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A Proposed Theory of Everything That Works:

How the Neppe-Close Triadic Dimensional Distinction Vortical Paradigm (TDVP) model provides a metaparadigm by applying nine-dimensional finite spin space, time and consciousness substrates and the transfinite embedded in the infinite producing a unified reality.

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ABSTRACT:

Our current standard reductionistic materialist scientific paradigm allows explanations of <u>almost</u> all aspects of our experience, possibly 99.9%. But certain scientific endeavors are still contradicted. In the E-Book "Reality Begins with Consciousness", we motivated a new paradigmatic approach TDVP (Triadic Dimensional-Distinction Vortical Paradigm) integrating the broader physical, psychological, consciousness and biological sciences, motivated mathematically (including Calculus of Distinctions, Dimensionometry and Dimensional Extrapolation) and ultimately expressed philosophically (Unified Monism). The mnemonic INDUCTS summarizes many key features: <u>Infinite continuity embedding Finite Discreteness; Natural Law; Dimensions interfacing, plus distinctions; Unified Monism philosophically; "Consciousness"</u> (broad); <u>Tethering of Space-Time-Consciousness; Subjectivity—Objectivity with "relative to" and "from the framework of".</u>
Metrically, comparing 25 Theories Of Everything, TDVP scores perfectly (39/39) across 39 different criteria; no others score ≥20/35 besides the earlier Neppe and Close models. TDVP is supported empirically, and we've mathematically derived the nine spinning dimensions of finite reality.

Examples of how a 9D finite, transfinite and infinite reality can be applied to psi, creativity and other experiences, are given.

The implications for life and even dark matter may be profound and are currently under active review.

TDVP generates hundreds of new ideas.

KEYWORDS:

3S-1t, 9-D spin, Calculus of Distinctions, Close, Consciousness, Continuity, Dimensional Biopsychophysics, Discrete, <u>D</u>imensions, Dimensionometry, Dimensional Extrapolation, <u>D</u>istinctions, Embed, Falsifiability, Feasibility, Finite, Framework of, Indivension, Individual Units, INDUCTS, <u>I</u>nfinite, Laws of Nature, Life, LFAF, Mathematics, Neppe, Objectivity, Ordropy, Paradigm shift, "Reality Begins with Consciousness", Relative to, TDVP, Tethering,

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Theories Of Everything, Triadic Dimensional-Distinction Vortical Paradigm, _ Subjectivity, TDVP, Unified Monism, Vortices ^b

Why do we need a new paradigm?

We need to present a new TOE simply because the current Standard Physical Model does not *always* work: Possibly it's compatible in 99.9% of cases in our real world experience, but that remaining 0.1% must not be contradicted. However, we argue that contradictions and unexplained phenomena need re-examination.

We need a new paradigm shift because our current physical model has failed.

We need to be able to return to origins—to understanding the beginning; to conceptualize order, even when conventional physics tells us we tend to a state or disorder; to understand whether complex contradictions between quantum mechanics and relativity and gravitations; the jumps in evolution suggesting something beyond just chance phenomena; physics phenomena on relative nonlocality such as entanglement or at the quantum level the strange implications of the "observer" in altering wave and particle states; and in Consciousness Research, why, when applying meta-analyses, there are nine different areas of psi research appear to be proven as they each demonstrate statistical results of one in a billion against chance; how we could explain alleged survival after death; These are the two most obvious contradictions to our conventional physical model:

- Survival after bodily death if it exists and there is cogent data that it does. But if it did not, the phenomenon of "superpsi" requires dramatic alterations of our world-view anyway.
- The second element is so-called "psi" —psychic phenomena—in its many forms and again the evidence, as discussed below for each of nine phenomena (including survival or superpsi) is statistically more than one in a billion against chance.

Additionally, it could be argued that by many, that we need to provide a model for life and for free-will. 5

Even more complex, we need to explain the existence of quantum phenomena like non-locality and quantum entanglement, the implications of the near light-speed vortical spin of fermions and the effects of so-called dark matter and dark energy in the rotation of spiral galaxies²⁰

These are major challenges that demand answers. The Neppe-Close TDVP model we discuss in this paper provides a workable alternative to understanding this.

^b We acknowledge permission to publish and our grateful thanks to Brainvoyage.com who maintain copyright on the derivations from three books: This article is an amplification of some of the concepts and derives partly from several chapters and Table 5a and 5b of *Reality Begins with Consciousness (5th Edition)* and on ². It is adapted from *RBC: Key Features Chapter 1* ³. The pictures are from *RBC: Glimpses and Glossary* (See www.brainvoyage.com) ⁴.

The current mainstream scientific paradigm cannot explain so-called anomalous phenomena and the 'missing" portions of reality because there is no place in its formulation for phenomena that may involve more than matter and energy interacting in three-dimensions of space and one dimension of time.

The limitations of purely philosophical models

Alternatively, there are other purely philosophical theories, without scientific bases, that argue from the position of us being pure "consciousness" and everything else being false. But a model must be able to explain our standard reality experiences, as well, and these models fail in that regard.

But even with the limitations of these so-called "mind-body theories", which, in short, do not explain both the material world we live in and, extremes such as psi and survival, or how they integrate, all these philosophical models are also not based on scientific information and are purely philosophical. *The Neppe-Close Unified Monism model derived from TDVP, that we allude to in this paper provides a feasible, non-contradictory way to understanding this.*

Filling the void: Science, mathematics and philosophy: why TDVP is needed: We present here some concentrated but essential ideas that cover all sides. We can certainly easily live in our ordinary 99.9% world of experience; yet, scientifically and philosophically, we want to explain the dilemmas or at least the feasibility without contradiction in that remaining 0.1% too: And we also want to be able to apply science and mathematics, not

just philosophy to demonstrate this.

With respect, this is described in our 50 chapter, 500 page E-Book *Reality Begins with Consciousness: A Paradigm Shift that Works (RBC)* ⁶, currently revised in its 2014 fifth edition (*RBC 5*). ⁷ Additionally, over two years of material from a series of peer-reviewed, articles is being published in the *DIJECA* (Dynamic International Journal of Exceptional Creative Achievement). These articles from both books, *RBC* and later on *Space, Time and Consciousness* (in progress) ⁸ are featured in this special series of journals from 2012 to 2015.

PERSPECTIVE TO TDVP: A NEW PARADIGM SHIFT

Theories of Everything and new paradigms

The model that we propose, TDVP (a more palatable abbreviation for "*Triadic Dimensional-Distinction Vortical Paradigm*") presents a sweeping new perspective of reality: This makes it a truly ground-breaking paradigm shift that we know will be greeted by a wide range of reactions. ⁷ A few will embrace it, many will be stunned by it, and those with a vested interest in a materialistic worldview will react with hostility.^c

The model of TDVP allows a serious effort to upgrade the mathematics of the physical sciences to include the direct and indirect involvement of consciousness. If successful,

^c Thank you to the numerous peer reviewers. The article is greatly amplified from a recent article in Telicom on this topic ²; and it is significantly modified and updated from an earlier one on this topic in this journal ⁹.

there is then a reason to believe that this new paradigm will provide a comprehensive framework within which all the branches of science can be expanded to include phenomena heretofore excluded from scientific investigation. And we believe, the data is showing it is successful. Whereas other models languish, this has grown and can be applied to explain more and more previously unexplained, contradictory or perplexing phenomena.

Essentially, TDVP involves a paradigm shift because it transforms thinking in many disciplines. The TDVP model of reality involves a single worldview underlying the theories and methodologies of several scientific subjects.

TDVP in three points.

- 1. The "Triadic Dimensional Distinction Vortical Paradigm" (TDVP) recognizes that Space, Time and "Consciousness" are always inseparable—they are in some way loosely or tightly "tethered" together forever.
- 2. TDVP reflects a broad model that conforms to the Laws of Nature: Nature manifests in tiny, infinitesimal, discrete (quantal, pixilated), specific components that we call the finite "reality", and we can experience only a tiny part of this finite "reality" in our world—the rest is hidden.

These tiny quanta reflect the level of the smallest quantum unit that exists, but we have introduced a more accurate term, the "qualit". Qualit refers to "quantum plus meaning" because there is an inseparable tethering even at these tiniest of levels. These levels of size move from this qualit through to the astronomical / cosmological level in finite reality.

3. This finite reality is embedded (is totally contained) in an unimaginable, humanly inaccessible, endless, general, continuous (uninterrupted, like an unbroken line on a graph, unending) infinite "reality". Infinity has to be part of reality because Gödel's incompleteness theorem reflects the limitations of describing only a closed finite reality. The embedding of the finite within the finite allows a unification scientifically. The philosophical consequence is referred to as "Unified Monism": Importantly, there is no need for any linkage between the finite and the infinite because the two exist together, always and eternally.

Essentially, the finite cannot exist without the infinite. Similarly, our covert living human reality of experiencing a limited three dimensions of space embedded in a moment in time ("restricted 3S-1t) exists necessarily with a broader hidden quantized multidimensional reality. In this regard, we've demonstrated there are 9 spinning finite dimensions (9D). But we can go even higher as these 9 dimensions are embedded and contained within a still discrete quantized transfinite reality. The hierarchy continues and all these levels (the 9-D

^d We're describing one unified reality. The infinite contains all the other subsets of "reality", because they're embedded in the infinite. We could quip that the infinite is a "superreality" not a "subreality", because it contains everything, but this leads to questions of what is "super" and what is "sub"? So we choose to avoid this and generically use "reality" in quotations to describe these subsets. Effectively, the infinite and the metafinite together make up this same, broader unified reality. But even in the metafinite, they're in different subsets: the finite is one, the transfinite a second. Moreover, 3S-1t is a further subset of the finite subset. We could talk, too, of our "experiential reality" or "hidden realities" and these are useful concepts to explain what may be covert or overt.

finite and the transfinite) are only mirrors of components of the almost completely humanly inaccessible infinite continuous reality that embeds all of the discrete registrable elements.

Moreover, when we speak of the smallest Quanta we refer to Space-Time, Mass-Energy levels. A better term is "Qualit" level which we define in extent as Space-Time-Meaningful information all necessarily tethered together; and similarly, Mass-Energy-Content of Consciousness.

The important principle here is that we cannot reduce completely to an infinitesimal level as in the Calculus of Newton and Leibniz and that we have introduced ways of making distinctions as the fundamental mathematical logical method of calculation and this is called the Calculus of Distinctions, and when referring to dimensions, the Calculus of Dimensional Distinctions.

Pertinence

Based on the data available, TDVP fits the criteria for a so-called "Theory of Everything" (TOE). It is extraordinarily important because it provides what appears to be a broad solution to our world: Importantly, whereas every previous TOE has in some way failed, TDVP appears to succeed: ¹⁰ The paradigm we present must explain both our conventional, usual physical experiences. But yet, it must also seamlessly elucidate how those subjective experiences that are frequently reported but are regarded as bizarre, strange, anomalous, psi or unexplained, may be interpreted. Examples would be experiencing oneself as out of one's physical body, ostensible awareness of information from afar, or some of the many unexplained mysteries and even paradoxes of current materialist physics ¹¹.

Complex reality produces complex ideas

So let's explore how these areas can be integrated into a unified theoretical explanatory model. Importantly, we can cite references on which each comment is based. Our Neppe-Close TDVP 4-year collaboration is detailed in *RBC*. ^e TDVP is not just a theory: A significant fundamental component of TDVP—the postulated 9 finite vortical dimensions—has been proven mathematically to be correct (www.VernonNeppe.org/media.php). ^{12; 13}

We recognize this adventure may be very complex: *The nature of reality is deep and unexplained. This article deals with reality, consciousness and origins. We provide just a nibbling on the sumptuous banquet that results from developing a comprehensive model for reality, and the cuisine is particularly splendid when it is somewhat scientifically proven. TDVP begins in Science and is validated by mathematics. ¹⁴ The endpoint consequence is a unified philosophical model for reality, "Unified Monism".*

The challenge

Our synthesis, by its very nature, is also elaborate, intricate, involved and complicated. However, we believe this time investment is worthwhile, as it will greatly enhance your understanding of our existence. Therefore let's begin gently with certain fundamental principles in this article knowing that the "meat" of this exciting voyage—many links, YouTubes, and

e www.brainvoyage.com/RBC/perspective.php.

books—are available. f

Understanding a new paradigm

We start with some important broader principles: New theories incorporating elements outside the scope of the existing scientific paradigm will always meet with resistance: This is as it should be. All major advancements—Thomas Kuhn's ¹⁵ "scientific revolutions", or "paradigm shifts" like those of Copernicus and Kepler, Newton and Leibniz, Einstein and Bohr, challenged long-held assumptions and were met with great resistance.

Yet a new theory should never be rejected out of dogged adherence to belief in pre-existing fixed assumptions. If the new assumptions are correct, or even just "more correct" than the old, they will eventually win over open-minded scientists and thinkers. All scientific theories are based on preconceived ("a priori") assumptions: Since they are a priori, by definition, no matter how correct they appear to be, there is always the chance that they may be wrong. For example, modern science's tacit assumption is that everything can be explained simply in terms of matter and energy interacting in the time and space we understand: "consciousness" g is simply an epiphenomenon of this material complexity.

Our new paradigm dares to challenge this belief. We don't just replace one belief system with another, but in our book, *Reality Begins with Consciousness*, we present cogent arguments based on empirical data from relativity and quantum mechanics to many other sciences, and we apply new mathematical and logical frameworks to support the TDVP paradigm. ⁷

Reality Begins with Consciousness as a supporting document

In our book, *Reality Begins with Consciousness (RBC)* ¹⁶ we present to you some remarkable ideas that are supported scientifically and mathematically. We realize it may be valuable for the reader to gain a priority perspective: We communicate our major points of emphasis now including our overall paradigmatic statements, and then in *RBC*, we build from there, listing a broader six dozen points about our model and only then, after providing this perspective, do we further develop our detailed theme on several different topics. We're not providing the 500 odd references at this point as they're available in RBC ⁷; we're simply stating principles. We believe that this will assist more in comprehending our ideas. We request that you, our readers, keep an open mind until you've conceptualized the whole picture. If you will do this, we believe you will see the unfolding of a comprehensive new paradigm that will expand science to encompass aspects of reality heretofore excluded from the scientific search for truth.

"Dimensional Biopsychophysics": pioneering a new multidisciplinary science

TDVP provides the basis of a new discipline—what we call "Dimensional Biopsychophysics" (DP). This necessarily involves learning novel concepts, new terminology and reintegrating old ideas: DP portrays the unfolding of a comprehensive new paradigm that

f See particularly http://www.vernonneppe.org/ including www.vernonneppe.org/research.php, www.vernonneppe.org/media.php, www.vernonneppe.org/media

^g Capitalized words, such as "Space", refers to our specific definition, usually based on TDVP, as opposed to the general use of the term "space" which is its general use.

will expand science to encompass aspects of reality heretofore excluded from the scientific search for truth. DP, therefore, is a new multidisciplinary term that impacts across many different major areas of study. DP includes dimensions, the finite and infinite, and consciousness. It integrates the broader scientific biological, psychological and physical disciplines and includes mathematics.

DP deals with reality. Therefore, *its study is not trivial and effectively this article introduces an undergraduate degree of study*. It may require several reads just like a textbook will and referring to the sources in the footnotes. But we hope you will benefit.

- We carefully define every single term in TDVP and many others. So at this point, let's just work on understanding principles, not detail.
- We supply here the first principles, but the detail is in the further readings facilitating understanding.

The broad brushstrokes

These initial statements at this point can be perceived as equivalent to abstracts that are non-referenced. This is introductory only: We've supported almost every component of this model with appropriate sources spread through the *RBC* book. There are many new ideas in this paper. These concepts reflect our broad brushstrokes. However, with several headers below, there are also many new terms or phrases you may be unfamiliar with. The object is to prioritize your reading.

If you have not read about this model before, may we make a suggestion?

- First please read the section below but only the italicized sections first. This way you will obtain a perspective, without the detail of the <u>Brief Summary of TDVP</u>.
- Then please re-read this article a second time, this time including the regular print.
- If needed, thereafter, please refer to the glossary h (or the supplemental book, RBC: Glimpses and Glossary) for terms that you may not recognize, and please use its "glimpses"—the pictorial representations to further conceptualize our points. 4
- For perspective, we italicize "priority" sections; reading both the italics and regular font amplifies more.

THE ANALOGY: THE ELEPHANT

The inexperienced elephant:

Let's draw a simple, fun metaphor with our model. Imagine an elephant. He perceives this strange object that always seems to follow him about. Yet he cannot quite reach it all the time. To him, it is something separate; yet it cannot be because it is always with him. What is it? What is it for?

h http://www.brainvoyage.com/RBC/glossary.php



One day, he recognizes this strange object in other elephants. Why do they have it? He *watches*: They use this object in drinking and in swooshing trees. He *realizes* he does so too, and has done that *always*.

Then, another elephant's strange object gets entangled with his. And he feels pain, and pulls it back. Suddenly, he realizes he is the *owner* of this object. He now experiences his *trunk* is part of himself. It had been the *hidden part*, and the part he accessed all the *time*, and yet he finally realizes it *belongs* to him.

The elephant does not know the name of the peculiar object, so he cannot conceptualize it *consciously*, but he at least has some kind of *knowing*: this foreign object that has tracked him all his life is part of him!

The previously *hidden purpose* is now more than that. This "hidden" object is now "revealed".

In a way, the elephant is experiencing a shift in his paradigm of the world. *The hidden becomes covert*. He still fully cannot understand it. But he has this vague *awareness*: this is his *consciousness* and this is his ownership. He swings it about in excitement. It moves. He can control it—in every direction. He did not realize what that meant: He was demonstrating his *free choice*.

One day, he overheard a human refer to his "trunk". He liked this new name, this *neologism*. He now understood that this object that he had identified as part of himself, was a "trunk". It, indeed, was that part of himself that he had never before recognized. It was an inseparable part of his previously hidden reality. *Language*, however primitive, had allowed further *interpretation*.

The wise human onlooker

To a human onlooker, the elephant may not have recognized all the subtleties: that his trunk had always been a part of his life's experience in *time* in the past from the beginning. That it was there in his *present* and that it was a necessary part of his *future*. ⁴ That it occupied *space*, just as he did and it *weighed* a great deal. He used his *energy* to move it about. He could not *conceptualize* the jump but effectively, he was *whole* again, a *unit*, his time, space and

consciousness were all connected into one: These were one; they were *tethered* together, always and *inseparably*. It is tethered to him *inseparably* no matter what he does.

The elephant's single reality trunk was part of that single previously hidden reality, and that part of his individual self became part of his *group self*. He was part of a broader *community*. His hidden reality was now recognized as a functioning part of himself, though he had not known its name.

The elephant, human and TDVP

And so it is with this model, an all-embracing *unit* that we call TDVP. It too involves an entirely new concept or more exactly series of concepts—paradigms. And because they are so broad reaching, we use our new *language* to describe these concepts as "*metaparadigms*". Like the elephant, it has markedly affected our thinking, our understanding of reality has changed. This is our "paradigm shift".

This TDVP reflects an inseparability of Time, Space and Consciousness. We cannot separate these three different "substrates". They are always "tethered" together. And within these three substrates are containers: Weight or more strictly mass contains something be it an elephant or a rock. And it can be used as an energy source by, for example, making a fire. And we can consciously dream about the subjective dream contents of it: In our dream there is the tree burning down, we "see" the contents and smell the burning of the bush!

But we can argue that the elephant, or even the single celled amoeba, or even a rock also has some kind of primitive *consciousness*—that *everything* has even a semblance of *meaning*. We humans, will perceive this; and then form them into a *language* of symbols—we *conceptualize* them; and from that we *interpret* this into our own unique *experience*. But we sometimes, like the elephant, do not recognize how much of our *reality is hidden*, and that we're experiencing only a tiny proportion of *all of what exists*.

And like the trunk that can swoosh and remove tree branches, we can use our consciousness, and our mass and energy to *impact* changes, and to *influence* others.

And so as a thinking human we realize that consciousness can have different ways of application—different *distinctions*: It can impact and influence, it can contain the content of our thoughts—just as the elephant moved his container —tree branches; and it can be *measured*—the elephant threw the branch twenty feet in space one minute ago.

TDVP: A BASIC DESCRIPTIONS

What is the relevance of TDVP?

Science and mathematics have been traditionally separated from mysticism, philosophy, spirituality and theology: TDVP allows for a marked bridge to occur across these disciplines. *TDVP effectively links science and spirituality*.

What is the broader place of TDVP?

TDVP involves a major paradigm shift. It can be applied to all the science, and it can justified further in many areas by mathematics. The ideas that then happen allow us to derive a new mystical philosophy called "Unified Monism" (UM). UM describes a unification

of all of reality: It is one unit for two reasons: infinity embeds/contains/pervades the finite; and because Space, Time and Consciousness (STC) are inseparably tethered together from the very beginning.

Why do we need TDVP?

The current scientific model cannot explain certain contradictions or ambiguities:

- There are contradictions reflected in Quantum Mechanics and Relativity,
- There are unexplained areas of the Reductionistic Model.
- There are paradoxes in Consciousness Research: These demand resolution.
- There are many cosmological conundrums, even the Big Bang Theory and rate of expansion of the Universe.
- Evolution might have unexplained gaps and jumps.

These limitations simply require developing a new model.

Why do we use TDVP?

TDVP is a metaparadigm that works scientifically:

- It applies the available empirical and theoretical data across all the known, broader sciences.
- The broader sciences include the physical, psychological, consciousness and biological disciplines and their sub-disciplines.
- It embraces principles in all the sciences.
- It has applicability to these scientific principles.
- It examines processes not content.
- It is different from any other model of reality previously proposed.
- It works in our regular experience of the world we know; and it works in the context of survival after death, and psi.
- TDVP involves an integrative, feasible, non-reductionistic model. It has some general and specific areas of commonality with several other models, but it also is unique in many of its features, which may be why the paradigm shift that it proposes works and has not been falsified.

But why TDVP? Why not other theories? Surely they're just as good?

- All other proposed "Theories of Everything" (TOEs), though still often very good and well motivated, have major areas of limitations. They can be shown not to be feasible or to be directly falsified under certain circumstances.
- So as TOEs they have failed ⁷ This is why, besides our own earlier models, Neppe (27/39) ¹⁷ and Close (23/39) ¹, the other 21 TOEs, score under 20/39: These are still excellent scores but reveal their limitations. Even the current Standard Model of Physics scores only 13/39. Yet, TDVP scores a perfect 39/39 (Table 2 below ⁷).

• For example, just examining TOEs that fit our current 3S-1t reality as well as survival after death ⁱ, and have justifiable demonstrable scientific or mathematical data for both, eliminates all but the original Neppe and Close models, the combined consequence of these models that we call TDVP, as well as the Klein-Boyd subquantal model ^j, and in Kabbalic mysticism. However, as developed, Dr Klein's model was incompletely developed without the many concepts outlined below in INDUCTS; Kabbalah is a philosophy and not a science. This is why they both score a remarkable but incomplete 19/39. Just to illustrate how difficult these criteria are to fulfill, even if the best features of the Klein and Kabbalah TOEs were combined together they would score 24/39 overall, but 15 of the first 16 General criteria.

The proof of TDVP: The ground-breaking by 9- dimensional spin:

We do not need these comparisons. The proof of the pudding is in the eating. We already have explained the Cabibbo mixing angle in particle physics is mathematically derived from 9 spinning dimensions. ^{12; 13} In the same mathematical derivation, we demonstrated how the intrinsic angular momentum is responsible for the necessary intrinsic spin of fermions. ^{12; 13}This becomes a very important component affecting future thinking in particle physics because intrinsic spin has not been recognized as rotational in the current paradigm, even though it contributes to angular momentum. ¹⁸

Our 9-dimensional results have apparently been replicated by a thought experiment. ¹⁹ None of these findings are derivable from any other number of dimensions. ^{12; 13}. We are working on applying the nine dimensional spin ideas to even the contradictions of quantum mechanics and gravity. And, it appears, that the 9D spin model can explain the stability of the triadic combination of quarks and we indicate, for the first time, why there needs to be three not two quarks in protons and neutrons ²⁰. We also have illuminating information about why there is a step-by-step development of the structures of the Elements of the Periodic Table ²⁰. Finally, by introducing consciousness into the equation, plus this may reflect data on so-called 'Dark Matter" reflecting consciousness.

This does not prove that the TDVP concepts of the infinite are correct but the 9 spinning dimensions were postulated by TDVP and this proof emphasizes the classical appropriate scientific method. ¹⁶

The Model

In the E-book, <u>Reality Begins with Consciousness</u>, we propose a model that appears to be the first comprehensive paradigm that can be explained consistently in science, mathematics and

ⁱ Survival after death is not even one of the original 39 criteria. These 39 are discussed in Chapter 44 of *Reality Begins with Consciousness 5th Edition*. We tried at that point to use only common metrics but we would certainly have included it today as it is so fundamental and allows for an important philosophical and scientific dichotomy: both our real world and survival must be explained by any model.,

^j We pay great homage to Dr Adrian Klein who is based in Israel. He can be categorized as a Dimensional Biopsychophysicist and based on his creative insights was admitted to the Exceptional Creative Achievement Organization. His TOE model is called the "subquantal model": This was never highly developed but nevertheless more and more data is supporting this kind of subquantal "field" model (which of course would not invalidate, only support TDVP). Dr Klein has subsequently worked closely with us to make TDVP better, and we very greatly appreciate this.

ultimately, as a consequence of the scientific and mathematical analysis, philosophy. The model is applicable in all the known sciences—the broader physical, psychological, biological and consciousness sciences.

Hence it is not only a paradigm for one science, it is a "metaparadigm": The prefix meta-refers to a "higher level" or "broader higher level of order" —a broad ranging paradigm. This use has precedence, possibly earliest by Kurt Gödel, whom we quote extensively in *RBC*, and who wrote about "metamathematics" (as opposed to the alternative meaning of "meta" referring to "beyond"). ²¹

Language

Because TDVP is a wide-ranging metaparadigm that works empirically and mathematically, involving Dimensional Biopsychophysics, it requires:

- a new language, at times, as there are new concepts and old terms are contextually used;
- clear and precise well-defined terminology, to avoid ambiguity and
- *well-defined ideas* accounting for all the known or proposed elements in Infinity, Natural Law, Dimensions, Consciousness, Triadic Tethering, Unification, and Subjectivity (INDUCTS).

TDVP: What is it?

Our model is called <u>Triadic Dimensional-Distinction Vortical Paradigm (TDVP)</u>. The consequent philosophical model is called <u>Unified Monism</u>. These terms are technical but are given as a broader perspective here. We explain them in more detail throughout this book. We prioritize some of these already mentioned concepts.

- <u>Triadic Space</u>, Time and broader 'Consciousness' are tethered together.
- <u>Dimensions</u> of extent involve mathematical <u>distinctions</u>.
- <u>Vortices</u> involving curved movements. Vortices are ubiquitous in nature, including our common experiences of reality. These individual vortices interface across dimensions (we call this "vortical indivension" allowing a communication system through moving curved vortices). The finite is a 9 dimensional (9D) vortical reality, and the "transfinite" is higher than that. Technically, the key elements of a vortex are curvature and movement.
- <u>Paradigm</u> (Metaparadigm /Theory of Everything) across the sciences and mathematics with unification of the infinite and finite resulting in the philosophical model of Unified Monism.
- The implications of TDVP lead to "Unified Monism" (UM), a new philosophical model.

The reason for TDVP

What is the take home message for TDVP— the triadic dimensional-distinction vortical paradigm? Why is it necessary?

- TDVP begins as science, is further validated in part by mathematics, and has as a secondary consequence, philosophy.
- TDVP developed out of necessity because other explanations of reality had failed. TDVP is not something arbitrary: We regard it as needed to explain the world, our cosmos, our universe, and our reality.

• *In the RBC book we show that TDVP is currently the most logical candidate to explain reality.* When TDVP is compared with 23 other TOEs, with scoring metric based on a comprehensive comparison of theories in Table 2, TDVP scores a perfectly, an order of magnitude more than all the others. ^{6;7}

The brief mnemonic that summarizes the key parts of TDVP: INDUCTS.

To give the reader a priority system, we suggest the following acronym, **INDUCTS.** These critically important concepts can be applied in the broader "Sciences", in the dimensional Mathematics and in Philosophy.

- *Infinity*: The continuous infinity embeds the discrete metafinite [metafinite= finite + transfinite].
- *Natural Law* (Laws of Nature) govern all of reality. Most of reality is hidden and beyond our comprehension, but even the infinite is governed by unbreakable laws.
- *Dimensions*. These measurements of extent can be conceptualized because of another important "d" "distinctions").
- *Unified Monism:* Reality is unified and there is a unification of infinity and the finite. Also, Space, Time and Consciousness and Mass-Energy with Information expressed as meaning reflect unified triads.
- *Consciousness*: This is a broad unitary concept with several elements.
- *Triadic Tethering:* Time (T-), Space (S-) and Consciousness (C-) are inseparably tethered.
- Subjectivity and objectivity; "relative to" and "from the framework of". These phrases are pertinent. We distinguish our subjective experience, and recognize everything is necessarily described "relative to" and "from the framework of".

If these seven points are remembered, you will understand the basics of TDVP: INDUCTS.

DETAILS OF THE MNEMONIC THAT SUMMARIZES THE KEY PARTS OF TDVP: INDUCTS.

We clarify some key concepts relating to INDUCTS.

1. <u>I:</u> The <u>infinite</u> involves a <u>continuity</u> that is without end. This infinite continuity contains all the <u>discrete</u> <u>finite</u> experience at every dimensional level. Infinity reflects an unending (open) "reality", unending in space and time, and containing an endless amount of all information. Infinity in TDVP refers to the limitless, unbounded, continuous, without end "reality" in Space, Time and Consciousness (C-) Substrates. *The infinite "reality" contains the finite* discrete and transfinite subrealities. Infinity involves a continuous "reality", that obeys the laws of nature, but we conceptualize the gestalt—the whole—and the total "stuff" of infinity is almost completely unknown. In TDVP, we propose that the infinite is the origin of "order" and "life".

The logical extension of continuous infinity is that it is more than an "Information pool" in the Infinite. It also must be unextended and timeless space and time in the infinite, and the contents still are the infinite repository of mass-energy and information.

The **finite** is qualitatively different: It involves our day-to-day experience of a

discrete, pixilated closed "reality" of separable tiny units such as Quanta. Because "Quanta" imply mass-energy ("massergy"), we use the term "qualits" to include mass-energy and "consciousness".

2. <u>N: Natural Law (Laws of Nature)</u> The nature of reality is vast and complex and conforms to the laws of nature. Hence <u>any explanation</u> of reality is necessarily vast and complex. <u>TDVP</u> attempts to explain the nature of reality and <u>conforms to these laws</u>. Therefore, it is also complex and requires careful multidisciplinary examination.

Our limited experience of reality may tempt us to make attributing events or happenings to "supernatural" or "miraculous" causes. But in TDVP, there are no such supernatural or miraculous events: These still fit the laws of nature though, and like many events involving the infinite reality and higher dimensions, they might not be well understood. In TDVP we recognize that what others conceptualize as "supernatural" or "miraculous", is because their experience is limited to their three spatial dimensions embedded in a moment in time.

3. <u>Dd: Dimensions and Distinctions</u> are not just arbitrary terms, but can be measured — they have *extent*—and can be distinguished from each other (hence the term "Distinctions"). **Dimensions:**

The easy perspective: Length, breadth and height are the three spatial dimensions (3S). They are dimensions because they have extent—they can be measured. Dimensions involve three different substrates, namely Space, Time and "Consciousness" (S, T, and C).

More formally: Dimensions are non-congruent, non-parallel extensions measurable in terms of variables of extent (CoD) such as Space, Time and (dimensional) Consciousness. Operationally, in the Euclidean framework, for convenience, dimensions are defined as orthogonal to each other and characterized in degrees of freedom. A dimension is a continuous distinction that can be measured in units of extent. These interact together forming different "domains" with specific properties. These *Dimensional Domains* (also called simply "*Domains*") involve contiguous collections of perceived or conceptualized distinctions of extent. Importantly, <u>3S-1t</u> is our conventional scientific reality (what, we, as living sentient beings experience)—3 dimensions of space (length, breadth, height) (3S) and 1 moment in time (1t) (the "present"); (3 dimensions are abbreviated 3D or 3-D). Or given there may be some meaningful consciousness in our experiential reality (3S-1t-1c).

When conceptualizing a *9-dimensional finite reality* it could be any set or subset of dimensions, for example, the postulated triad of 3-D domains: Space, Time and "Consciousness" 3S-3T-3C but 9-D could even, theoretically, be 2S-1T-6C. (See, too, "domain").

The *10th plus dimensions* are postulated as a transfinite series of dimensions, predominantly containing C-substrate qualities, with or without S and T substrates (though still linked to S and T by tethering across dimensions). The term "plus" as used in "10th plus dimensions", mathematically is more than a plus (+). "Plus" usually implies an arithmetical addition, but "10th plus dimensions" reflects expansion of greater awareness and recognizes a broader, discrete reality. Technically, the transfinite incorporates the 9 finite dimensions (they are inseparable just as tethering is).

Distinctions: When we experience something, we distinguish what it is from what it is not, and there is a separation between. We make these fundamental <u>distinctions</u> and there is a complex mathematics behind these distinctions called the <u>calculus of distinctions</u>.

In TDVP, three different distinctions are particularly important:

Distinctions and variables:

Three kinds of variable distinctions exist: Extent, content and impact.

- a. <u>"Variables of extent"</u> are measurable in finite units. Extent involves measures of space, time and extent of consciousness and it is these variables of extent that are the only variables that we call dimensions.
- b. <u>"Variables of content"</u> contain data and describe volumetric objects and their components such as subatomic particles, atoms, molecules, stones or physical bodies, and ultimately more complex structures such as furniture and all its contents. The basic units of "content" are the units of essential substance of reality, manifesting as specific mass-energy and "content of consciousness". The intensity of content is measured by "content density" (effectively specific content data/extent). The variables of secondary parameters, such as force, velocity and angular momentum, are measured in compound units of variables of extent and content.
- c. <u>"Variables of impact"</u> impact and influence the content and extent variables through many factors. This influence theoretically could range from regular verbal or nonverbal communication, to conscious actions, to psi, to psychological impacts, to brain function and to proposed highest levels of mystical guidance (higher infinite consciousness). Impact could also have space and time involvements with impacts involving the physical effects of events or objects. We can slightly or markedly influence others or events or objects. We can measure influence by <u>"Influence density"</u>. This is effectively Influence degree/extent. Importantly, we can refer to the matrix of consciousness that is contained in the finite; but there is no container in the infinite; nor is there any way to measure any kind of space, time or information because they are all boundless —without end.
- <u>U: Unification:</u> Reality is a whole unit: the *infinite* surrounds/ contains/ pervades/ embeds the *finite*: The all-pervasive infinite ocean not only surrounds the finite is the land-mass of the continents but is, also, hidden within them. These form a *unit*.

Unified Monism (UM) is the philosophical model developed from the scientific and mathematical metaparadigm of TDVP. UM posits a unified reality of Space, Time and Consciousness with the infinite inseparably pervading with the finite. STC is tethered together, and unified. Also tethered is mass-energy (as they're the same, we can call them "massergy" to emphasize that single identity but different manifestation—as mass or energy or some of both) with Information expressed in meaning (C-). As an important aside, this still includes a mass-consciousness pair, and energy-consciousness pairing, within these subsets.

The Space, Time and "Consciousness" can be directly measured in the finite, quantized world; but in the infinite, all of these are "without end" and immeasurable. Massergy with information is also without end in the infinite, but moves from the general, without end to the

specific discrete finite: The endless repository of information becomes specific meaningful consciousness in the finite and transfinite.

In TDVP and its secondary outgrowth, therefore, UM, there is no need to postulate a "mind" separate from the body. We do not use the term "mind" in TDVP because it is redundant: Everything is unified and by recognizing that most of our reality is hidden from us, with even our 3 spatial dimensions embedded in the present time (3S-1t) being restricted —we do not see in the infrared or ultraviolet for example; we are not overwhelmed by all the informational input in existence. The rest of our reality is hidden: we can apply much of our experience to the 9 dimensions of our finite reality.

Within that rest, the hidden reality which we do not overtly experience on a day-to-day basis, remains that unification of all our "consciousness". This is what some call the "mind" and see it as linked in some way with the body in 3S-1t. In TDVP, we recognize that we can also experience reality in other states—in altered states, or under exceptional circumstances, or even in a disembodied state, and these other forms are experience from the framework of other dimensional domains. That "mind" is not a separate entity: We are always part of the finite 9D spinning reality, and we're always part of that 10th plus higher transfinite dimension; and this is all embedded in the infinite. The only difference is we do not directly experience almost all of it while alive in our restricted 3S-1t.

What about other philosophical models? Do they do as well? They do not. Just as we can compare 24 Theories of Everything, we can analyze the major so-called "mind-body" (or "mind-brain:) philosophical models. 27 are mentioned here, but there are numerous variants of these.

These philosophical examples⁷ range from those that are "mind and brain" are one: Some just have a mind but no body such as the original Berkleyian Idealism to phenomenalism and mental monism. There are more sophisticated alternatives invoking a deity like Panentheism; Theological monism; Chassidic theism; Transcendent Theism; Spinoza's variants; Panentheism; Vedanta Eastern "mind""; or "consciousness" variant philosophies. Then there are modifications of materialism that do not allow for post-mortem survival such as Classical monism; Realistic materialism; Non-reductive emergent physicalism; Spatiotemporal Emergentism; Realistic monism of non-reductive physicalism; Epiphenomenalism; Functional reductionism; and Identity reductionism. There are other variants such as Neutral monism; and even Promissory materialism. There are also models which bear comparison with Unified Monism, particularly Transcendental materialism; and Kabbalic mysticism.

Other models can philosophically explain both existences—our experience in this world and psi, for example. But they require a body and a "mind" and the Cartesian dilemma of "interaction" of mind and body requires explanation: These variants of Descartes Substance Dualism include Property Dualism and Promissory Dualism. Chalmers has described this as the "hard" problem ^{22; 23}.

Effectively, Unified Monism is the only philosophical model that appears non-contradictory, does not require any interaction, and is based on science with the philosophical base being a logical, secondary component. ⁷

C: Consciousness can be conceptualized as a unit reflecting a four pronged EPIC mnemonic.

- <u>E</u>: Consciousness has three unifying *existential distinctions*—the E of EPIC: or *How* does it exist? The E reflects all of Consciousness, not only what we can experience.
 - it can impact and influence all reality;
 - it can contain *content* and
 - it can be measured —it has extent.

The "how": How Consciousness impacts other things, how Consciousness contains information and how Consciousness can be measured.

• P: Consciousness can be conceptualized at four main different *paradigmatic levels*—the P of EPIC or the "*Where* is it located?"

We experience different levels of C-: From the smallest inanimate measure—the quantum (which we call "qualit" to include consciousness) —this is argued to be in everything inanimate and animate; to any form of life that has a nervous system—the only non-disputed component in all living organisms; to the deeper psychological meanings, which some would argue is purely in higher beings like animals and is partly separate from the nervous system; to the highest levels of C, the most disputed level, outside the brain —we may aspire to this level, but seldom reach it in our usual states, though altered states of consciousness possibly does, at times, allow for it. Therefore the four main levels are:

- "Quantum (Qualit) Consciousness": At the most basic level, the data of physics (e. g. the Copenhagen interpretation) suggests even the most elementary particle or quantum has a kind of meaning imbued in it ^k;
- <u>"Neurological Consciousness"</u>: Then there is Neurological Consciousness: This provides the endpoint of all consciousness expressed in living beings—the brain and nervous system.
- <u>"Psychological Consciousness"</u>: At the next level, there are many Psychological aspects of Consciousness, sometimes on the surface, sometimes not (disputably separate from the Neurological Consciousness and not just a biochemical-electrical reaction).
- <u>"Higher Consciousness"</u>: Finally, there are deeper higher levels of consciousness. This could be an expression of a meaningful source of information (<u>"metainformation"</u>) from the continuous without end infinite (<u>"metaconsciousness"</u>) or from the discrete higher equivalent, the transfinite (<u>Transfinite Consciousness</u>) (includes qualities like love, honor, or even negatives e.g., hatred?) or hypothetically the lower dimensions of the finite that we cannot usually access (e.g. the first nine dimensions).
- I: Consciousness reflects a specific experience from a general information source—the I of

^{*} Several YouTubes exist and we're adding to these and modifying, as needed. These are two: Jim Al-Khalili *Double Slit Experiment explained!* https://www.youtube.com/watch?v=A9tKncAdlHQ '; and in Dr Quantum - Double Slit Experiment: https://www.youtube.com/watch?v=DfPeprQ7oGc.

EPIC: Information in the infinite reality is an unending boundless source; consciousness as appreciated by the brain involves a filtering-feedback correction process translating into specific meaning or the "*Why* specifically is it consciousness as opposed to information?"

Consciousness is targeted specific information: Consciousness reflects "meaningful information". Information refers to the general origin of consciousness; but Consciousness expresses this information in meaning. Consciousness becomes the "why"—the meaning of why something is: it is a specific explanation. Meaning effectively involves targeting general information into a specific relevance for an individual-unit —for us as individual beings; or for specific groups with belief systems; or cultures; or even as argued, possibly quanta.

• Consciousness can be conceptualized as *Cybernetic* consciousness communications —the c¹ of EPIC. We recognize this loop in our daily processor work: "*Which* part of the computer is it?" *This is the Input –Processor (Central)-Output*. This is the "which" because which of these three modalities are pertinent in a specific description?

We differentiate these three elements of the loop reflecting respectively. The concept of "c" therefore provides a mechanistic input, central and output model, again applicable to any of the Consciousness models. That is the reason we can refer to it as the "which modality" of Consciousness. Essentially, we can apply this mechanistic input, central (receptor) and output model, by taking Consciousness into the modern world of cybernetic computer communications. And already for many years we've applied the concept to many specialties like behavioral psychology— Stimulus-Organism-Response, or in neurology, our nervous system has the incoming and outgoing connections with central receptors. Table 1 provides a simplified but illustrative tabulation.

CYBERNETIC	TUPVI	CENTRAL	TU9TUO	
LOOP	incoming	central	outgoing	
COMPUTER	input	processor	output	
QUANTAL	"observer"	wave-particle	different response;	
NEURAL	dendrite	neuron	axon	
NEUROLOGICAL	Sensory stimulus	reflex arc or brain	motor response	
PSY CHOLOGICAL	stimulus	organism	response	
BEHAVIORAL				
HIGHER	information	Bidirectional filter	meaning	
CONSCIOUSNESS				
OBJECTSAND	Awareness or	mediation	Manipulation or	
EVENTS	apprehension		influence	
GENERIC	Afferent influence	Central event or object	Efferent impact	

These points summarize our four-pronged **EPIC** (mnemonic) approach to understanding that the broader consciousness concept (which we call "C-") is a unit.

¹ We use small case "c" for cybernetic here to differentiate it from the capitalized C of Consciousness.

The **EPIC** approach to Consciousness creates a unified, integrated single concept of C-applicable across multiple specialties. We can conceptualize consciousness more easily by recognizing the four questions:

- The Existential *How does it exist?*;
- The Paradigmatic Where is it located?;
- The Informational Why Consciousness and not just Information?; and
- The Cybernetic *Which part of the process is it?*

4. T: Tethered Triad and Embedding:

Triadic: An inseparable trio such as space, time and consciousness (STC) (adjective: triadic) The S, T and C substrates therefore constitute a *triad*.

Tethering S, T and C are always "tethered" together: They cannot be completely separated. Tethering is more than just being linked. It's like Space (length, breadth, height) cannot be expressed without that moment in our world, that we call the present. Add to this consciousness: We simply cannot have time without space, or space or time without consciousness. This tethered triad is fundamentally "inseparably tethered from their origin". In the finite context, this tethering manifests across, between and within multiple fluctuating dimensions. S, T and C always exist together in both the finite and the infinite. The infinite and finite subrealities manifest in the three substrates of all of Space (S), Time (T) and "Consciousness" (C) or when referred to together, the "STC substrates". S, T and C are fundamentally inseparably attached together at one or more roots. Even when these roots are limited to only one or a few communication source attachments of S, T and C, this still results in a relative non-local (network) linkage at every dimensional level. Effectively, even at the subatomic level, space, time and "consciousness" always immediately co-exist together, originally and eternally across space, time and meaning. Tethering is not even like traveling at light speed— it is not a wave: the communication is instantaneous. Effectively, there is "immediate" relative non-local communication at every level: It is there—tethering does not need to move through space, time or meaning or "physically link". S, T and C always remain linked, across, between and within all dimensions. Because mass -energy is expressed in measures of space and time, they too are always tethered to the content of consciousness.

Embedding:

We introduce here a different but similar concept, recently applied descriptively in TDVP: "embedding". "To embed" is different from "to tether". In TDVP, the concept of "embed" is an important innovation: Embedding implies more than just "contains" and "within", but that the higher domain or reality completely pervades the lower one. For example, all the lower dimensions are contained in the higher: This is not just a linear perception of 1 single dimension in the next higher one —imagine an MRI scanner: there are an infinite number of points in a line, and an infinite number of line "cuts" in a brain volume. Extend this through 9 dimensions and then through the transfinite and then to the continuous infinite, and we have a description of an "infinity of infinities" because the infinite points, lines and volumes go on, ad infinitum. But embedded is more than just "contained": the metafinite is more than completely

within the infinite—the infinite completely pervades all of the metafinite.

The mathematical physics expression of this is that each n-dimensional domain is embedded in an n+1 dimensional domain. This means that all distinctions of extent, from the ninth-dimensional domain down, and the distinctions of content within them, are inextricably linked by virtue of being sequentially embedded. Because of this intrinsic linkage, the structure of any distinction with finite extent and content, from the smallest particle to the largest object in the universe, reflects patterns existing in the logical structure of the transfinite substrate. Such a distinct object will always have in its content, combinations of the forms reflecting those patterns.

Applying another example, we cannot have Spatial dimensions without Time (time pervades space). And yet we cannot have the higher Consciousness dimensions in the transfinite without Time and Space being completely contained in Consciousness which completely surrounds it (this is also so mathematically applying concepts of real, imaginary, complex and hypercomplex numbers). But this embedded state is dynamic: For example, in our 3S-1t ordinary subjective living reality, "Higher Consciousness" is seldom utilized. All of consciousness is expressed by biochemical electrical components in the brain or nervous system; and at the lowest evolutionary scales, as in protozoa, possibly this is simply a product of apprehension and perturbation. So "embedding" implies a *hierarchy*: The lower and all those even lower inside the higher, ad infinitum. Embedding is more than "tethering", where the necessary pure, inseparable existence of dimensions of space, time and consciousness is always present to some degree, and massergy-content of consciousness secondarily always exist as we cannot separate out the STC or Massergy-meaning elements. But we do not refer to tethering of the finite "reality" "tethered to" the infinite "reality", for example.

• <u>S: Subjectivity, Objectivity, Relative, Framework and Reality:</u> We subjectively experience only a covert "reality"; most of the broader reality is "hidden". Reality is always "relative to" and from the framework of" a specific e.g. individuals/ domains. This is why we differentiate subjectivity and objectivity.

Common reality: We recognize the commonalities of our common subjective realities (sometimes calling it "fact" or "objective reality" as when millions watch a sports match on television) but they still do not contain the hidden realities: We are limited in our experience. So even common reality that we "experience" as objectified is "relative to" and "from the framework of" our 3S-1t. Common reality is, nevertheless, also different in almost everyone who experiences this common reality based on their own perceptions, conceptions and interpretation. These three modulators vary individually, but even then, it is not possible that even fundamental visual registration is similar for everyone: Individuals have, for example, different structures and patterns in any of their senses including vision (so direct sensation is varied); the consequent perceptions are different, the conceptualizations vary cognitively, and this is further interpreted differently by the coding of semantics.

Subjective and objective: Subjective and objective is always relative and this is why

in TDVP, we differentiate subjective reality experience, common subjective reality experience and "objective" which includes all including the hidden realities (and, of course, has its own subjective elements, too).

This leads to other perspectives of subjectivity and objectivity: Everything remains relative to our finite domain subjective experiences. Even objectivity is a limited concept as ultimately the objective is the collection of all objective "stuff" (STC, Mass-energy, information) in the infinite.

Experience is always relative to, even at a divinity level, where it would hypothetically be from the framework of everything that exists in reality. Therefore in that context the ultimate objectivity would be relative to the Divine.

Reality reveals a deeper, multi-dimensional reality, only partially revealed by the physical senses. It suggests that reality is like a fathomless, dynamic ocean that we can't see, except for the analogous seething white caps at the surface. The difference is that the particles and waves, analogous to these white caps, only appear in response to our conscious interaction with the ocean of the deeper reality.

TDVP provides a "mechanism" explaining why there is something rather than nothing. In TDVP, the form and structure of reality is determined by the intrinsic logic of nine-dimensional reality, without requiring any transfer of mass or energy.

Connectedness

- 1. TDVP reveals that all things are, in fact connected to, and part of that deeper ocean of reality, only momentarily appearing to be separated from it.
- 2. TDVP posits that, although ostensibly separate in the 3S-1t world of our physical perceptions, we are never truly separated from the Whole, but remain connected at deeply embedded multi-dimensional levels, and these in turn, are embedded at the deeper levels of the transfinite discrete reality, which in turn, are embedded in the continuous infinite. Each phenomenon, even if only at the quantal level, exists still in a multi-dimensional domain consisting of space and time, and these are embedded in one or more additional dimensional domains. This is because reality is a unit, even if only tiny components can be experienced.

This elaboration of INDUCTS recognizing the relative, the subjective-objective elements and the "from the framework of" should allow a basic background to TDVP. But there is more: We can combine features of INDUCTS and recognize the complexity of the TDVP metaparadigm.

Combining INDUCTS. The ultimate examples.

These descriptions cover INDUCTS in more detail. But there are combinations of INDUCTS concepts. One major group that INDUCTS all is the idea of the infinite relative to the transfinite, the finite, the mirroring, the embedding, the tethering, the unification, consciousness

and the subjective relative to framework, all in the natural law context. In other words, all of INDUCTS.

Particularly important in this instance would be the concepts of "order", of "life", of "restricted free will" and of a "divinity".

Infinity, the transfinite and the finite: Mirroring and the forest: Experiences would still be relative even in the infinite "reality". Therefore, all of STC and Mass-Energy with Content Information are all linked with the "relative to" the infinite level.

The infinite mimics everything in the discrete metafinite. The transfinite component reflects higher mimicking like qualities of consciousness (e.g. honor, bravery, understanding, wisdom but also negative aspects like evil) of the infinite, but the origin might not be critical because we almost never can directly access the infinite.

But there are also experiences in the infinite that are translated into the 9D mirrored finite domains, or parts of them. They would still be relative to the specifics of the pertinent component of the infinite. It may be like a root or a branch or a leaf on a tree in a massive unending forest. That forest may be reflecting everything infinite in STC and in endless massergy—information. The roots and leaves are relative to our individual-unit existence and these cross with many other roots and leaves in interaction and impact them. This is our restricted free choice. It cannot change the whole forest but it can change our immediate environments and this is mirrored in the finite. And those roots and leaves are not only in 3S-1t, our physical existence but also in the 9 finite dimensions. So speculatively even if we're in altered states ranging from part 3S-1t states and part other dimensional domains as in meditation or out-of-body experiences, or maybe leaving 3S-1t in meditation or possible physical death, we're still reflecting the infinite in the finite.

Newer terminology?

We have here introduced the idea of the "metafinite" as a composite term for "finite" discrete lower 9 dimensions combined the still discrete higher "transfinite". We differentiate this from the infinite by which we refer to the "continuous infinite" as opposed to this metafinite which has a transfinite that is actually the discrete countable infinite. This area is complex and many readers have had difficulty understanding the difference. We now suggest a major clarification jump in terminology: The term "continity" to refer specifically to "the continuous infinity" as opposed to the discontinuous, discrete 9D finite plus transfinite that we call collectively the "metafinite". The "continite" has no end in extent: It is boundless in Space, and endless in Time, and extends without limits in Consciousness.

The advent of multidimensionality also might allow us to simplify our already new terminology. We could also just use "finite" for all of the "metafinite" and refer to its artificial subdivisions of "9D-finite" and "transfinite". If we don't know it's 9 dimensions specifically, we could write about the *lower-finite*. If this is so in the infinite continuity—the continite—we could refer to the 9D-continite and trans-continite. Still metafinite seems more precise than "finite" which others may misinterpret.

Ordropy and Life, Freedom of choice (choosing life-tracks) and Divinity.

The concepts of order, life, free-choice, life tracks and Divinity are important. In the finite, we experience 3S-1t in an existence that physicists conceptualize as tending to disorder (entropy). Yet, we also experience the great "order" that is associated with "physical life" and existence. If we postulate, as we do, in TDVP, that the infinite is the great repository of all, it could reflect ordered eternal existence not tending towards disorder. This is *ordropy: a tendency towards order*. Moreover, if we postulate that one expression of this ordropy is an eternal existence, we can postulate immortal life. That life may be expressed as a special component of this ordropy and may be mirrored, in part, as "finite physical life" in 3S-1t and existence in other dimensions. *Ordropy* and ultimately *life* can be so expressed.

Ordropy involves the existence of spatial, temporal or other meaningful *multidimensional* order and patterns, in finite and infinite subrealities, including, but not limited to, negative entropy ("negentropy") which is only one component. (This is a newer term: previously, we referred to it as "extropy" but it is more than just the opposite of entropy and we wanted to emphasize the order not disorder). Ordropy is a logical idea if we postulate that there is meaning and order in our reality; and given the second law of thermodynamics in the finite, it would be logical to postulate an origin in the infinite.

Life is a complex concept. We recognize that "biological living" with its physiology ceases at physical death; in TDVP, this is described as "physical life". The TDVP term "life" also has components of existence in the infinite, and is used synonymously with "existence" of at least, a "consciousness" and likely a specific structure of space-time that mimics the infinite "reality".

An extension of this idea is a speculative TDVP hypothesis: The concept of the "Life-track": This is the descriptive finite model of individual-unit existence mirrored in the infinite and created by the conscious drawing of finite distinctions of all areas of existence. The logical end point is that we all experience specific life-tracks but these could be modified and this would imply a different reality: Some would call these "parallel realities" or even extend it to "parallel universes" —implying in this instance in TDVP terminology, zillions of individual-units interfacing and making a difference.

Divinity: Theologically, we extend this and theoretically could define, in an unprejudiced manner, any being that exhibited these qualities as a divinity who ultimately experiences all of everything. The Divinity would reflect the original and ultimate overarching essence or existence and is both embedded in and embeds all of the conceivable and non-conceivable covert, potential and expressed information, matter and energy matrices and beyond it. Effectively, we would conceptualize from the great German mathematician, Georg Cantor, a contemporary of Max Planck, who described mathematical levels of infinity: The highest level is the *infinity of infinities*. In TDVP, this would be the highest Top-Down level. It is pertinent because at the "infinity of infinities" level, theologians could hypothesize a Divinity, and we could examine relative nonlocality from the framework of all existing, all etemal God-like approach. But again, such an experience is from the framework of the Divinity with N-dimensional Time, Space and Information.

Infinity would then be hierarchical and those mirroring of life-tracks would be leaves and branches in a tree, which could influence contiguous parts of that tree—implying limited free will. But only the Divinity would extent to the forest and beyond to all of reality,

the infinity of infinities ²⁴.

These ideas are relevant not only for the non-quantifiable features of the neverending infinite information as well as its translation into meaning, but also for all of space, time and its translation into an endless mass and energy. This might reflect an infinite pool with ALL its patterned or "being patterned" sub-variants. It might even speculatively be conjectured that time could be conceptualized as billions of years of existence as equivalent to six days from the framework of a divinity!

At the lower levels, the continity could reflect the continuity of survival after death and there may again be different continity "lower" levels. But, of course, nothing could be directly experienced in the continity, including so-called survival after physical death. This cannot be experienced in the continuity, but again in the metafinite.

If survival is reflected mainly in some fluid 9D finite domains, so, too, would TDVP hypothesize that out-of-body experiences and near-death experiences, do as well. Of course, we, living humans also live in our own restricted 3S-1t dimensional domain. We may in meditation or prayer or other altered mystical states, rarely access the transfinite discreteness which may be mirroring that Divine infinity of infinities in that infinite continuity.

We therefore postulate that most of that metafinite, like our living reality is experienced within the discrete 9D but not 3S-1t. For example, it could be a dimensional domain like Dimensions 5, 8 and 9 but most likely this is fluid and may vary from individual-unit to individual-unit, and from state to state. This includes individuality which would be one subjective way of experiencing that survival reality. We could also talk of continuous infinity levels including the 9D-continite and trans-continite.

A speculation on order and life: Ordropy and existence revisited.

If we extend the concept of Mass and Energy being interchangeable even in the infinite, effectively being different expressions of the same stuff, then we have two distinctions: massergy and information. The third distinction is the boundary expression of specific meaning which put together becomes registrable consciousness. These are all still tethered together inseparably from their origins.

Using this model, *information is non-energetic so doesn't lose its strength of signal*. When **ordropy** is linked with that information, we can call that **Informational Ordropy (IO)**. This IO order is non-energetic and non-entropic at that level because it contains no energy and it is structured. **Life** has a component of the IO. So the "signal" of the information continues forever without destruction.

However, there is also a **Massergy Ordropy (MO)**. This is energetic and opposite to entropy. It could also be called Negentropy. It is the tendency to order at the Mass Energy level. Physical life has both IO and MO. But **Negentropy** is the limited component of energy, and Massergy Ordropy (MO) speculatively might not exist in the finite without needing to compensate for the tendency to disorder because it contradicts the second law of thermodynamics.

But **physical life** must have IO and MO. The MO ultimately dies because of entropy, the IO is maintained as **endless life.** Moreover the IO might still impact the MO and provide a compensating negentropy in physical life.

When ordropy becomes finite specific, in 3S-1t, the tendency is to only recognize one aspect, the mass-energy (massergy) element; we ignore the general unending information that is converted to consciousness. Yet both must exist. But this is not a dualism like body and soul. But in TDVP, we conceptualize this as a reflection of a quality originating in the infinite that is mirrored and expressed in the finite.

INDUCTS Concepts: Important examples

Dreams and altered states occur in a relative subjective context: We can also apply this subjective experience even to dreams and altered states of consciousness: Space-time in dreams is embedded within the consciousness, yet for us, this is our subjective reality. And the measures are relative to one's state at that time. We apparently usually imbue meaning /awareness/consciousness into this kind of experience, creating the hierarchy of S embedded in T embedded in C.

Psi experiences

Psi experiences conventionally include Extrasensory perception (ESP), psychokinesis (PK) and many other states regarded as anomalous or possibly exceptional human experiences, depending on orientation.

Importantly, these may at times be explained across dimensions. Let's speculate theoretically: This might explain these phenomena below, but we are not trying to prove their existence, per se. That requires scientific empiricism and sometimes mathematics, as we have seen: We are applying TDVP theoretically and seeing how and whether it would work as ways to understand what many would argue have no explanatory mechanism currently. We are using examples that others might perceive as radical, but this is purely explanatory here. We've already provided, though nine different areas of 1 in a billion against chance evidence, implying that psi requires addressing, though not specifically the examples below. For example,

- 5. out-of-body experiences and near-death phenomena may speculatively reach across finite domains, possibly impacting our usual 3S-1t (so the experients can relate it to others, for example) but moving to higher dimensional domains in the 9 D finite spin spectrum;
- 6. precognition (foreknowledge) and retrocognition (back-knowledge) must necessarily impact more time dimensions (at least, 1T as opposed to the present t) as well as special knowledge (at least extra 1C).
- 7. If one used a fictitious "time-machine" and went back into the past, one would be "traveling" on at least 1T (not to "t" the present alone). Therefore one could not change the past.
- 8. Survival after bodily death would certainly imply different dimensional domains from the usual 3S-1t ¹⁸ and
- 9. therefore would require extra dimensional communications in ostensible "mediumship" from the "physically dead" to those who are physically alive. ¹⁸ They would need to cross dimensions: We've provided vortical indivension as an example. ⁷

- 10.Moreover, those communications would not be all-embracing knowledge: There is no reason for the "discarnate" to have any more awareness than the "incarnate". The only difference may be that their dimensional domains give them a different kind of still individualized reality interpretation.
- 11. Psychokinesis, impacting mass-energy and content C-, could be explained by impacting through extra space-time dimensional fabrics. The extra C- could provide the embedded impacts and influence required.
 - At the end point speculation, this could even explain so-called apports.
 - Another example would be "healing" or therapeutic intent.
- 12. Communication by psi, such as by "telepathy" (so-called mind to mind) or "clairvoyance" (mind to object) (terms we perceive as artificial) would be beyond 3S-1t. The information transfer occurs potentially rarely in 3S-1t when one interfaces the various vortices, or hits "lines" or complex geometric forms (tensors, scalars, vectors). This is further complicated by any communication involving the brain where the psychological and neurological elements may further distort information.
 - This could be spontaneous psi or
 - deliberate as in various experimental psi situations with specific targets.

Psi, communication, extra-dimensionality and theory:

Besides the direct implications of psi and extra-dimensionality, there are some remarkably important theoretical aspects:

- 13. The interface across dimensions and communications and involving individual-units is, theoretically, conceptually a metalevel higher than any postulated "field theories": In field theories, there is a web or field connecting communications of some kind. Examples of field theories would range from the so-called "akashic" (involving memories), "morphogenetic" (involving imprints), or "subquantal" (involving "infinitesimals" that house information or consciousness). The metalevel of vortical indivension is because its mechanism can be applied to any field theory: it does not require any specific conditions, like past memories or imprints or location. It is there because it provides the fundamental communication interface mechanism across dimensions and across systems like the individual or group or family. This means that if any of the field models are demonstrable, this would provide added support for Vortical Indivension going through these mechanisms, at least in part. But if a specific model were refuted, it does not discount Vortical Indivension or TDVP as a mechanistic explanation of the process and content communications at higher dimensional levels. ^{6,7}
- 14. These hypotheses do not necessarily imply all of psi is beyond 3S-1t. Psi may be part of ordinary regular communication ²⁵. If so, at least part of it would routinely intrude into 3S-1t. And even if other components are extra-dimensional (beyond 3S-1t), the endpoint of communication still involves regular 3S-1t. For example, the psychological intrusions and the neurological endpoint translations into the brain involve the mass-energy with consciousness aspects of living individuals, but it may be that some components of psi are also part of this unrecognized process—just as infrared and ultraviolet rays are part of 3S-1t but restricted from our human vision processes.

- 15. Additionally, Neppe has demonstrated that the anomalous functioning of the temporal lobe strongly correlates with the subjective reports of "psi" experiences (Subjective Psi Experiences [SPEs]). ²⁶⁻²⁹ The strength of this correlation is accentuated bidirectionally ³⁰: Those reporting large numbers of SPEs have anomalous temporal lobe functioning ^{31; 32}; and those with temporal lobe dysfunction and seizure-like phenomena, report far more SPEs ^{33; 34}. This is the established medical method of demonstrating causality as opposed to correlations ³⁰. Therefore, there may apparently be a predisposing function in the (3S-1t) living brain that allows one to experience a reality outside the more usual "restricted 3S-1t" functions, although the subjectivity of this experience, neither confirms nor denies the objective veridicality of the experience.
- 16.Creativity could speculatively impact the transfinite (the 10th plus dimensions) with the higher C- qualities. The logic of such a phenomenon would imply that creativity is not just like psi in the context of extending 3S-1t though 9D, but may impact that "higher" possibly transcendent state of "purer" qualities of consciousness that requires ordinal measuring of higher consciousness in the transfinite. Whether the creative process still must go through all of the nine spinning dimensions first, or can involve purely the transfinite state, would be unknown even in this speculation. However, there appears no reason why one could not extrapolate across to such a transfinite state directly with any kind of higher awareness.
- 17. Just as new original thoughts (what we're calling creativity) may touch even the consciousness components of the transfinite, so may the inherent awareness of higher qualities of thought and behavior. Therefore, the transfinite would be the spiritual expression of science and mathematics!
- 18.Another theoretical speculation: The only way to intrude into the true continuous infinite would be the hypothesis of a Divinity. But the laws of nature in the infinite are still not compromised. The Divinity would obey such laws.

Understanding the conundrums of physics

Importantly, too, we could understand some of the other contradictions of physics or conundrums.

Principles

- The Standard Model of Physics works in those areas of physics that just require 3S-1t. Three of the forces in physics —the weak and strong forces and electromagnetism—obey 3S-1t and the so-called "inverse square law" of physics where the energy diminishes profoundly (to the square) over distance.
- We could postulate that a reason not to conform with the so-called "inverse square law" of physics is that extra dimensions are in place. This is so as we might be dealing with a full linear dimension of Time (past, present, future) not just t (this moment) or possibly more than one time dimension and also consciousness dimensions.
- But the Consciousness dimensions are beyond 3S-1t and therefore has immediacy and no signal relative to 3S-1t.
- Similarly, because 3S-1t does not have T 2nd and T 3rd, these extra time dimensions also have no signal unlike only 3 the spatial dimensions in the present moment, t; possibly that is important there as future and past higher energy level.

- Clearly, if we can apply the principles of 9-D finite vortices, then this would be a higher level proof, not just a logical speculation.
- The interfaces are different at every dimensional domain level including third level interfaces and consciousness becomes increasingly important.
- Let's now apply the logical speculative examples:

Three examples of "immediacy" present as possibly extra-dimensional:

- *Gravitation:* Gravity certainly has an "immediacy" that might imply properties beyond 4-dimensions. The immediacy is its action at a distance. Gravitational attraction might not be like a linkage across two masses: It may just appear so in the jigsaw puzzle that is 3S-1t. But that it happens immediately may suggests it is not only involving 3S-1t as full Time or Consciousness dimensions may be involved. If we observed this phenomenon top-down from say the 9th dimension, we would not possibly be plotting points but showing that the phenomenon had other properties.
- *Entanglement:* Similarly, the *immediacy* of events such as in the unexplained phenomenon of "*entanglement*" (described by us, living relative to 3S-1t) would imply extra-dimensionality.
- Possibly "tethering" that interfaces Time, Space and C- (implying at minimum 3S-1T-1C) would by definition be extra-dimensional.

We could speculate that many other contradictions in quantum mechanics and relativity could be solved by applying the 9 dimensional model.

These profound expansions of the TDVP principles recognizing the relative, the subjective-objective elements and the "from the framework of", plus the whole INDUCTS principles, should allow a further advanced background to TDVP.

COMPARING TDVP WITH THE MAJOR THEORIES OF EVERYTHING (TOEs)

The comparative metric criteria were carefully chosen and reviewed by other TOE authors, but they might still have been heavily influenced by the TDVP criteria. However, these metrics appeared to be globally feasible.

Because of it, one can analyze sub-scores: TDVP is the only "TOE" that scores fully *even on the 16 "General" non-specific metrics common in* \geq 9 *different "TOEs"*, and also on the 11 more "Specific" *metrics (each occurring in* \geq 4 *different TOEs). Together* 16+11=27 and scoring these alone *eliminates any selection bias and uniqueness to TDVP*. The difference is still orders of magnitude more. 5 "special" metric criteria were covered only by one TOE (TDVP) making up the 39/39 overall score. ⁷ This result justifies how comparatively far more complete than any other currently postulated TOEs TDVP is. These metric criteria are scored as Yes or No. But at times, TDVP is qualitatively much greater (e.g., far more mathematics) implying even greater chasms (no other TOEs are like that.)

Table 2 below compares criteria scores. It illustrates the profound differences in scores in all three headers,

Ge=General; Sp=Specific; Sc =Special,

1st = The first 27 criteria (= General plus specific), Tot = Total of the 39 criteria.

Examples of these criteria in the different sections: core concepts include:

<u>General:</u> Mathematics—significantly core, not just en passant; Infinity—continuous or countable;

Specific: Origin at source; Evolution important; Multidimensional Time;

Special: feasibility measure; Infinity-finite interaction; Consciousness dimensions.

Table 2: Metric comparison of the 24 Theories of Everything

Table 2: Metric comparison of the 24 Theories of Everything							
Name of model	Author	Ge	Sp	Sc	1 st	Tot	Year
		16	11	12	27	39	
Triadic Dimensional Distinction	Vernon Neppe /	16	11	12	27	39	2011
Vortical Paradigm (TDVP)	Edward Close						
Vortex N-Dimensional	Vernon M	15	7	5	22	27	1989,
Paradigm	Neppe						rev1996
Transcendental Physics	Edward R. Close	13	9	1	22	23	1985
Quantum Field theory	Adrian Klein	13	6	0	19	19	2010
subquantum integration	/Neil Boyd						
approach							
Kabbalic mystical model	Ancient Judaic	12	5	2	17	19	ancient
Implicate-Explicate Order	David Bohm	11	6	2	17	19	1980
The Akashic Field	Ervin Laszlo	10	5	3	15	18	2004
TES; Theory of Enformed	Don Watson	11	5	1	16	17	1998
Systems							
"My Big TOE" (MBT)	Thomas	12	5	0	17	17	2007
	Campbell						
The theory of formative	Rupert	11	5	0	16	16	1981
causation. (FC)	Sheldrake						
Transcendental Field Theory	Bernard Carr	10	3	3	13	16	2008
Vedic mystical model	Vedic	11	4	0	15	15	ancient
Biocentrism	Robert Lanza	9	5	0	14	14	2004
(Consciousness) Material	John Smythies	11	1	2	12	14	1956 -
Dualism. Modified							later
Standard Materialistic	Standard	7	5	1	12	13	-2012
Reductionistic Scientific Model	various						
CTMU Cognitive theoretic	Chris Langan	7	5	0	12	12	1998
model of the universe.							
Quantum Activism	Amit Goswami	10	0	1	10	11	11
Kosmos	Ken Wilber	7	4	0	11	11	1995
Conscious Realism	Don Hoffmann	6	3	0	9	9	2006
							2008
Consciousness and Hyperspace	Saul-Paul Sirag	7	2	0	9	9	1993
Typology of Aether-Motion-	Alfred Evert	8	0	0	8	8	2010
Pattern							
Many-Worlds Interpretation	Stephen	7	1	0	7	8	1996-

String Theory including M-Theory	Hawking Green, Schwarz M theory plus many others	6	1	0	7	7	1984- 1988 -
Nonoverlapping Magisteria	Steven Jay	3	0	0	3	3	2001
(NOMA)	Gould						
Criteria per column as above		<u>16</u>	<u>11</u>	<u>12</u>	<u>27</u>	<u>39</u>	

MOTIVATION FOR TDVP

- Whereas TDVP might be proven insufficient, or require some revisions based on what is known, TDVP is currently the best available model for a metaparadigm.
- We have already mentioned contradictions in the current Scientific Model. Many TDVP hypotheses have already been tested, researched and demonstrated: This includes Research in psi phenomena (in parapsychological research) actively demonstrates that in nine different areas of well-researched meta-analytic data, the chances of such events occurring by chance is less than one in a billion (Table 3). These astronomical results demand answers, and strongly support the *relative nonlocal* TDVP explanations.

Table 3: The nine well-researched areas of parapsychological research each showing six sigma results (<1 in 10^9).

These six different areas of Consciousness Research have been analyzed in detail

RV: Remote viewing REG: Random event generator

Ganzfeld

GCP: Global consciousness project

Presentiment

Retrocognition/precognition --- Bem protocol

These three other psi areas have further <1 in 10^9 chance occurrence

Survival and "superpsi"
Staring
Precognition

- The "particle-wave" double-slit and delayed choice experiments could support the role of "consciousness": This is obvious to some scientists; others deny any role of "meaning" role and apply a dozen quantum mechanics explanations (e.g. Copenhagen interpretation) without mentioning consciousness: However, it is difficult to move away from explanations involving meaning and the tethering of mass-energy and meaning is one example: This implies that there is meaning in everything—in every object and event.
- <u>unexplained entanglement</u> ³⁵⁻³⁷} and the Aspect ³⁸ and the following experiments ³⁹ could support extra dimensions and /or some kind of mirrored awareness mathematically and empirically, subatomic physics data support spin (vortices) plus the postulated 9

dimensional spin model that TDVP suggests ¹³. This is so, inter alia, as the Cabibbo mixing angle in particle physics can only be derived through a 9-D spin model. ¹²

- Importantly, the 9-dimensional justification works reciprocally because by the Cabibbo demonstration and by explaining the intrinsic spin of fermions in a 9D spin context, we have been able to validate the hypothesized 9 dimensional nature we proposed as the finite component of TDVP. Effectively, we tested our TDVP hypothesis of 9 dimensional vortical spin and we validated that.
- However, our Cabibbo derivation does *not* elaborate the nature of any of the specific dimensional substrates involved, namely those of Space, Time and a postulated "Consciousness". 5
- Based on progress for the future:
 - The applications and knowledge base in TDVP is growing with every month;
 - TDVP generates some six hundred hypotheses to be tested or examined.

THE AXIOM OF TDVP:

TDVP is based on a single axiom. ²

The substrates of Time, Space and a broader "Consciousness" have always been inseparably tethered together—ostensibly, tightly, loosely or slightly—in both the finite and the infinite subrealities. The discrete (quantal) finite is contained in the (continuous) infinite resulting philosophically in a unified monistic reality. ⁷

The reader could correctly point out there are twenty terms that need clarification in this definition. There are indeed. And they generate exponentially more. That's why we need to apply definitions and if the word is imprecise, then we need alternatives—neologisms. Tethering is a particularly difficult concept.

REVISITING THE NEW MATHEMATICS IN TDVP:

TDVP is further validated through mathematics. TDVP not only applies the broader sciences empirically, but several <u>mathematical techniques</u> allow for primary source proofs and explanations.

These include two important new areas of mathematics, pioneered by Dr Edward Close and fundamentally applicable to Dimensions and distinctions namely:

The Calculus of Distinctions allows for examination and testing of essential concepts. ⁴⁰ This has been described in the press as its own possible metaphoric jewel, a multifaceted diamond in stature, because of the fundamental quality and durability of the mathematical technique, called the Calculus of (Dimensional) Distinctions (CoD). ¹⁹ CoD has many creative and unique facets:

- It reflects the most fundamental logical system to approach Reality.
- It allows applications across different dimensions, recognizing the distinctions between our different kinds of experiences, and how the mathematics can be applied at different dimensional levels.
- It allows conceptualizing conscious awareness, differentiating our experience at the most fundamental of levels, and ultimately realizing the relative nature of the hidden dimensional realities of existence.

- The CoD distinguishes 'variables of extent, content and impact'. These are applied to ensure that the dimensional, the substantial and the influences on events or objects are differentiated: consciousness is a critical common element in all of these.
- It recognizes the key experiential roles of subjective 'perceptions', 'conceptions' and 'interpretations': What to us is experience in everyday reality, may be quite different at, for example, the sixth and seventh dimensional domains.
- The CoD also allows for integrating the complex algebras and multidimensional geometries. This is possibly its most practical use.

Dimensional Extrapolation (DE): The technique of mathematically facilitating movement across dimensions. DE is therefore highly pertinent in "Dimensionometry" —a new multidimensional extended geometry, extended to include dimensional domains of at least nine dimensions. Higher dimensions contain the lower and communicate usually by spin movements (vortices). DE is the mathematical process for defining the dynamic relationship of dimensional domains and number theory through rotation and projection. It is a process used to identify the number fields characterizing projected multi-dimensional domains: the logical extension of a known parameter or parameters facilitating the process of moving to and from higher dimensions. DE involves an iterative logical operation based on the natural correlation between number fields and multi-dimensional domains of extent. DE is most easily calculated bottomsup, starting at lower dimensions and extrapolating to the higher ones, but can also be reversed. In the process of DE, the mathematics simply runs out of numerical representation when going beyond 9-finite dimensions to the 10th plus, as it contains everything beyond those dimensions but also contains the 9 finite dimensions, plus the transfinite. This combination of finite (9D) and transfinite is what we're calling the "metafinite".

Applying the process of rotation and unitary projection from dimension to dimension in Euclidean space, we find that the mathematical structure of basic number theory requires the existence of nine finite orthogonal dimensions embedded successively in an infinitely continuous substrate. ²⁰

Extensions of mathematics in TDVP:

Certain fundamental areas of mathematics allow for appreciation of the infinite:

- The awareness of the Gödel's Second Incompleteness Theorem forces the further application of infinity. TOEs cannot be incomplete in a closed metric system one needs to be outside the system implying an open infinite system.
- The application of Cantor's ordinals particularly in the transfinite, and his concepts of the infinite are critical including the "infinity of the infinities".

Mathematical applications applied beyond 5 dimensions (3S-1t-1C):

• Fermat's Last Theorem critically allows for conceptualizing vortices, triads and asymmetry beyond three dimensions. It is extraordinarily important because conventional wisdom regards everything as symmetrical. Many features are symmetrical in our 3S-1t existence,

but mathematically, this is not so beyond 3S-1t. Additionally, Fermat's Last Theorem reflects a diophantine (integer) expression that recognizes that combinations of three expressions each having exponents of three or more, do not result in symmetrical integers.

- The application of modifications of the Pythagorean theorem allows for development of dimensionometry.
- In TDVP, mathematically, the application of <u>real, imaginary, complex numbers</u> allows conceptualizing the first nine dimensions of Space, Time and "Consciousness"; and <u>hypercomplex numbers</u> are used in the transfinite ordinal, cardinal and transcendental reality. Applying ordinals in higher dimensional calculations are critical (e.g., in Consciousness and in the Transfinite).

The nine dimensional spin model:

- The mathematics leads logically to a 9 dimensional spin model.
- In the <u>finite reality</u>, we propose 9 finite dimensions, most likely three of space, three of time, and three of "consciousness" (S3, T3, C3). Mathematically, S, T and C differ as their dimensions all appear volumetric: (3-D) with linear (1D) and planar (2D) analyses being subcomponents. This can be used to explain why, e.g. unexpectedly 3 Time dimensions should exist, and likely 3 finite Consciousness dimensions: 3S, 3T, 3C.
- Algebraic and geometric "dimensionometry" involving Hamiltonians, Grassmann, Lie, Clifford, Riemann and Hilbert space algebras, and topological Group theories.

These applications of new mathematics simplify complex, previously impossible calculations.

- The logic of TDVP is justified applying complex mathematical physics where we demonstrate the sole feasibility of nine rotating finite dimensions (no other number): The Cabibbo angle empirically was 13.04 degrees, yet could not be derived from the Standard Model Of Physics. ¹²
- Yet this angle is *exactly* derived from the 9 dimensional model. Moreover, TDVP is the *only model* that proposes 9 finite dimensions with (spinning) vortices. ¹³ We previously hypothesized this would be so. ⁶ Consequently, this finding importantly justifies the finite 9D spin model in TDVP. (We, also, can further preliminarily justify that.)
- The 9 finite dimensions appear mathematically feasible, yet applying the math to any other number of dimensions, like the 10, 11 or 26 as in some String Theories, or the 4, as in our experience of our day-to-day reality, produces errors: TDVP scientifically and mathematically motivates multiple dimensions, and Close and Neppe show that there are likely 3 carefully defined *dimensions* each of Space, Time and Consciousness.

 **Mathematically, the spin is the key: These rotational movements—the 'vortices'—allow a way to move through dimensions. The new mathematical techniques to move through 9 dimensions include the 'Calculus of Distinctions' and 'Dimensional Extrapolation' plus already well-established conventional mathematical techniques to help in the exploration of the many 'extra' dimensions.
- The 9 dimensional finding in TDVP differs markedly from the various String Theories. The 'strings' in the various String Theories generally involve the 'curling' or 'folding' into extra dimensions, and do not usually regard 'spin' as the major requirement for more dimensions. It's an irony, too, that the String Theories apparently remain unproven mathematically:

Some would say that's why they are still 'theories'. In addition, no String Theories that we know of, have a <u>total</u> of 9 dimensions. But, perhaps most pertinent of all, String Theories do not involve any kind of consciousness, and do not generally specifically postulate Multidimensional Time, often speaking of poorly defined space-like or time-like 'spaces'. By contrast, our TDVP model is based on sound logic, scientific evidence and mathematics. It produces strong empirical evidence for more than one dimension of time, and argues for the profound need for consciousness to be included in any equation describing reality.

• The relevance of the 9-dimensional spin mathematics involves new mathematical techniques for describing multidimensionality. These begin with the fundamental application of 'distinctions'. We then recognize that observational perception is relative, and that what is regarded as 'non-local' may be non-local only <u>relative</u> to the particular dimensional domains being considered.

Further mathematical perspectives Calculus of Dimensional Distinctions:

We can proceed with an extension of the new form of mathematical analysis of the Calculus of Distinctions, applying specifically the Calculus of Dimensional Distinctions, CoDD. This way we can treat all phenomena as finite, non-zero distinctions. First, whereas Space and / or Time or Consciousness may be zero along one dimensional domain, it would not be so along others. Secondly, and critically, we can replace the dimensionless points of conventional mathematical physics with distinctions of finite unitary volume. This way, we can equate these unitary volumes with the integers of basic number theory and explore the relationship between mathematics and reality. The reason for this is the most fundamental infinitesimal amount is not one tending to zero as in Newtonian-Leibnizian calculus: It is still quantized and therefore integral. This makes a substantial difference. Essentially, the conventional unit: MeV/c² is not a truly basic quantum unit, because the data expressed in these units contain fractions of MeV/c² units. Max Planck discovered that energy and matter occur only in integer multiples of a specific finite unit of quantum action, not fractions of units 41-43.

Spin and asymmetry:

In TDVP ⁵, Close and Neppe have also developed the procedure of Dimensional Extrapolation ^{12; 13; 19} using dimensional invariants to move beyond three dimensions of space and one of time. Within the multi-dimensional domains defined in this way, mass and energy are measures of distinctions of content. If there are other dimensions beyond the three of space and one of time available to our physical senses, how are they different, and do they contain additional distinctions of content?

In our physical experiential reality of restricted 3S-T, the smallest distinct objects making up the portion of reality we apprehend are spinning because of the asymmetry of an object with the features of mass and energy existing in four orthogonal dimensions 20 .

Developing an important new equation, the Conveyance Equation.

The mathematical expression of the conveyance of logical structure can be derived by

application of the CoDD and Dimensional Extrapolation to the elementary distinctions of extent and content revealed by the empirical data obtained in particle colliders.

This is a variant of a group of Expressions called Diophantine which simply refer to integer solutions of exponential equations 20.

The Diophantine Conveyance Expression when n = m = 3, integer solutions produce trinomial combinations of elementary particles that will form stable structures. This explains why there is something rather than nothing, and why quarks are only found in combinations of three 20 .

Revisiting our current world, and the transfinite: Is our consciousness, space and time different conceptually and mathematically?

Our current world of 3S-1t-1c with limited experiential reality ⁴

- As living sentient beings we may not realize how much creative "higher consciousness" we could access, because *we mainly use our brains alone* little else than thoroughly applying neurological and psychological consciousness in 3 dimensional space in the sliver that is the present moment in time.
 - Three space dimensions, a moment in time and some conscious awareness but these are mainly filtered in our brain. This is our limited reality experience.

The transfinite, infinite and mathematics.

• We further extend the mathematical portion of the TDVP model beyond 9 finite measurable dimensions "higher" to the technically "countable infinity" (it goes on forever; so it's not actually countable, it's so large, like the number of stars)—we call this "transfinite" — mathematically it's "the 10th plus immeasurable dimensions" with technically *a one-to-one correspondence of its elements*. Our combination term "metafinite" refers to all the discrete/pixilated/quanta—so it's "finite plus transfinite".

The hidden reality of the transfinite or just below 4

- Most of *objective reality* is **hidden** from us:
 - Objectively that Reality exists, but
- we don't recognize how limited our experiences are.

- The substrates of Space (S) and Time (T) are *almost* completely contained at the Higher levels within the substrate of "Consciousness" (C) (the "C-substrate"). At the level of the transfinite itself, the overriding (pervading) substrate is consciousness. However, Space and Time still exist independently though completely embedded in the Transfinite.
- In contrast, we have the <u>infinite</u> which cannot be directly experienced but can only be "mirrored" or even more so "directly expressed" through what we're calling the "metafinite" (at lower levels, the multiple discrete, quantized dimensions of the "finite" —we postulate 9 dimensions, plus at the highest conceptual level, the "transfinite" the discrete, quantized 10th plus dimensions). All the metafinite has measurable extent.
- This <u>transfinite</u> conceptualization might have significant applications, inter alia, because of its <u>mathematical</u> implications. Mathematically, we propose that in the transfinite we're dealing with hypercomplex numbers. Effectively, this could imply that the "complex numbers" we can mathematically demonstrate in consciousness in the finite, may be reflected by an even more subtle derivation in the transfinite. This means that Space and Time must totally be contained in Consciousness in the transfinite reality. There is a complete unification and this extends to the infinite "reality" that completely pervades the discrete finite and fuzzier (because it is uncountable and extends forever) transfinite "realities". We can mathematically still calculate based on discreteness such as in quanta or qualits.
- The Infinite mathematics: But when we reach the continuous infinite, any discrete mathematical calculations are irrelevant. The infinite cannot therefore be analyzed in a "consciousness" like our sentient awareness, that neurophysiologically, thinks like a computer, possibly in discrete bits. We can only conceptualize the full synthetic gestalt of the Infinite, with its forever, unextended space, and unending information source translating into an infinite potential for meaning. We can only see the mirror that is the finite.

Why use the phrase "Reality Begins with Consciousness"?

Mathematically, there is a justification for "*Reality to begin with consciousness*": We have proposed that in the transfinite we're dealing with hypercomplex numbers, implying an even more subtle derivation in the transfinite of Consciousness. Because Space (S) and Time (T)

must be totally contained in that Consciousness (C) in this transfinite reality, there is a complete unification of S, T and C but it could explain how even at the "mystical" finite beginning, reality begins with consciousness because S and T are totally contained in C at that N-dimensional level. We could simply conceptualize that before we experienced our reality at the finite 3S-1t in our earthly living, there would be a whole reality with the mystical higher transfinite mirroring the highest infinite involving a continuous infinite completely pervading the discrete quantized N-dimensional transfinite subrealities. This would imply that in the beginning of the finite Reality indeed begins with Consciousness. But at the infinite level, there is no beginning.

PHILOSOPHY AND MYSTICISM:

TDVP is particularly applicable to "Kabbalah" (ancient mysticism) ⁴⁴: Although Kabbalah is esoteric and ambiguous, it includes, inter alia, all of TDVP's title: "<u>triadic</u>" STC, <u>dimensions</u>, makes <u>distinctions</u>, involves <u>vortices</u> and is <u>paradigmatic</u>. This is highly pertinent, because a fundamental theory should have survived thousands of years of mysticism, and Sefer Yetzirah on which much of the concepts in Kabbalah is based ^{45; 46}, fits that requirement. Effectively, TDVP is, in part, the scientific and mathematical validation of Kabbalic mysticism. No other ancient philosophical model can claim this.

However, our TDVP model goes much further than Kabbalah: TDVP involves empirical science and mathematics from the start and is more specific, direct in its information and amplifies and clarifies certain areas. The consequential result of TDVP is a philosophical model that is applicable to the brain and body, as well as the broader infinite and finite: "Unified Monism" is the necessary philosophical consequence of TDVP—it is not a primary metaphysical or philosophical conceptual model. Like Kabbalah and TDVP, some of the Eastern mystical philosophies (e.g., Vedic varieties) recognize the unification of reality, the infinite "reality", the broader role of consciousness and a higher guiding element. But Kabbalah recognizes the links of space, time and consciousness, not just consciousness, which is why it scores so high on our Table 2 metric.

Table 3: Comparison of Some Pertinent Philosophical Models Relative To Unified Monism (Provisional, Neppe and Close, ©)

Philosop hy	Panp sy chism	Realistic Materialism	Dualism	Pantheism	Unified Monism
Origin	Thales, Plato, James	Galen Strawson	Descartes	Spinoza	Neppe and Close
Fundamental	Mental aspect in all matter; unified experience	Matter variant explains meaning	Mind-matter separate	God in all	Continuous infinite contains discrete finite; Triad: Space, Time and Consciousness tethered
Basic	Idealism monism	Materialism monism	Separate mind- body dualism	Idealism monism	STC unified monism
Awareness	Fundamental is mind	Fundamental potential to matter	Fundamental is both mind and matter	One being	Yes independence; fundamental is all of STC tethering, infinite, multidimensionality
Derivation and base scientific	No	No	No	No	Yes; Empiricism of TDVP necessary; result secondary is the UM philosophy
Mathematical derivation	No	No	No	No	PFDCIII ^ ; fundamental Mathematicologic; Y es

Charge and spin	Not direct	Fundamental to matter	No.	No.	Yes
Meaning	Yes	No	Yes	Yes	Yes
Life	Y es idealism	No	Compatible	Y es idealism	Yes
Micro to macro	Yes	No	unlikely	Yes	Yes
Inanimate aware	Y es idealism	No	? variants	? variants	Yes
Space-time independence	No	Yes	Yes	No	Yes but tethered together and with "broader" consciousness
Virtual reality	Likely, yes	No	No	Possibly	No
Fundamental Problems	Do we really exist?	Survival and ? sentient beings	<u>Chalmers</u> unsolved;	Extreme: Divinity	None
		unexplained.	interaction	variant alone	
Physical exists	Y es and No.	Sez	Y es	Jez	Yes
Physical life	Variable models	Yes, key	ses	Not really	Yes
iz q	Zes Y	Not independent	res Y	z9 Y	Yes
Precognition	Not relevant	No	No;	No	Yes
OBEs; NDEs	compatible	? compatible	Logical	compatible	Logical natural consequence
Survival post mortem;	Yes	Unexplained, no	Compatible	One being= self	Logical and a natural consequence
Free will	Yes	Denied	Compatible	One being	Yes, but within constraints
Philosop hy	Panp sy chism	Realistic Materialism	Dualism	Pantheism	Unified Monism
Divinity	Compatible	Xez	Compatible	Required: One being	Compatible and likely
Reincarnation	Variants yes; broadly not pertinent	No	Compatible but not necessary	No	Compatible but not necessary
Subjectivity	Yes	No	Yes	Yes	Yes
Objectivity	No	Yes	Separated	Yes, potential	Yes, together
Consciousness	Yes	No	yes	yes	Yes
Levels of consciousness	No	No	Possibly	No	Yes, fundamental
INDUCTS*	I ND UC TS	₽NÐU CTS	INDUCTS	IND UC TS	INDUCTS all *
Relative to	No	No	No	No	Yes
Range	Same	Maybe e.g. OBE	Same	Same	Higher levels different (also so in TM); relative; vortical indivension
Fits into it	Non-reductive physicalism	Non-reductive emergent physicalism; Spatiotemporal Emergentism;	Non- physicalism	Monistic Divinity Theology	Divinity plus others impact tethering; could sometimes contain panentheism; Chassidic Theism part of impact; Transcendent theism first cause primary;
Variants	Berkeleyian idealism; phenomenalism ; mental monism; Vedanta Eastern	Peter Strawson: Realistic Monism of Non-reductive physicalism; epiphenomenalism; functional reductionism, Identity reductionism;	Substance Dualism (Descartes; Property Dualism (mind emerges); Promissory dualism	Panentheism; Theological monism; Chassidic theism; Transcendent Theism; Spinoza creator results in all infinite dimensions	Transcendental materialism (Zeno, Chryssipus, Betty) (discrete stuff not continuous); Kabbalah (triadic STC untethered); Vortex N- dimensionalism/ pluralism (earlier Neppe); Transcendental Physics (earlier Close)
Different from	Neutral monism; Promissory materialism	vs. physicalistic monistic reductionistic	Monism	Dualism; reductionistic materialism	Classical monism or dualism and all variants; none

materialism;		
Panpsychism variant;		

- *INDUCTS: Infinity, Natural Law, Dimensions, Unified Monism, Consciousness, Tethering, , Subjective-Objective components
- ^ PFDCIII: Mathematical Bases: Pythagoras Theorem modified (Close), Fermat's Last Theorem, Dimensional Extrapolation (Close), Calculus of Distinctions (Close), Modification of Incompleteness of Gödel (Neppe), Impact Distinctions (Neppe), Infinite Continuous—Discrete Metafinite (Neppe, Close).

Unified Monism actually appears to be the most feasible of all the so-called mind-body philosophical models that exist. These are discussed in great detail in our book, *Reality Begins with Consciousness*, though Table 3 is new. We select out several of the most useful current philosophical models and this way show the difference. Unified Monism appears to be very versatile working in the context of both our restricted 3S-1t reality, as well as such extremes as alleged survival after bodily death. Its versatility is partly because at that restricted 3S-1t level consciousness is mainly contained within the space and time restrictions of our brain. However, when one reaches the transfinite level consciousness is the main element and all of Space and Time are embedded in Consciousness.

VERIFICATION BY FEASIBILITY AND FALSIFIABILITY:

TDVP like any multidimensional or cosmological model requires an extension of scientific analyses. This requires the development of our new feasible Philosophy of Science analytic technique, Lower Dimensional Feasibility, Absent Falsification (LFAF). This is so, as higher dimensional or cosmological aspects often cannot be directly falsified in our worldly "restricted 3S-1t reality". We cannot "falsify", for example, billions of years of evolution, and the 9 areas of psi are inherently difficult to replicate. This means that if we could not prove it, it would become "metaphysical": Instead, we can apply the new LFAF technique to recognize that other higher dimensions still produce verifiable information in 3S-1t. We then ask "is it feasible?" If we can express the empirical information scientifically in 3S-1t as a piece of a complex jigsaw puzzle, then it is feasible if it had not been falsified. This LFAF technique effectively involves the methodology of literature review, hypotheses, methods, results, analysis, discussions and provisional conclusions (including statistical, clinical significance and observational nonstatistically needed analyses) applying the recognized (Popperian) "not falsified" scientific analyses and then amplifying by saying "can this actively fit what we know into a 3S-1t (or lower dimensional) jigsaw puzzle?" If that is feasible, then that provisionally and empirically validates, and we can progressively develop further hypotheses in that scientific discipline (a paradigm) and further apply LFAF in other sciences (metaparadigm).

UNDERSTANDING OUR PERCEPTIONS:

Let's prioritize our understanding:

- Our perceptions and those that many others perceive (e.g., for millions watching the same sports match on TV) commonly produce results which we interpret as an "objective" reality: It is more correctly "a common reality which we make objective" through our interpretations.
- In our common living reality experience, the dimensional domain level is <u>3S-1t</u>

- However, there is always some subjective awareness, so it is actually <u>3S-1t-1C</u> (this is conjunctive; not used as a minus).
- As living beings, we're actually experiencing a very limited reality in <u>"restricted 3S-1t"</u>(-1+C)". For example, we cannot see in the Infrared or Ultraviolet.
- The rest of reality is "hidden": We perceive but cannot perceive everything, but it still exists.
- We cannot usually directly <u>perceive</u> higher dimensions, either: We only can <u>conceptualize</u> such higher dimensions. Therefore, our experiences are limited to our <u>interpretations</u> of such experiences. Certain altered consciousness states (such as meditation; alleged post-mortem survival; mystical awarenesses; near death experiences and maybe dreams) might allow us to more directly access higher dimensional perceptions.
- This hidden component is relative to our perspective: Consequently it may be regarded as relative to the hidden 3S-1t, to the hidden lower dimensions, to the transfinite, to the continuous infinite, and ultimately to the mystical infinite.
- We cannot directly experience the infinite. The best we can do is experience "mirrors" of that infinite through these discrete components of the finite.
- Any finite-infinite reality is <u>experienced subjectively</u> relative to the various pertinent dimensions being considered (the <u>dimensional domain</u> level). This has implications in a multidimensional reality. For example, so-called near-death "experients" (who have the referred to experiences) could perceive reality differently, not from the 3S-1t-1C domain, but from other dimensional domains.

Individual-Units and the Systems Approach

- Our <u>subjective</u> experience is usually interpreted as individual, but it could be at any level of individuality (so more correctly, it is at the <u>"individual-unit"</u> level such as <u>group</u>, <u>i</u>ndividual, <u>family</u>, <u>ethnic</u>, <u>cultural</u>, <u>social</u> or even <u>species</u>) (GIFECSs).
- TDVP involves a <u>multisystems approach</u> epitomized by the "individual-unit" and recognizing the great unification of all the ethicospirituobiopsychofamiliosocioethnicocultural systems: Initially, the reader may be surprised at compound terms such as these. These compound words have developed over many years in Neppe's writings to create a comprehensible way to interpret the unification of *Systems Theory* and the systems approach. It says that spiritual, biological, familial or ethnic *cannot be separated* in our unified reality. Reality is one and the separation into different levels of systems is simply an artificial conceptual way to understand it. The lack of hyphens emphasizes such a unification.
- While living, our common subjective experience creates a secondary somewhat **common objectivity**: Millions may, for example, see a specific event on television and this then becomes factual.
- <u>Interpretations through 3S-1t:</u> In contrast, based on the accumulated empirical reports, great variations of interpretations in alleged <u>"after death communications"</u> from the survival state support the awarenesses that such descriptions are inconsistent and greatly varied in content. We are not at this point commenting on the <u>veridicality</u> (the truth) of such

subjective experiences, only that <u>objectivity</u> may be more difficult, if, indeed, we're postulating different dimensional domains. Such interpretations would not have commonality producing the kind of objectivity that our current living 3S-1t-1C existence has, because millions cannot potentially validate events. Instead, higher dimensional communications have idiosyncratic or unique elements: We cannot, for example, objectively validate sources of information or data from an alleged communicator, because besides the individual subjectivity, the data must usually be interpreted combined with the psychological distortions of the medium in 3S-1t-1C.

- <u>Applying dimensional models:</u> By applying dimensional mathematical models and combining them with reported subjective data, we can obtain a greater perspective of the limitations of both our subjective sentient experience plus the great variations of interpretations that allegedly occur in other altered states of consciousness (ASCs).
- What is potentially available across dimensions is vast and across infinity is *truly infinite*. What is used at any point is a miniscule fraction of the available S, T and C.

Relative, top-down, bottoms-up:

The finite-infinite reality is always relative. It is relative to any subjective realities experienced by any level of individual-units. At the broadest level, it can be conceptualized from the "top-down", in terms of transfinite or higher dimensions influencing dimensions below. Alternatively, most scientific methods apply data only from the "bottoms-up" and such analyses make higher dimensional analyses much more difficult. The "bottoms-up" approach begins at the information and meaning we have in the few pieces of what could be understood as a 3S-1t-1C jigsaw puzzle and we dimensionally extrapolate upwards.

- The bottoms-up approach is much more limiting and difficult to think outside of the box than the top-down approach, which also pervades the infinite "reality". We then try to conceptualize or distinguish the higher S, T, or C dimensions.
- The bottoms-up approach and top-down approaches are critical in TDVP in the mathematics of what we're calling <u>Dimensionometry</u>, <u>Dimensional Extrapolation</u> and Indivension.
- *TDVP involves higher level dimensional communication mechanisms:* "Vortical indivension" is a <u>metalevel</u> higher than field theories (such as subquantum, Akashic, morphogenetic, Transcendental Field). Therefore, these may support TDVP, but not negate it.

Consciousness (extent) as a Dimensional Substrate.

- "Consciousness" is conceptually and significantly contained within Space and Time at lower dimensional levels. For example, in 3S-1t, our "consciousness" is mainly limited to the brain. However, under certain circumstances, it could be a little outside 3S-1t, like in mystical experiences, creative thought, or dreams.
- In contrast, Space and Time could be conceptualized as completely contained within "consciousness" (the C-substrate) at higher levels. This has to be so for the mathematics to work out. Space dimensions involve real numbers, Time dimensions involve imaginary numbers, Consciousness finite dimensions involve complex numbers (which combine the

real and the imaginary) and the Transfinite in TDVP (also called the 10th plus dimensions) involves hypercomplex numbers. Therefore, S and T theoretically must at that higher level be *entirely* contained in C substrates. *We cannot find an instance where higher dimensions of S and T could be separated from C completely making parts outside S and T at that higher dimensional level. Effectively, it would be like the Finite being contained totally within the <i>Infinite*.

• Consciousness manifests differently at different levels. However, it likely applies the same "Consciousness", just different conceptual faces that are context dependent: Meaning exists at the quantal (qualit) level, and also psychologically and neurologically in the living being applying cognition, affect and volition, and as acquired meaningful information at the higher transfinite and infinite levels. Effectively, this is the same meaningful "consciousness" that utilizes different qualities of the same meaning at different levels.

The Infinite "Reality":

Time, Space and Consciousness exists as a reality essence (a metareality) involving a pervasive consciousness (information expressed through meaning as metaconsciousness) never-ending, infinite order ("ordropy"—order with trophic enhancement) with a content of unending massenergy and information. We revisit these ideas briefly, modifying the conceptual context:

- Ordropy and entropy: The multidimensional finite order derives from the infinite. At the physical finite level, this order is mixed with disorder tendencies ("entropy"). But entropy is linear in one direction, tending toward disorder; so it's not the opposite of Ordropy, just one component.
- Life after physical death: Life within ordropy: <u>Life</u> always exists in the Infinite "<u>reality</u>". It exists from the source of multidimensional order ("<u>Ordropy</u>") within the infinite. But Life reflects very significant order at many levels (ordropy). An infinite potential for life manifests in the finite "reality" as physical life provided adequate biology could support that physical life. When that physiological support is no longer possible, physical life terminates as physical death, but that infinite potential life still exists. We call that "po-life" (potential physical life). The life "essence" always exists in its infinite origins of always existing (hence, a secondary hypothesis in TDVP is survival after death).
- The mirrored finite: We still experience such a general *infinite (continuous)* "reality" by its mirroring or even direct, specific, pixel type expression in the "metafinite". The metafinite consists of all the discrete reality—the finite and the transfinite together: This is why we use this new term—it's needed because we wanted to characterize everything discrete together. The finite mirror is a reflection of the infinite "reality", but on the other hand, the infinite embeds the finite as well as embedding it. They are one unit: It is just that no being other than a Divinity can likely experience the infinite directly, except possibly in exceptional state or trait circumstances.
- Our metafinite reality consists of discrete components—these are quanta: We could think of them like the 'pixels' on our TV, but these are much, much, much tinier fundamental units. But these 'pixels' are not just contained in the 3 dimensions of space and single moment in time we actively experience all the time: They're actually in nine dimensions—it's just we cannot directly experience most of them. But they're still always happening in the background.

- <u>Ultimate Simultaneity (Temporal Unity):</u> The continuous, infinite reality reflects all of time and space in totality simultaneously. Therefore, on a finite level, the infinite appears "relatively nonlocal". Relative nonlocality can be at any other level: Relative to 3S-1t, relative to dimensions, relative to the transfinite. Importantly, we must describe everything relative to something: It is experienced or described from the "framework of" —we can apply this at the infinity of infinities level, too where some would talk of "from the framework of a creator".
- Relative Nonlocality: ⁴⁷ We argue that "nonlocal" events require further descriptors for us to understand the *degree* of nonlocality, what the *framework* of the observer describing it is, and where we humans are located *relative to* the ostensible nonlocality. This suggests three critical factors: *Relative to, from the framework of,* and *a hierarchy of "to what degree"*. "Nonlocality" without the prefix "relative" compromises its description by making it an absolute: We must scientifically ensure that qualitatively we can describe events that correspond with each other, and differentiate them from those that do not. Recognition of this hierarchical "relative non-locality" is important: Nonlocality from "the general framework of" a Divinity, or mystic or near-death experient, markedly differs theoretically "relative to our sentient reality in 3S-1t": Specific events may be described "relative to" our living 3S-1t reality, but conceptualized differently to in an altered state of consciousness experiencing higher dimensions. Questions to ask would include:
- Is the nonlocality 'pseudo': simply communication that some but not others detect through extending our usual communications? Or is it still local 'subliminal' communications? Or is it undetectable by humans, yet detected by some animals or machines? Or are psychological or brain happenings misinterpreted as nonlocality?
- Is the nonlocality impacting higher dimensional hidden realities?
- Is it at the countable infinite—transfinite—level?
- Or does the nonlocality happen at the infinitely continuous reality?
- Or at the highest level of that infinite—the mystical?
- Is it nonlocality in Physics: quantal, entanglement or the many other causes likely different from nonlocality in Consciousness Research.

We also propose that events happening immediately, not even requiring light-speed, are fundamental properties of nonlocal time involving more dimensions than just 3S-1t.

The Finite "Reality":

- <u>Self-transcendence:</u> Although mathematics and science are neutral, their links in TDVP allow for mystical and spiritual development, introducing many potentials for transcendence of self in our experience which is necessarily only of the finite "reality": We can never experience the infinite directly.
- <u>Individual-unit:</u> Individual-units are distinct "conscious" finite biological unit across dimensions and also the infinite. Multiple levels manifest together, most overtly in individuals but can be familial, group, ethnic, cultural, social, and species linked (acronym: GIFECSs). This communication process across dimensions and across "individual-unit" systems like individuals, groups and cultures is facilitated by what we call "vortical indivension".

- <u>Indivension:</u> Indivension is a new term deriving from "Individual-units; dimensions". Indivension describes the process of moving across, between and within dimensions, and interfacing across different levels of individual-units. It involves the process involving fluctuating STC—mainly C-substrate domains of "zillions" of *individual-units* and movement across dimensions by dimensional extrapolation. These portray unique or common transdimensional (often transfinite) relative experiential realities. Indivension occurs through the interaction of vortical distinctions Indivensions also describes the limited, relative and fragmented views of reality afforded by the physical senses of different sentient beings. Key to indivension as a process is a content namely "vortices".
- <u>Vortices:</u> simply involve curved movements. These can include many shapes: spherical, ovoid, helical or spiral forms (adjective: vortical).

Importantly, Vortices allow for communication across dimensions. Vortices reflect any 3 dimensional moving, fluctuating, curved or rotational content within, across and between dimensions:

Now some technical aspects: More complexly, vortices dynamic moving curvilinear manifold multi-dimensional distinctions of any open or closed form. In part, because of the *asymmetry* of multi-dimensional content variables in response to linear or rotational forces, vortices are ubiquitous in our 3S-1t domain. The interfaces across vortices can be facilitated by vector, scalar or tensor elements. Technically, the movement can equal zero relative to a specific dimensional domain or reference frame.

- Communication of individual-units by vortical indivension: Space, Time and Consciousness communicate across, between and within dimensions. We call this process "indivension", because "individual-units" (e.g. individuals, societies, ethnicities) interact across dimensions. A specialized content of vortices—spinning movements—applies the indivension process. The indivension process is a metalevel higher than any fields as it's dimensional not just "subquantal", "akashic" or "morphogenetic".
 - Interfaces: Each individual-unit interfaces with zillions (Nⁿ) of other vortical individual-units producing a complex web, and a finite origin of all information. The term "zillions" is used here to communicate an extraordinarily large quantity. It is of the same order of magnitude as another term, now well known for a different reason, namely "googol". (A googol is technically 10¹⁰⁰. An even larger term is when googol becomes exponential, namely "googolplex" which is 10^{googol}!) There are different levels of development and this can fluctuate even in individuals or individual-units. (These fluctuations occur within a context—three-dimensional moving rounded shapes called vortices. The indivension is the mechanism).
 - Relative non-locality: In finite terms, infinity is conceptualized as relatively nonlocal (beyond space and time) but in infinite terms it involves a metareality of all existing STC ("metatime", "metaspace", "meta-information" and "metaconsciousness") with potential life and ordered "reality".

• Origin Event: The beginning in finite "reality" is the Origin Event (the beginning of existence, e. g., around the so-called Big Bang or other singularity or other alleged event). Tethering occurs from there. Consciousness is the initial event in the finite, because we must draw distinctions to explain the origins of anything else. In the infinite "reality", we posit that there is no beginning and there is no end.

THE JUSTIFICATION

The easy one-sentence TDVP axiom

We now follow this with our single primary TDVP axiom, plus a historic Minkowski footer. ⁴⁸ *All of space-time-"consciousness" have always been inseparably tethered together—ostensibly tightly, loosely or slightly.* Let's historically clarify this idea:

At one point time, "Time" was regarded as separate from "Space", but Hermann Minkowski argued in 1908 that they were not: space-time could not be separated. Just as time is not a subset of space but a separate and different kind of dimension though inextricably linked, we argue that Space and Time are not subsets of "Consciousness", nor vice versa. Yet they are not (dualistically) separated. All three exist in extent, necessarily together as a unit: There are likely multiple "dimensions" of "consciousness", definitely at least 3 of space, and likely 3 of time—and all need careful definition.

We propose that all three—Space Time and "Consciousness" (STC) —necessarily form a triad in everything, from the tiniest subatomic components to the astrophysical, from the inanimate to the sentient, from the finite to the infinite.

STC reality begins at the *finite origin of events*; yet it has no start or end in an existing infinite where "origin" is a contradiction.

The powerful empirical *physical* Minkowski space-time approach initiated a century ago has now been extended. Not only is space and time inseparable, "one", but space, time *and consciousness* is one and inseparable. Moreover, not only is this *TDVP triad* applicable to Physics, it *represents data across all the sciences, and mathematically demonstrates why this STC triad cogently works and is better than any other previous model.* From this fundamental triadic tethering axiom books can be written—and *Reality Begins with Consciousness* represents the first of this.

How scientifically sound is TDVP as a TOE?

We may be wrong, but we argue that TDVP is more soundly motivated than any other because it fits all disciplines of science, is supported mathematically, resulting in a philosophical basis. We could expect consonance with ancient mystical elements if TDVP reflected fundamental truths—and Kabbalah has endured a millennia.

Now let's move on to some other principles that again are amplified through in the cited books, but will assist in obtaining a priority perspective. Again, please understand these are simply to allow the broad picture. We do not yet present the detailed proofs, empirical data or suggest hypotheses at this point, and this will be addressed in this and our later books.

TDVP provides an extended explanatory model for all the sciences (physical, life, consciousness and social) from the finite subatomic to the conventional macroreality to the

astronomic realities applying quanta, or (more correctly) "qualits" (a term to include 'consciousness elements' even in the inanimate, plus all the quantum subatomic elements (and speculatively even subquantal infinitesimals or in dark matter), as basic finite discrete reality units with the pervasive continuum of the infinite. No other Theory of Everything apparently applies more than three of consciousness, dimensions, infinity or tethering necessary building blocks.

TDVP generates over 600 new ideas, some speculative, that logically follow from its fundamental axiom. These are covered in *Reality Begins with Consciousness: A Paradigm Shift that Works*, and particularly so in the (to be published) associated companion book involving more speculations and models, *Space, Time and Consciousness: The Tethered Triad.* The concepts here are complex, but the object here is to obtain an overview. *The elephant's trunk is part of itself, no longer hidden; and the space, time and consciousness it manifests are tethered together inseparably as part of himself; and yet the elephant uses his trunk to make choices; and also to interact with other elephants and their trunks.*

These ideas are complex and may not easily be comprehensible in this brief summary. But the concepts are explained gradually in *RBC*.

Translating Physics and quanta again: important implications of the 9D modelThe implications of our 9D work grow with each day. Sometimes some unusual and unexpected findings are a consequence.

The non-spherical electron and electron cloud.

Whereas these are simple preliminary analyses, these proposals apparently solve this dilemma, and with it, we have also postulated some remarkable and novel implications. We cannot 'prove" this using conventional Quantum Mechanics because some calculations generate 'impossible" velocities above the speed of light, though it may be balanced by symmetrically equivalent negative velocities below the light speed. But physics does not allow this theoretical construct.

The difficulty encountered is briefly the following: There must theoretically be an equilibrium because there are "electron clouds" with rotational forces counterbalancing. We would expect counterbalancing positive and negative forces otherwise there would be utter chaos in the universe. This is what we find, however there is a problem: in one of the calculations the speed of light is exceeded, balanced by a velocity slightly lower than that of light. So it works out except, of course, that our conventional thinking in physics says this is impossible. Whereas we do not want to change conventional physics thinking, it is possible that if indeed there is a 9-dimensional reality, that we should be saying "the velocity of light is the highest velocity possible from the framework of our experiential 3S-1t reality". If indeed, there is more than one dimension of time, then there may need to be an adjustment relative to other dimensional domains. Essentially, electrons cannot be completely spherical unless the speed of light in other dimensional domains exceed 300, 000K per second.

But this is not necessarily required here and not the most parsimonious explanation by any means. Instead, we have proposed a solution to this conundrum which involves changing the electron shape: This would not require modifying the velocity of light. $^{13; 49-54}$. We have derived a specific complex mathematical equation so that this is not only theoretical and we report it elsewhere. 8,49 .

As a related tautological comment: Because free electrons are spinning, this illustrates how vortical spin components are fundamental to even such elementary particles. A key basic element of the TDVP model is vortical rotation. Therefore the postulate of vortices in TDVP is validated at this elementary particle level.

- Logically, this should also be applicable to multiple electron atoms, where the probability distribution of the electrons in shells around the atomic nuclei might be likened to an *electron cloud*.
- Clearly, there have to be counterbalancing forces to stabilize the electron cloud.
- There should be a logical mechanism to understand the spin of electrons.
- This can be done by recognizing conservation of angular momentum to the electron spin.
- We also need to explain why the electrons are not always detectable.
- Finally and most importantly, we must provide a way to explain the overall velocity calculations because the electron velocity calculations would otherwise exceed the speed of light. Applying the basic relativistic physics premise of supraliminal velocity being impossible, we must find a logical solution to this dilemma. Such a solution involves a separate hypothesis from the Cabibbo calculation in this paper, and even if incorrect would not invalidate our 9D spin hypothesis. But demonstrating a mechanism, would elucidate our understanding of elementary particles considerably.

We propose that:

a. the vortical electron cannot be spherical: We have demonstrated this in our inertia and velocity calculations, it is clear that the spin velocity of a purely spherical vortical electron stripped from an atom would become superluminal. 12:,13 The electron, is not necessarily spherical but it could still be symmetrical. Effectively, spherical objects can exist in a Newton-Leibniz world, but we exist in a Planck-Einstein world. 20. In the quantized world of Planck and Einstein, the number of sides possible is limited, because of the finite size of the smallest possible unit of measurement (which we are defining here) is relative to the size of the object. The light-speed limitation of Einstein's special relativity and Planck's quantization of mass and energy define a minimal unitary distinction.

When we choose to measure the substance of a quantum distinction, the effects of its spinning in the three planes of space registers as inertia or mass, spin in the time-like dimensional planes manifests as energy, and spinning in the additional planes of reality containing the space and time domains, may require a third form of the stuff of reality (which we're calling Consciousness), in addition to, but not registering as either mass or energy, to complete the minimum quantum volume required for the stability of that distinct object.

The disappearing electron cloud can be explained by a double Bell distribution curve of the electron cloud 12, 13

Orthogonality

The process of rotation and unitary orthogonal projection from the planes of one dimension to the next in Euclidean space utilizes the Pythagorean Theorem. Generalization of the Pythagorean Theorem equation to three dimensions and application to the minimal quantized distinctions of extent and content produces a set of Diophantine expressions that perfectly describe the combination of elementary particles. Integer solutions of these equations represent stable, symmetric combinations of elementary particles; but when there are no integer solutions, the expressions are inequalities representing unstable combinations that decay quickly. Fermat's Last Theorem applied to the equation describing the combination of two elementary particles tells us that there are no integer solutions, and thus no stable combinations.

The angle for each rotation is required to be 90 degrees because, while rotation of any angle out of a spinning plane results in a projection into another plane, when content is involved (e.g., a spinning elementary particle), rotation of any less or any more than 90 degrees leads to destructive instability— the rotation becomes disruptive and wobbly relative to the particle's intrinsic spin. Thus, for an n-dimensional elementary particle to exist as a stable physical object in 3S-1t, say an electron, each of the n dimensions must be orthogonal to all of the other dimensions.

Applying variants of the Quantum Mechanical theories such as the Copenhagen interpretation of physics, the plane involved becomes pertinent only when observed and measured. 55; 56 Effectively, elementary particles do not exhibit specific physical characteristics like mass, size and spin until they register as observed or measured phenomena 1; 38; 57

Importantly, with substantial content, each dimension must become orthogonal to every other dimension because, as soon as there is content, there must be conservation of angular momentum in 3S-1t. This, necessarily, requires orthogonal rotation to avoid instability. Any other orientation prevents particle combination and/or leads to dissolution of the vortical form in 3S-1t. 2, 5, 12, 13

The illusion of solid matter arises from the fact that elementary particles resist accelerating forces due to the fact that they are spinning, like a top or gyroscope, and they resist any force acting to move them out of their plane of rotation. 20

The quantized content of the most elementary particle must conform to the smallest possible symmetric volume, because contraction to a smaller volume would accelerate the rotational velocity of the localized particle to light speed in 3S-1t, making its mass (inertial resistance) infinite. ²⁰

We describe TDVP as a "metaparadigm" because of its overriding higher-level basis as it can be applied to all the different major areas of scientific endeavor. But TDVP is not intended to solve all current unexplained mysteries in physics or any other endeavor relating to *content*. Yet, we have not found any reality principles that could not be expressed within this paradigm shift.

There are, thus far, of course, millions of insoluble questions and unknowns in the world, but we're attempting broad models that are not being refuted, not to provide omniscience! TDVP is the practical, so-called "Theory of Everything" (TOE), better called a "metaparadigm". These "paradigms" should not explain "content" like bizarre neutrino behaviors, every detailed change in evolution, exact DNA sequences, or specific chemistry: Whereas these are all legitimate areas to clarify, they reflect content questions, not paradigms: Paradigms are not just theoretical, they are practical. However, they predominantly examine process not content, broader pictures and principles, not specifics. But by virtue of the process, they could assist with appreciation of the content and the specifics—that would be the secondary application.

An aside: We intensely dislike the term "TOE". However, "TOE" has been commonly and persistently used. To compare TDVP with the main other proposed "TOE" models, we needed to apply it, The TOE term is unfortunate because it may be interpreted ambiguously. We use "TOE" to refer to a very broad, universally feasibility model. But in its misinterpreted, inappropriate meaning, TOE is mistakenly regarded as representing theories of all-embracing knowledge. No model, except a proposed Divinity, is all-embracing in answering everything. We prefer to use "paradigm", "paradigm shift" and "metaparadigm". These come without the TOE preconceptions. And yet we are inevitably drawn to using TOE because its use is so prevalent, and so we compare our metaparadigm with other TOEs.

Nevertheless, sometimes we might explain previously inexplicable phenomena, utilizing the extended logic of TDVP, mathematical derivations, or multidimensionality. These are potential examples:

- We have demonstrated how we can derive the Cabibbo mixing angle applying 9D spin. 12
- Replicability difficulties may occur because we control only for 3S-1t, not the hidden dimensions in e.g. 9D.
- Non-locality can be understood *relative* to higher dimensions e.g., experiences of altered consciousness states, near-death and out-of-body experiences and the nine psi areas might intrude beyond 3S-1t; life and order might exist in an infinite "reality", mirrored by the metafinite.
- Philosophically, psychologically and biologically, limited free choice and life-tracks can exist.
- Many contradictions need not be solved by us, but can be important TDVP PhD topics. For example, 9D spin models might explain unsolved contradictions of quantum physics and relativity. This does not contradict these models, per se: It simply recognizes that we must use phrases like "relative to 3S-1t" or "from the framework of".

A glimpse into the future of TDVP: Groundbreaking or flawed findings?

- Later publications will focus on new, unpublished findings:
 - O In essence, a "thought experiment" further replicates the derived 9D vortical reality. (This is currently being refereed): We believe we have replicated the 9 dimensional spin findings with a thought experiment by deriving the mixing angle at 13.038 degrees. This is even closer to the mean empirical finding of 13.04 (to 4 significant figures) ± 0.05 degrees. This is a lengthy derivation and is detailed elsewhere as it involves a detailed appreciation of intrinsic spin and angular momentum, and that in turn requires another lengthy preamble.^m
 - O Demonstration of TRUE units (a truly remarkable concept where we introduce consciousness into the equations of mathematics). Applying 'consciousness' makes sense of many unexplained physical observations. Previously intractable mathematics now yields to simplified calculations that work and markedly change our view of higher dimensional existence: In this new kind of Particle Physics, a key concept is what we're calling the 'Triadic Rotational Units of Equivalence' (TRUE). (This is currently being refereed). Triadic rotational Unitary equivalents (TRUE)
 - O Allocation of TRUE unit scores to elementary particles in the chemical elements of the Periodic Table, and by logical extension to molecules. We propose that this may offer a new understanding of the fundamentals of reality, and based on our preliminary findings, even, possibly, of life. This appears preliminarily correct. (This is currently being refereed).

For example, the basic units of life are generally regarded as Carbon, Nitrogen, Oxygen, Phosphorus and Sulfur have the exact same percentage of $\mathbf{2}$ units. Hydrogen is the sixth and so fundamental it even scores far less. Not surprisingly secondary elements of life such as Calcium and Magnesium also fit this same structure. Remarkably, so does Silicon that has been hypothesized to be an element of life. These are all anions and cations with reactivity (as opposed to elements such as neon and argon, inert noble gases, with open valences of zero). We emphasize this, because these elements also have in common an equal number of neutrons, protons and electrons. This exact ratio in elements that play a major role in life-supporting organisms is not accidental. Without the presence of $\mathbf{2}$ units, no stable structures could form and there would be no physical universe. This means that $\mathbf{2}$ TRUE units had to be present from the formation of the first elementary particle, guiding the formation of the physical universe to produce structures capable of supporting life. This supports the hypothesis that logical structure, meaning, purpose and life are not emergent epiphenomena, but intrinsic features of reality.

o Remarkably promising is correspondence of TRUE with the Planck Probe (October 2013). According to the new data interpreted in the context of the standard model, the

^m Currently in the peer review process.

ⁿ We use the term <u>a because though it likely refers to some kind of qualit level "consciousness"</u>, some may challenge what we are referring to. Consequently, this is used as new, non-prejudicial term.

- total mass—energy of the known universe made up of only 4.9% ordinary matter and energy and a whopping 95.1% so-called "dark matter" / "dark energy": Applying TRUE, the amounts correspond! Maybe this "Dark Matter" is an expression of the remarkable contribution of Consciousness. (This is currently being refereed).
- o *Triadic quarks:* Based on the mathematics of TRUE units and the 9 dimensional spin model, the mystery of why quarks always appear in threes can be explained. As indicated, Fermat's Last Theorem applied to the equation describing the combination of two elementary particles tells us that there are no integer solutions, and thus no stable combinations. The equation for the combination of three particles, on the other hand, does have integer solutions. This explains why three quarks, not two, combine to form protons and neutrons. ²⁰
- o Extended special relativity: Special relativity has been described from the framework of our three spatial dimensions embedded in a moment in time. If we analyze events from the framework of another dimensional domain (let us say the sixth to eighth dimensions), the events will appear relative to those frameworks. Adjustments have to be made as the observer position would be different potentially not only in Space but with a different and possible multidimensional time and a more overt role for the dimensions of consciousness. This produces a model that we are currently working on.

These new research aspects are still in process, but logical continuations of the 9D model. These findings are still being checked; if correct, they are extraordinarily exciting in their implications for Space, Time and Consciousness. These are not fly by night speculations: We believe their broader principles will be demonstrated to be feasible and not falsified.

TDVP Perspective for Scientific Thought.

And so, ironically, in TDVP, we initiate a very broad scientifically empirical, inferential model based on specific testable or hypothetical *content* data, but that is directed towards the *process* of testing the model. The "process" reflects the "procedure" for evaluating data. As an example, we may be able to understand that in an asymmetric multidimensional, moving, curved (vortical) reality, the process of "spin" occurs. Consequently, we can understand from that, that fermions may have a specific "mixing" spin structure. However, we initially thought we might not be able to predict *the exact* Cabibbo angle, because such a calculation would require examining more than just the *process* of TDVP. Measuring this exact angle would imply deriving "content" not "principles" and it was a low probability calculation. Despite empirical evidence, the reason for this angle remained mysterious: It had simply never been explained. Yet with nine dimensional top-down models we have ostensibly solved this specific content issue and it fitted directly into our previously hypothesized finite 9-D vortical TDVP model.

The 9 dimensional finite spin revisited

And so vehemently, we demonstrate to the Nay-Sayers: The 9 dimensional spin model is mathematically feasible and all other dimensional models are falsified, and we've demonstrated

that spin/vortices are necessary. Because finite 9-D spin alone is exactly what we propose in our finite 9-D vortical TDVP model, we can legitimately argue that that portion of the TDVP model is proven. There are other components to TDVP, including creative ideas and speculation based on data relating to the transfinite and the infinite, but this is a key mathematical finding.

Where does TDVP fit?

A Theory of Everything requires a simple basic statement of truth that appears universally applicable.

We begin with Minkowski's statement of Space-Time that changed Physics:

"The views of space and time which I wish to lay before you have sprung from the soil of experimental physics and therein lies their strength. They are radical.

Henceforth space by itself and time by itself are doomed to fade away into mere shadows and only a kind of union of the two will preserve an independent identity."

Hermann Minkowski, in his famous Cologne public lecture: 80th Assembly of German Natural Scientists and Physicians. 21 Sept 1908. ⁴⁸

We have dared modify Minkowski to demonstrate the essence of the TDVP model, and indirectly to reflect the extent of the paradigm shift: It is literally a move from a unified space-time to a unified space-time-consciousness.

"The views of space, time and a broad consciousness which we wish to lay before you, have sprung from the soil of experimental physics, the toil of consciousness research and the challenges of mathematics and logic, and therein lies their strength: A universality applicable to the sciences, to mathematics, and to philosophical ideation. These views are radical, indeed, reflecting a paradigm shift. Henceforth space by itself, and time by itself, and consciousness by itself, are doomed to fade away into mere shadows, and only a kind of tethered union of the three from the very beginning will preserve an independent identity." ⁷

Vernon Neppe and Edward R. Close, 2011, Reality Begins with Consciousness.

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