can (trans)form molecules {Hans Selye} and calibrate cell communication {Bert Verveen} (as well as optimise Cell Communication by the precise production /positioning of Body Materials (the bio-"motherboard")).

As is the case in our brain, where every cell participates in the holographic process of information integration, likewise every body cell transforms/produces/releases/positions molecules based on the information field which all cells share.

Therein all cells function as units in unity {Bert Verveen}: a holographic process (in which 0D photons form a 1D laser forming a 2D holographic plate forming a 3D Hologram/Soliton).

Likewise there is a 'laser-like precision' in the way all cells work together in processing their shared information, because the cells themselves are likewise 'a holographic print-out' from the first cell (by its electromagnetic holographic projection from its DNA {Peter Garyaev, Robert Becker, e.a.}).

How 'rigid', exact, and precise this is becomes clear when it is seen that all cells 'operate the same vortex motion' {Lawrence Edwards} by being Cooper Pairs of each other. And thereby, as in a laser generator, create and maintain a (cell system) coherence of the kind described for Soliton waves.

Tetryonics (using tetrahedra representing vortices) shows the integral integrated vortex dynamic coherence, from the quantum domain up, on which this universe and our body is based. It also makes explicit that we need to understand that the electromagnetic Tetryonic quantum field is the foundation of everything in existence.

Likewise the contracting/expanding Vortex (Vrobel Time Fractal) in the formation of the Zygote is tied in with the contracting/expanding vortex of Cell Replication, which is the basis of all body cells operating as units-in-unity - because they are "Cooper Pairs".

It is that exact coupling of all cells which is needed for the 4D Dynamic holographic coherent functioning of our body as a whole. This needs to be understood to understand how health can collapse to illth, disease and death when that precise coherence ... decays, collapses and is lost.

PHYSICS

As Tetryonics shows, reality is Not *physical* but *phasical*. It is the quantum (electromagnetic radio information) field that forms and moves all forms of matter.

As long as Tetryonics is not fully understood, many scientists will still think about 'reality' (and our body) from the perspective of physics (rather than phasics). (And ignore our 'realisation' process.)

Based on the current notions/concepts of physics, the unity of the body (formed by its units/cells) cannot be seen/understood in terms of its physical ('separate') structures, thus must be looked for in its process/dynamics.

As physics does not tend to look for the (transformation) process of origination, most of its considerations are at the level of variation.

As described above, these processes cannot be stable if they are not phase-calibrated in their 'connection points' (as meridian therapies understand).

These processes cannot coherently adapt to changing conditions if the phase calibration is based only on local information- it requires 'transcendental'/non-local information in/from phase space.

1st Order	2nd Order	3rd Order	4th Order
State	Process	Transformation	Integration
Position	Speed	Acceleration	Coordination
Space	Time	Energy	Consciousness

Physics tends to regard motion as an attribute of the object it Observes.

It thereby regards the objects as 'moving' because of changes in/of object-relationships.

It can include the movements of other objects as 'explanatory' for resulting motions.

But physics (physicists) tend to disregard the effect/influence of immaterial (electromagnetic) fields ("Aether").

As will be addressed in the next section, Matter is formed by clusters of structurally inert Tetryons. Tetryon Clusters are formed by (surface-to-surface) strong force bonds, (rib-to-rib) weak force bonds, (tip-to-tip) derived force bonds; and gravitation (quantum field fluctuation pressure).

Tetryons are moved by the ambient fluctuating Tetryonic quantum field, the quantum influx/efflux into/out-of Tetryon clusters ("Exergy"), the quantum circulation within Tetryon Clusters ("Energy") and the (reflected quantum fluctuation) "Radiant Field" around Tetryons (thus Tetryon clusters).

In disregarding those fields, physics 'sees the material, but ignores the immaterial' (unlike cells...). As a consequence physicists also did not study consciousness (although they knew they operated consciousness in studying physics).

Even when physicists (applying immaterial electromagnetism) created computers, they did not study the "software" (consciousness) in their "hardware" (body).

Instead, they continued regarding the "laws of motion" as if they were material/mechanical (properties of matter), rather than exploring if they were expression of immaterial electromagnetic/information field kinetics (as Tetryonics found).

Yet, even from the perspective of classical conventional mechanistic Material physics, there are good reasons to suspect that cells-formed-out-of-a-cell are "Cooper Pairs".

By the "law of preservation of momentum", all material rotation dynamics seen *after* cell replication MUST be balanced with all material rotations *before* cell replication.

Also, by the "law of preservation of energy", all energy/mass *after* cell replication MUST be accounted for by all mass/energy *before* cell replication.

MD's, had they studied this, would have noted energy discrepancies: the increase in mass must be accounted for by a change in energy (as Tetryonics now can show).

MD's, had they studied this, would have seen that the internal Cell Cycle *before* cell replication was complemented by a second cell cycle *after* cell replication and that these cell cycles are interlinked.

MD's were aware of the 'new' feedforward-feedback cycle between the newly formed cell Pair.

By studying the cell cycle synchronisation (taking place predominantly in the cell cycle "pause phase") it would have become clear that there are many "loss-of-synchronisation diseases" (e.g. cancer); with the implied understanding that our body operates an integral system-wide synchronisation calibration (as meridian therapy knows).

Based on "pure physics", the "Cooper Pair" nature of cells formed by Cell Replication should/could have been detected.

That realisation could/should have led to the insight that *all* body cells are "Cooper Pair" connected (and that all cells are part of an underlying coherent dynamic integral harmonic (soliton) field).

That again should/could have shown that all ("Cooper Pair") body cells form complementary/dual parts/particles of the same vortex, throughout the body at all levels.

With the implication/conclusion that all cells are nodes in a complex 'holographic ' (unfolded) integral coherent autopoietic synpoietic hyper-vortex (soliton) system.

With, of course, the same conclusion as (unified/super) field/string theory derived from the idea of "atomic orbits":

If atom orbits determine electron motion (thus materialisation): what then defines atomic orbits?

If body cell coherence is based on 4D coherent vortex dynamics: what is the underlying logic?

The 4D Dynamic Logic has been separately described (and will not be elaborated in this paper).

One essence of 4D Dynamic Logic is "the i-god Principle": the universal dynamic of creation by

(Integrated) **Generation/Operation/Destruction** of system boundaries.

A boundary represents a *Distinction* {George Spencer-Brown} thence a *Logic* (Yes, Yes-and-No, No, not-Yes-and-not-No) {O#o}.

A system boundary is a 4D region/border/singularity of phase inversion; by inversion of the phase inversion, a boundary transition/elimination is attained.

Lawrence Edwards showed how this inversion of a system boundary in/on itself is essential in Life: "The Vortex of Life".

TRANSPHYSICS

The essential fundamental story of transphysics is best told by those people ("alchemists") which science (=scientists) ignored/denied because they looked into aspects of life which 'science' could not explain. Alchemists described how Earth/Matter, Water/Molecules, Air/Atoms and Fire/Quanta are aspects of one interchangeable system, operated by the quintessence/quantum-change. Indeed, photon-leap \Leftrightarrow electron-leap \Leftrightarrow electron-oscillation \Leftrightarrow electron-bonding: physics is not about materialisation but electron (un)bonding - driven by changes in the electromagnetic quantum field.

The principles described by alchemy as transmutation (=Transmaterialisation) is seen at all levels in our body:

Earth/Physics/bound-electrons/Matter is formed by Water/Chemistry/electron-flow/Molecules formed by Air/Electromagnetism/Electron-clouds/Atoms/ formed by Fire/Quanta/phase-change/quantum-change.

Although this is known for more than a century, there are still scientists who do not acknowledge this and that/how this (transmaterialisation) operates in our body; nor how (quint)essential it is.

For our bodily functioning this is essential and crucial:

The information of the ('unknown') environment is needed to choose and optimise our experience with/in it.

That information is selectively used (Filtered, be "Decisions") to gauge and calibrate our involvement.

Based on that Decision internal processes/processing is operated, to prepare ("intent"/"conviction") for the best interaction with/in those conditions.

That leads to specific actions (which later in 'same' conditions can be replayed from memory ('known') by Reflex.

Science studies the 'unknown', but some scientists do not understand that. They do not understand what they do not understand, and are unwilling to acknowledge that there is much which they know they do not know.

Such people declare (to themselves more than to others) that there would be forms of research which they call "*unscientific*". By declaring themselves to be 'experts on the topic', this means that they are "*unscientists*" (a form of dogmatic cultish fundamentalism).

Their assumption that science is a-complete-and-closed-system-of-knowledge is wrong, as is their implied ('dogmatic') claim that science is 'true' and 'right'. As the history of science shows (like a baby falling and getting up in learning to walk) science (scientists) created many models which were wrong, untrue and now discarded; many were 'dead ends' and only a few could serve as scaffolding for 'what is known now'.

The '*unscientists*' postulate that 'science deals with 'established knowledge' (mind/memory); that is not the case: science is about getting to know the unknown using soul/Intuition. Part of us/science deals with the known (mind/closed-system); part deals with the unknown (soul/open-system).

This is seen in the body as the integration of information/physics with Matter/physics; with Freedom of Choice (=the ability to 'flip a quantum').

Science itself is not scientific, nor are scientists. Science is a society of self-selected self-appointed scientists; a club, a guild, at times a cult. Science serves an important function for humanity: Angst-reduction. This means that 'the job of science' is to 'boldly look where no one wants to look' - some people found that so scary that the first scientists were 'burned at the stake' (for which the perpetrators were never punished).

Science is a psychological activity: "Observation" is not a noun but a verb. Every description of science is a formulation of "realisation" by a scientist.

Like everybody else, any scientist has his/her own blind-spots, ignorance, bias and superstitions. These are essential and logical psychological 'defence' systems necessary for dealing with the unknown. In our eyes we see how our "Blind spot" (the inversion point where the optical nerve bundle of the Retina leaves the eye - 'the umbilic of the eye') is 'covered up by the Blind spot of the other eye, by saccadic eye movement, by the optic nerve cross-over and by the 'double exposure of the visual image in the optical cortex in the rear of the brain ("Plato's cave").

In our body we thus see, explicitly, that the known is interwoven with the unknown, and that our existence takes place within a 'bubble' defined by Einstein as the "event Horizon" said to be limited by the 'speed of light'.

Max Plank however proposed that the edge of our reality realisation is defined by a quantum change: called a "quantum-leap". It means that the Event Horizon has another side.

Tetryonics makes clear that Einstein's "Event Horizon" is the leading edge of a light wave, thus a wave node, which can not only invert as postulated by Plank, but also contains all the wave envelopes of the entire soliton/scalar light ray.

Our body is such a soliton, projected from a wave node (the zygote) and thereby an inversion point (of reality into itself as described by Lawrence Edwards) and thereby also a wave node in/of the universal quantum field that surrounds us.

Our body is (inverted) part of the universal quantum/Light field, is/has its own quantum/light field, and thereby projects a quantum/ light interference field; these three quantum/light fields reflect on/of the (Tetryon) materials of the body, thereby creating a projected "Radiative Field" Tesla/scalar wave that is as many light-fields large as the age of our body (5+ billion years).

In our quantum/light field (which orchestrate Cooper pair cell complex soliton coherence) we all have our blind spots (wherever a subsystem 'turns inside out' in being connected to the super system). Similar blind spots arise from cognitive denial and unresolved internal trauma (then the body can no longer function as ('Cooper pair') integral part of the whole. These cognitive blinds can 'latch onto each other' (creating cognitive conflicts in society/ humanity/science). This 'reverberated ignorance'/denial between people based on trauma/blinds spots within people is called "Wetiko".

By the "Wetiko principle", individual denial/ignorance/bias/superstition of scientists can/will become amplified/suppressed in science (the society of scientists). This is by the same principles as by which sensor-impulses from 0D (Dirac Pulse) sensory cells are relayed via 1D (Fourier Code) neurones to the 2D (Moiré Array) neural plexus - before being integrated in the 3D Gabor Hologram brain; a colony of living cells with their own individual/collective awareness/consciousness.

TRANSMATERIALISM

"Transmaterialism", a.k.a. Transmutation was already understood and described by the alchemists. The underlying principle is that of "The Zipper of Manifestation" which refers to "photon-leap \Leftrightarrow electron-leap \Leftrightarrow electron-oscillation \Leftrightarrow electron-bonding". This formulates that Quantum change \Leftrightarrow Atomic change \Leftrightarrow Molecular change \Leftrightarrow Material change. This corresponds with physics \Leftrightarrow electromagnetism \Leftrightarrow chemistry \Leftrightarrow physics. Which are traditionally described by, respectively: Field Theory \Leftrightarrow Probability Theory \Leftrightarrow Relativity Theory \Leftrightarrow Classical Theory. These correspond

with an assumed involvement of the scientist as Outsider \Leftrightarrow Reactor \Leftrightarrow Interactor \Leftrightarrow Creator.

The following table shows these 4D relationships in overview:

photon-leap	electron-leap	electron-oscillation	electron-bonding
Quantum change	Atomic change	Molecular change	Material change
Physics	electromagnetism	chemistry	physics
Field Theory	Probability Theory	Relativity Theory	Classical Theory
Outsider	Reactor	Interactor	Creator

The understanding of the alchemists is very accurate and can be seen to operate at all levels in our body.

Transmaterialism/Transmutation describes the responsiveness of bio-materials to changes in the quantum/phase/information/consciousness - the bio-materials precisely produced and positioned by the cells ('the motherboard' to optimise Cell Communication) are Piezo-electric, Liquid-crystal, Transducer-transponder and Intelligent-gel.

Thus, operating physically, chemically, electromagnetically and photonic.

This also is seen, not statically but dynamically, in the bio-molecules used in/for/by Cell Communication: proteins/physical, enzymes/chemical, hormones/electromagnetic and pigments/photonic.

Transmaterialism is well understood not only in alchemy but also in System Theory, Cybernetics, and Radio Element Circuit Diagrams - which not only specify the capacitor/space/storage/structure, coil/time/flow/process, resistor/energy/interchange/transformation and switch/phase/information/consciousness but also more specifically define the (change in) relationship between bound-electrons, electron-flow, electron-leap and photon-leaps. It defines the dynamic of transmaterialisation itself.

Our body as a whole is a process of on-going transmutation. Physiology shows the material aspect, psychology shows the information aspect. The non-local version of the same dynamic is seen between humans, as (respectively) ecology and sociology.

Our sensory system, digestive system, immune system and sexual system are all based on the very specific application and use of Transmutation/Transmaterialisation on/of/by/for our body.

The dynamic of transmaterialisation is best seen in Cell Replication.

3D Material structure 'dissolves', 2D Molecular electron-flow 'evaporates', 1D Atomic electron charges 'discharge' followed by a pivotal 0D phase change in quantum space.

This Cascade from 3D to 2D to 1D to 0D is characteristic for a vortex dynamic (as when a plug is pulled in a full bath: the 3D volume flows from the 2D surface through a 1D streamline to a 0D sink point).

This same 4D structure can be represented in the form of a Tetrahedron: 0D Points linked by 1D Lines forming 2D Planes in a 3D Volume.

When physics studies Cell Replication from this perspective, and looks for the transmutation in the stages of transition from material to molecular to atomic and (most important) the pivotal reflection in phase space, where by the inherent vortex motion the Cooper Pair is formed, then it becomes evident how the classical/Outsider, relativistic/reactor, probabilistic/interactor and quantum/Creator perspectives must be linked.

Rather than integrating those 4 forms of science, it will become evident that it is more meaningful to

use Tetronics instead; in which these aspects of involvement in observation are already interlinked.

Evidently, if the vortex transmutation in cell replication forms our body, it also forms the basis of science (a body of knowledge) - which aims to optimise our abilities/capacity/potential/scope of what we can experience in our ("alchemical") body.

COOPER PAIR CELLS

Physicists conceived of the notion of Cooper Pair particles by using a model of Vorticity in their formulations. It implied a duality, same as seen in the link between black holes and white sources, magnetic contracting north poles and expanding south poles, and positive and negative charges.

As always, the mental models we use filter our perception; same as coloured/curved eyeglasses.

The changing models of science represent a change in involvement
From Outsider observer to reactive to interactive to Creator. "Objective scientists' ignored/denied their involvement and failed to see that science had crossed a boundary: from Outsider to Insider.

Such a boundary transition can be modelled in the form of a vortex (Einstein's zero point transition light cone) and understood using 4D Dynamic Logic.

The dynamics of transmutation are based on electron-dynamics. In part these are 1) as the movements of clouds in the skies, 2) in part as rivers in a landscape, and 3) in part as lakes/oceans. But the origin of clouds forming rain forming rivers and lakes lies in 4) the clear skies - in this case the quantum field which is as 'invisible to us.

These electron-dynamics are like any process/flow producing shapes as defined by the conditioning conditions.

D'Arcy Thomson showed that such conditioned/conditional forms are scalable; for example, a herring drawn on rubber takes the shape of an eel when the rubber is stretched lengthwise, and appears as a box fish when stretch up and down.

Likewise, those who studied flows forms (this includes sonograms such as Chladni figures and Cymatics) recognise that the shapes of the body organs are flow forms, such as seen in the wake of a pillar of a bridge. The shapes of colon, kidneys, lungs can be seen as transient flow patterns; seeing the same patterns in the forms of the organs suggests a shared underlying logic. Which must be traced back to its origin: the inversion vortex rotation of the Zygote.

The Zygote is the turning point between the contracting time fractal/vortex of sexual cell fusion (condensing all of humanity into a unique human) and the expanding time fractal/vortex (resulting in a hyper complex vortex complex) of cell fission.

The dynamics in/of/at a zero point too is conditional and scalable - this is described by the dynamics of the Mach conic. This is but one of very many Critical Parameters, identified by Dimensionless Numbers as indicated by the technique of Dimensional Analysis {Henry Langhaar}. All Critical Parameters pertain to the redefinition of the system boundary (thus changing the boundary, the conditions and the logic). Note that if therein parameters are omitted or redundantly added then the critical parameter which defines the system boundary/ definition will be affected/alterd.

In our body the 'critical parameter' is set: the cell membrane plays that role, and thus acts as a "filter". Every next cell Division Decision 1) adds another filter/layer, 2) adds another (differentiation=integration) quality of essence and exchange with all other cells, 3) adds another

feedforward-feedback loop (interlinked with all pre-existing loops, and all cell cycles, and all environment cycles) and 4) adds a new zero-point transition (integrated with all other zero transitions in phase space - together forming a Decision Tree fractal which is in essence our Soul). All those new qualities at all those 4D level are interlinked and part of the same process (as traditional health care and System (Patho) Physiology Well understands).

Starting with the first cell division=multiplication, every cell Division is a cell Decision, and consecutive increments in differentiation broadens the scope for integration. Every next cell adds another cell membrane=boundary=filter=quality, adding to the scope/scale/spectrum for integration in/to different, more diverse environments (expanding liveable territory) as well as adding to the scope and potential for social diversification (allowing for more complex/refined social networks/cultures).

Single cellular Uniformity has a limited scope and is very dependent on its conditions. As is seen in cloning plants, versus the greater potential for environmental adaptation in plants using sexual diversification.

In nature we see {Gaston Naessens} an ongoing increase in inner complexity/coherence. Amino acids => Proteins => RNA => DNA. By the Lipton/Pavlov/Oshman/Reckeweg principle ever more consciousness, life experience, is condensates and crystallised in Matter; serving as a hologram repository/projector {Peter Garyaev}. With an increased capacity to express consciousness as microbes => plants => animals ≈> self-aware social cultural life forms {Lynn Margulis}.

Microbes, and planted 0D seeds are embedded in and depending on their immediate environment.

~ In the biblical description this is "the garden of Eden" (cf. a flower pot; Earth).

Plants are rooted in, bound to their location. They can connect earth-and-water below (roots) with air-and-light above (leaves); the microbes feed the flowers and the sun feeds the microbes. This represents the 1D Vrobel Time Fractal Decision Tree by which the Zypote unfolds to form our body.

~ In the biblical description this is "the (life/decision) tree in the garden of Eden" (the fractal dynamic of Cell Replication = i-god Boundary/limitation Transition).

In **animals** the seasonal cycles are internalised in the 2D blood flow which gives them the potential to recondition their conditions via the many Internal-external multiplexed interlinked Borromean/Möbius Loops.

~ In the biblical description this is "the snake in the garden of Eden" (the interlinked natural/seasonal cycles)

Sentient beings add a other (vortex) inversion dynamic, and can recondition their 3D conditions not only to suit their local (space time) conditions, but also the non-local (universal energy consciousness) conditions.

~ In the biblical description this is "the apple in the tree in the garden of Eden" (it is the integral unifying ("van Allen Belt") field of the vortex inversion dynamic).

The Vortex of life {Lawrence Edwards} shows how these 4 levels are interlinked in one integral integrated integrating inversion dynamic:

point/seed/egg,
line/boundary/distinction,
vortex/unfoldment/transcendence,
torus/soliton/integration.

In terms of vortex dynamics, the seed corresponds with the 0D zero/inversion point (universe outside, self inside).

The plant corresponds with the 1D linear fractal flow streamline; a division decision tree.

The animal corresponds with the 2D territorial boundary (re)definition; with metabolic cycles.

Self-conscious beings correspond with the 3D Vortex volume, which includes 'the opposite side of the vortex'.

The Vortex unfolding of the body operates as a Soliton and is (like) a hologram projection:

The cell is like the photon,
the ('vegetative') cell replication is like the laser-beam,
the organ system like the photographic plate, and
the body like the soliton/hologram.

As shown in Tetryonics, such expansion/projection required (increased) coherence. As Tetryonics shows, the light ray is not just an assembly of waves in a wave train (as modelled by Einstein) but must include the harmonic wave envelopes to (multiply) stabilise the wave nodes.

The **wave node** is the key to establishing a long-enduring intrinsically coherent (autopoietic synpoietic) Soliton.

The **wave** that this forms extends/expands/unfolds the quality of the wave node (bindhu/seed).

The **wave train** unfolds the wave by self-replication (cf. Cell Replication)

The **wave envelopes** stabilise the wave train by self stabilising harmonics into (Tesla/scalar) wave 'laser-like' (soliton) coherence.

For the cell/wave to be optimally suited as wave/unit for repeated replication, the initial unit must be optimally stable. Likewise in Cell Replication of the Zygote there is a need for intrinsic self-stabilisation in self-replication. Clones would be good. Cooper Pairs would be better.

CONCLUSION

Cell Replication produces a (Cooper) Cell Pair. The internal Cell Cycle turns inside-out thereby forming the feedforward-feedback loop that keeps units in unity.

Cell Replication not only divides=multiplies (differentiates=integrates) the cells, but also the cell membranes, and the electromagnetic/photonic field associated with the cell.

The medical 'assumptions that 'the cells form the body' 'is not good enough. If science is to serve humanity well, it needs to be applied well, and needs to be recognised in our body (functioning).

Tetryonics provides a basis for studying Cell Replication (thus body formation) from the quantum level up.

Deterministic science only applies to materials (defined/confined by bound electron states).

Relativistic science applies to molecular dynamics (pertaining to all electron flows).

Probabilistic science pertains to electron leaps in atoms (without accounting for the electromagnetic fields that cause them).

Unified field science seeks to address the electromagnetic dynamic (in the form of schematic electron orbits in atoms).

Tetryonics provides a different, more integrated approach to universal creation.

If it properly accounts for that (as its many findings show), then its approach must apply also to our

human body formation.

Most explicitly and precisely: in the dynamic of cell replication.

Out of that follow the fractal unfolding of body formation, including the precise production/positioning of Body Materials and the exactly calibrated production/release of bio-molecules used in cell communication.

As with science ("axioms"), medicine operates with (too many) assumptions.

Tetryonics provides a model to resolve that.

As Tetryonics is based on a short-circuited radio circuit, it implies full capabilities of radio element circuit diagram representation.

As the radio element circuit diagram representation implies the relationship between information, energy, time and space, this allows for a fundamental 4D formulation of Cell Replication dynamics also.

It means that our body unfolds from the zygote by very precise (Cooper Pair) replication dynamics which by laser-like entrainment can produce and maintain an internal 'hologram/soliton' coherence/cohesion - which can last a hundred years, more or less.

This coherence in space, time, energy and consciousness can be modelled by, respectively, capacitors, coils, resistors and switches to demonstrate what Tetryonics found: the (Tetryonic) quantum forms and moves all forms of matter - that includes our body.

Thereby this essay seeks to provide an opening to understand and explain the intrinsic long-lasting 4D continued cohesion in/of our body.

This is now possible Thanks to:

Tetryonics (tetryonics.com)

Jaap van der Wal (embryo.nl)

Peter Garyaev, Rupert Sheldrake, Bill Tiller, Walter Schempp, ...

Fritz-Albert Popp, Roel van Wijk, Rajendra Bajpai, Henk Kooij, ...

Hans Selye, Bert Verveen (verveen.eu), Saskia Bosman, ...

Robert Becker e.a.

Daniel Dubois, Gilles Nibart, Peter Marcer, Peter Rowlands, ...

....