

'Life' Explained?



Austin D. Torney

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Preface

How does the inanimate becomes animated. I'm counting on the readers to pick up on any sparks of insight herein.

Of course, the degrees of life accumulated, through evolution, and it consists of creatures able to take in energy, through metabolism, but what makes it tick?

Life and its experience, in higher forms, came along way later than the universe, so it is an afterword, yet, like all other things in existence, this can shed some light on what constitutes the universe, since life is of the universe. What comes to mind are both the holistic and the detailed sides of the brain, which we will get into later.

Perhaps the knowledge of movement makes for animated life, but, when did this happen? How does one draw a clear line between organization and not? When, even, does the night turn to day?

The most interesting and potent things, from the evolution of the universe to life, exist at the blurred boundary between order and chaos, Life perhaps emerging in tide pools—the shifting edge between land and sea. It is all of the fuzzy realm in which and where things have to be orderly enough to take form, but not so much frozen that they cannot change.

A 100 billion neurons exist in the brain, each connecting to about 1000 others, granting a lot of processing power. We even deal with the animate (other minds) differently than the inanimate, leading some to think that there is even a dualism between our own minds and bodies, but this has never been shown. Even identical twins develop different memories and directions, showing that everyone is quite unique in the history of the universe.




Life Explained

It is, of course, that atoms and molecules make life up, through a casual nexus of physical-chemical reactions; however, this observation cannot be equated to an “explanation”, for it seems not to be plainly reductive, and so we might delve deeper, to look for something else going on, for there may very well be a background behind what the chemicals do.

According to the quantum realm, “matter” is only composed of potentiality—it only becomes matter when it’s “real-ized” by its interaction. In a stable configuration of matter, such as would be so in the inanimate, all the quantum uncertainties may be effectively statistically averaged out, this thus ever being deterministic; but, in the case of the statically unstable but dynamically stable configurations of the animate, the ‘lively’ features of the underlying quantum structure have a chance to surface to the macroscopic level; that is, to life, and I wish I knew exactly how.

The electric dipole moment of biomolecules might be the ordering parameter for the corresponding macro-quantum system, and so this could result in a change in quality for that macro configuration. There is the particle and there is the wave—either one forced on us by our observations, being jointly known as the ‘wavicle’, all three states of which are probably truly not the actual reality.



LIGHT IS A
WAVE!

There are, strictly speaking, perhaps, no objects that are identical with themselves over time—the temporal sequence remains open. Nature is often no longer seen as clockwork, but only as a “possibility gestalt”, the world occurring anew each moment. The deeper reality from which the world arises, in each case, acts as a unity in the sense of an indivisible “potentiality”, which can realize itself in many possible ways, it not being a strict sum of the partial states.

Bohm suggested that the whole universe could be thought of as a kind of giant, flowing hologram, or holomovement, in which a total order is contained, in some implicit sense, in the same finite space. In reality, time is an illusion. The explicate order is a projection from higher dimensional levels of reality, and the apparent stability and solidity of the objects and entities composing it are generated and sustained by a ceaseless process of enfoldment and unfoldment, for the illusions of subatomic particles are constantly dissolving into the implicate order and then recrystallizing. So, our reality dissolves and reforms in a constant dance that, like moving pictures, cannot be perceived by the mind's eye.

What remains unchanged over time are certain properties that find expression in the laws of conservation of energy, momentum, electrical charge, etc., these necessarily being closer to the basis of all. It appears to us, though, that the world consists of parts that have continued from "a moment ago", and thus still retain their identity in time; yet, matter really only appears secondarily as a congealed potentiality, a congealed gestalt.

Physical phenomena may not be made of basic building blocks but are perhaps made of “elementary processors”, which are complex-valued field “operators” that depend on time and location. These generate certain overlappings of correlated multi-dimensional wave fields that are propagating through time, fields of possibility, whose intensity is a measure of the probability of an object-like realization, this intensity being very sensitive to the relative phase of the overlapping partial waves.

There are no point masses then, but only smudged particles, such as we suspect in the space-filling representations of the distribution of electrons in the shells of atoms—a ‘cloud’. There is a relationship structure that arises not only from the manifold and the complicated interactions of the imagined building blocks of matter, but also one that is substantially more inherent and holistic, again such as we see in quantum physics. So, there is form before substance, relationality before materiality. It’s hard to imagine pure relationships existing without a material substrate, but, consider electromagnetism:

E/M fills space—without a material substrate, but is probably still physical, or consider a music CD—its singers and instruments encoded in a relationship structure. The material CD is only a carrier, of secondary importance, its information being primary, an analogy to particles and waves' descriptions. Impressions of realizations are left in our 3D world by the gestalt that “lives” in the multi-dimensional spaces of quantum superpositional possibility.

Quantum systems of many quantum states are not then so much systems as they are holistically differentiated process structures. However, considering them as systems, they are complex, meaning here that such systems cannot be reduced to simpler systems without breaking connections; thus there can be no clear reductions, for, as in chaos theory, there are embedded instabilities, and if we disregard even the tiniest correlations then we may severely distort the result. We can no longer just analyze the parts but must try to use much more sophisticated statistical methods, these being more than the simple probability to which we are accustomed.

Waves can reinforce, weaken, or even cancel out, this all being a kind of generation of partial disconnectedness by intermediate extinctions, such as in the way a biological organism forms from a single cell by successive cell divisions, which do not occur by parting, but by repeated formation of semi-separating cells walls; however, this is only a very rough analogy.

Via metabolism, life forms have a sufficiently powerful energy pump, one that could conceivably generate states of thermal disequilibrium in molecular systems embedded in certain substrates that would excite certain low-frequency collective modes of vibration with great power, perhaps via mechanisms similar to Bose-Einstein condensation, the electric dipoles coming into play as an ordering parameter; however, this is not a conclusive, direct connection. Information appears only in the animate, and is furthermore exchanged, the meanings somehow combining to make sense in some nonreductive process—the relational reality of life happening at this semantical level of information exchange.

Life is not mindless; it is inspired; its meanings cannot all be discovered by observation, but truly by participation. Life's entities embrace one another: cell, organism, species, and biotope. A living creature is more like a poem, revealing further dimensions and expressing new properties at every level of organization: letter, word, sentence and [uni]verse.

Somehow, perhaps, the quantum states that continue on further in the quantum superposition have reached more efficiency and effectiveness, with all the paths being tried out, just as in the 95% efficient photosynthesis methods actually seen, using fermi-lasers, and so that's what collapses out of it, the more productive paths that last, ones usually with the least amount of effort, too.

Or not, if life is simply reductive to atoms and molecules.

Becoming

We humans mirror and recapitulate much of evolution while growing in our mother's womb, racing through many stages in which life evolved. During this nine months, and even beyond that, we move from mindlessness to shadowy awareness to consciousness of the world around us onto consciousness of the self and then even to becoming conscious of consciousness itself.

For the first two and one-half years of life, the inexplicable holistic world is experienced less and less holistically as the child discovers the bounds of discrete objects. The holistic right brain remains, of course, for us to take in the overall view, while the logical left brain is there to recognize the detailed relationships.

As such, so goes the universe, since we are formed in its image. So, then, this gives us a clue to the nature of the universe. Seeing that the brain is divided into two hemispheres, each with their own characteristic mode of thought, that can communicate with each other.

This means that we are looking very deeply into the way that reality itself is constructed. These two complimentary aspects to the cosmos are thus absolutely essential, one being of the whole, the apparently indivisible, continuous fluid entity, although discrete at unnoticeable levels, the other being the interrelationships of the parts. Each interpretation does not appear at exactly the same time, but the yin ever gives way to yang and ever then back to yin, and so on, this rounded life of the mind thus continuing to fully roll as the cycle of this symmetry turns and returns. If not, one either gets totally lost in the details or prematurely halts at the whole.

The holistic right brain mode is unfocused, as we see in some people who are unconcerned with details, it always building the scene in parallel to form a single entity; whereas, the focused left side of brain isolates a target of interest and tracks it and its derivatives sequentially and serially.

Yet, the two sides of the overall brain are connected to each other and so the speed of the juggling act can meld them together into a complete balance.

It's like that portrayed by the revolving Yin-Yang symbol, each ever receding and giving rise to the other.

Such does the universe go both ways, too, its separate parts implicated with everything else in the whole. During conscious observation, the 'hereness' and 'nowness' of reality crystalizes and remains, we establishing and actually bettering what that reality is to a large extent by painting a more useful face upon it.

We define and refine the nature of reality that leads to the mind's outlook. Counterintuitive? Cyclical? Yes, but it is the universe in dialog with itself; the wave functions, and yet the function waves.

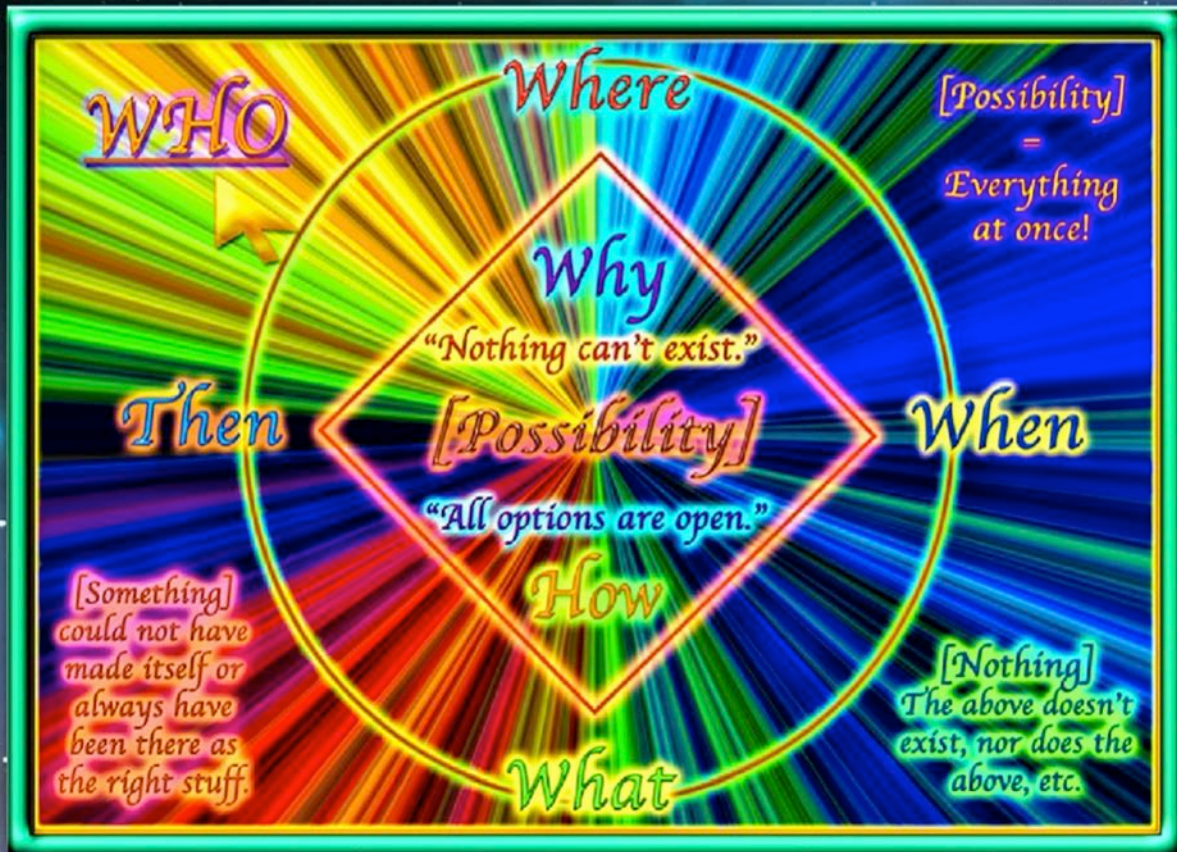
The universe supplies the means of its own creation, perhaps, its possibilities supplying the avenues and the probability and workability that carved out the paths leading to fitness and success.

So, here we are, then and now, the rains of change falling everywhere, the streams being carved out, the water rising back up to the sky, the rain then falling everywhere, the streams recarving and meandering toward more meaning, and so on.



'Being' Explained

Enhanced Edition



Austin D. Torney

‘BEING’ EXPLAINED

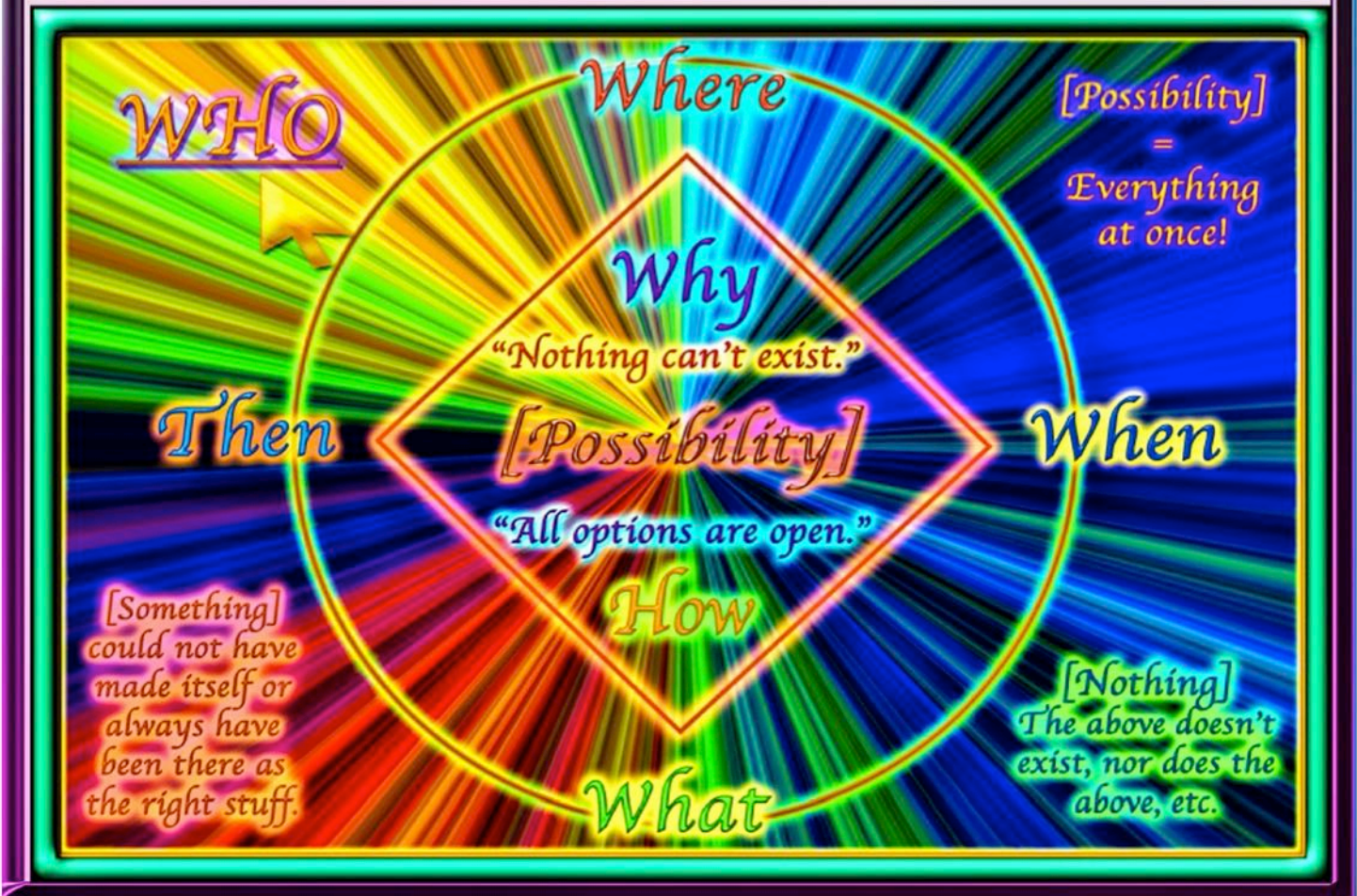
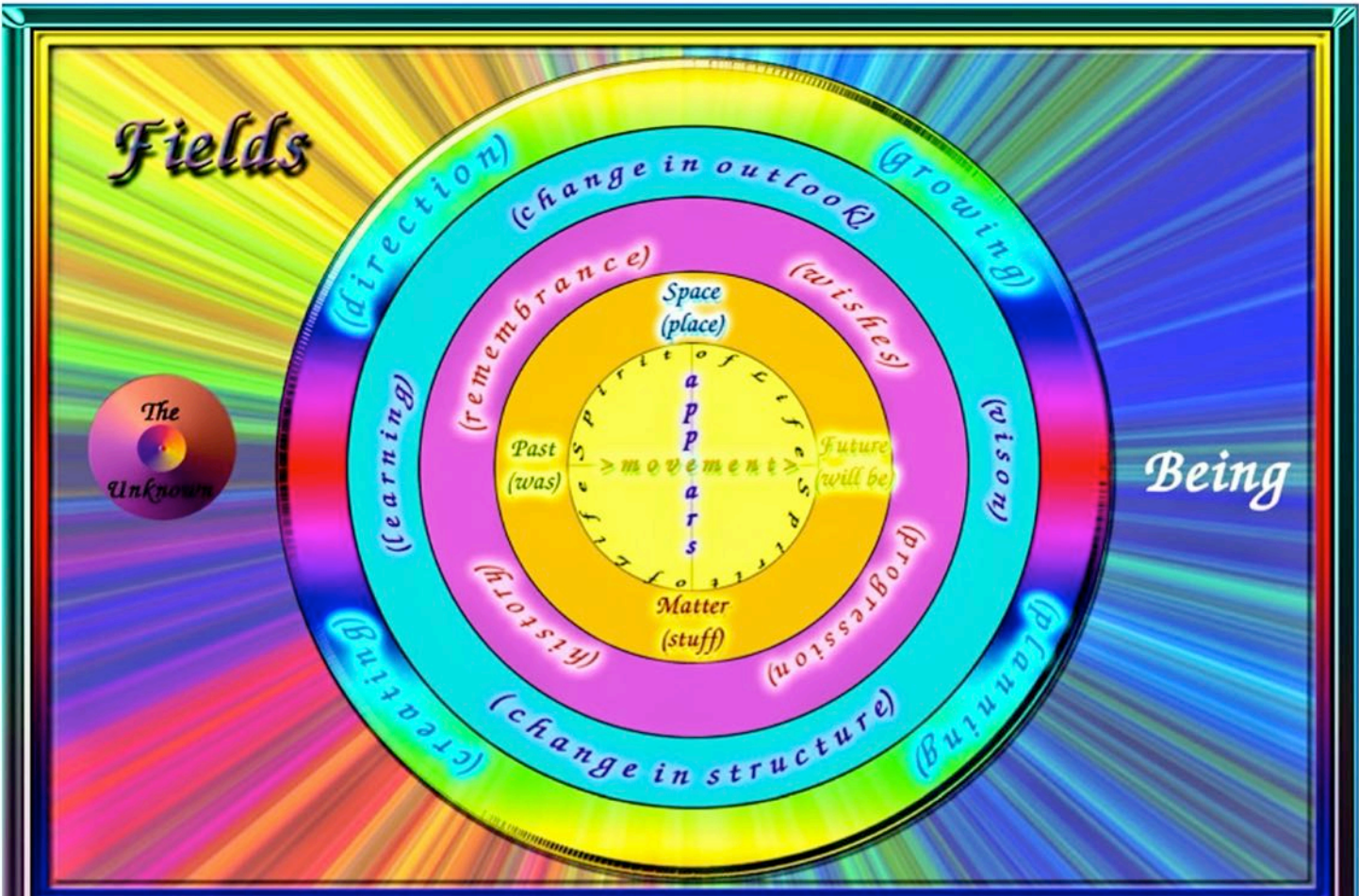
Pyramid Schemes

Opposition-Plus-Transition

We often note the apparently natural scheme of “opposition-plus-transition” operating at various levels of the universe. The ‘opposition’, or opposing events or actions, constitute a balance of opposites, while the ‘transition’ is what transforms, even each into the other, sometimes.

Here is an example for the ‘forces, the first one of the so-called ‘pyramids’:





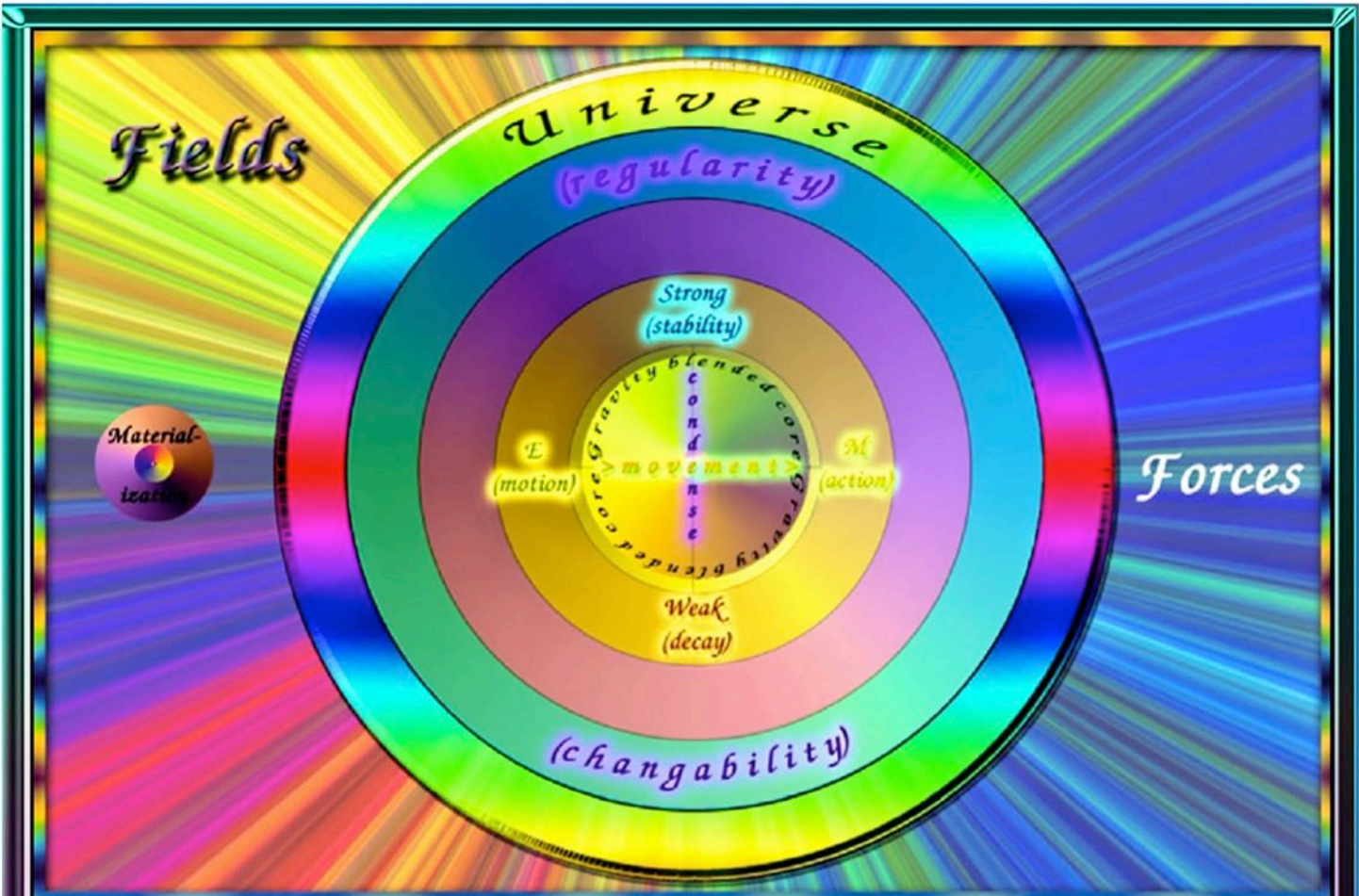
The Forces

Strong vs. weak opposition,
plus the magnetic to/
from electric transition(s).

The strong nuclear force promotes stability, while the weak nuclear force promotes changeability. Their balance promotes progress, for events have to be orderly enough to take form, but not so much frozen that they cannot change.

The magnetic and the electric transition each into the other, in the self-regenerating e/m wave.

Gravity, a secondary force/effect, would then become of the blending of the 4 primary forces.



Being

Space vs. matter opposition,
plus the past to future transition.

While space and matter are indeed similar, in some ways, the thinness of space versus the lumps of matter is a very large contrast, thus granting us a clear notion of the

‘What’ that is in the ‘Where’,
In opposition.

As for Time, it could go backwards, but it usually doesn’t, due to there being so many more states of disorder than order; so, for practical purposes, the transition occurs only in one directions, as

past — > (now) — > future,

which grants us the notion of the passing of

‘Then’ into the ‘When’,
via the present ‘now’,
as transitional.

Time is, more or less, energy—the movement of the appearances of matter through space, or a difference of 3D spaces(s).

The secondary blend of all this is the essence of life: one's being—the 'Who'.

The 'Why' of it all, which is not to say 'purpose', is that, since nothing could not be (stay), then something has to be, with no option or choice, yet it must amount to nil, as there can be no other mover that is prime, since there is surely nothing to make anything of.

The 'How' would be the necessary production of opposites from the simplest, unstable state: nothing, some of which could be noted as the opposite virtual pairs emitted, or, as like Hawking shows, the positive kinetic energy of stuff ever being canceled out by the negative potential energy of gravity.

There is more to this beginning opposition-transition of space vs matter and past to future, which is found by the further combining of the fields, on up, to explain 'being', such as

space and past becoming remembrance,
matter and past becoming history,
space and future becoming wishes;

matter and future becoming progress,
with, then, further combining,
on up, etc., as one may predict...

history and progression leading
to a change-in-structure,
remembrance and wishes leading
to a change-in-outlook,
remembrance and history leading to learning,
progress and wishes leading to vision,

up through the remaining combinations,

onto learning and change-in-outlook
making for direction in life,
change-in-outlook and vision
making for growth,
learning and change-in-structure
making for creating,
and vision and change-in-structure
making for planning.

Finally, direction, growth, creating,
and planning make for being.

Thus, the necessary human condition,
All of it from movement through space/time.

Being Observes Doing

What is Life?

Free.

We may learn something new and make choices tomorrow that we wouldn't make today.

Lucky.

Free Won't

No strings.

One must live it fully to find the answer.

The Only Purpose is to Be i

Make Your Own Meaning in Life.

It's to Create and Live a Being more Intense.

The End of all our Exploring is to know the place for the first time.

Transformational

Oppositional

recall + sensation + anticipation

the smoothly rolling now

Being

from no-where to now-here

grows

direction

change in time

growth

{Spirit} {of Life} {the blended core}

<Space>

remembrance

wishing

Past

Future

history

progression

creation

change in structure

Matter

planning

appearance

Totality's Existence

Positive vs. minus polarity opposition (in the form of electric charge polarities), plus the mass to/from energy transition, and the matter creation to/from light annihilation transition.

Stable Existence

Antimatter(-) vs. matter(+) opposition, plus the photons to/from electrons/positrons transitions of light to/from matter.

Note that there are only two stable matter particles in free space, the electron(+) and the proton (+), because there are only two ways to make them, and only one stable, uncharged energy particle, the photon. A photon is neutral since it has both a positive and a negative aspect.

There are no stable uncharged matter particles in free space (the neutron decays within minutes).

There are no stable, charged energy particles in free space.

There is a symmetry here, one that allows for the nullification of existence at the level of Totality.

Finite Existence

Largest infinity vs. smallest infinity opposition,
plus the past eternity to
the future eternity transition.

Thus, our finite existence must lie
at the mid-point
of the infinite and the infinitesimal extent,
and in the centered now
of the eternal duration.

Infinity * infinitesimal = 1 (finite unity),
just as $n * 1/n = 1$.

The Summary of Composition of Being

There are appearances of lumps of matter (stuff) in a place of space, some of them in motion, whether the space is here on Earth, in outer space, or mentally, as internal representations of the external. While space and matter may ultimately be very similar at the microscopic level, at the functional life level they are an oppositional pair because we can clearly arrange stuff in space(s), such as furniture, or see stuff separately, such as an animal walking or a leaf falling, and so space is very much the practical opposite of stuff.

Space is the where of existence and matter is the what, this what in the where usually having a clear distinction. The motion of the what of stuff through the where of space makes for the other, transitional pair of then and when, of that stuff changing, which becomes the notion of past and future, of what was and what will be.

The oppositional and transitional pairs of space vs. matter and motion or change granting the time from past and future are the four foundational bases of the pyramid of being.

A spirit of life becomes the blend of all, which is similar in scheme to the forces pyramid in which gravity became as the blend of the weak force vs. strong force opposition and the electric to magnetic, and reverse transition.

So, all this gets incorporated into the necessary nature of a progressive being, for being must evolve to match what is, if it is to survive, meaning that being could hardly be much different than it is, as a necessary reflection of reality.

The actual rearrangement of matter to be started and completed as the future comes to pass is called a progression, one that hopefully began and is kept track of via the wishes that become of the mental projection in the space of the future, all of the preceding melding into what we can call vision, for lack of a better word.

On the other side of the future, which is the past, we have that the matter of the past constitutes history, along with our remembrance of it being as made of a mental space of the past, both history and remembrance ever combining into learning.

As for remembrance and wishes that operate in space, they in combination lead to a change in outlook that makes a difference, while the history and progression that are of matter combine into the actual changes in matter structures built or rearranged.

Vision and change in structure make for more excellent planning, while learning and change in structure provides creativity, with learning and a change of outlook providing direction, and a change in outlook with vision providing for growth, all these in unison making for a fine and complete being.

All of this shows what becomes of space, matter, and time.



