

Ubiquitous Gimmel¹

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Abstract

'Gimmel' constitutes a third, previously unknown component of reality: It is both massless and energyless. Gimmel is necessarily in union with every single stable particle in the universe, and in anything that exists permanently. Therefore, it is ubiquitous in all of nature including our physical reality. The existence of gimmel is provable mathematically and also empirically demonstrated at the quantal, macroworld and cosmological levels.

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^c This article 'Ubiquitous Gimmel' is an extraction of UNDERSTANDING REALITY (MATH PROOF CRITICAL): Neppe VM, Close ER: Understanding reality: Towards a unified theory of existence (via applied Dimensional Biopsychophysics: exploring the Triadic Dimensional Vortical Paradigm (TDVP) through demonstrating fundamental principles, the 4D-9D perspective, the mathematics of quantum calculus and the empiricism of gimmel). IQ Nexus Journal, 13.1, 2021, V6.705, 54-176. However, it is so important that it's been separated and updated. From (pdf) <http://www.pni.org/realitygimmelproof>. The specific citation is: UBIQUITOUS GIMMEL: Neppe VM, Close ER: Ubiquitous Gimmel in Understanding Reality (Section 25). *IQ Nexus Journal*, 13.1, 2021, 138-169. V4, <http://www.pni.org/groundbreaking/gimmel>

^d This article has been specifically requested to be separated out from the original.

^e There may be statements in this article that appear to be assumptions. Nothing is: Every statement is justified by data (unless the word 'speculative' is use.) This Gimmel article was separated out because it is so important. But it is the 25th Section of UNDERSTANDING REALITY (MATH PROOF CRITICAL): Neppe VM, Close ER: Understanding reality: Towards a unified theory of existence (via applied Dimensional Biopsychophysics: exploring the Triadic Dimensional Vortical Paradigm (TDVP) through demonstrating fundamental principles, the 4D-9D perspective, the mathematics of quantum calculus and the empiricism of gimmel). IQ Nexus Journal, V6.2. 13.1, 2021, V6.705, 54-176. (pdf) <http://www.pni.org/realitygimmelproof>.

This took us several years to write and is complex but reflects much of our life's work. We encourage readers to read all these articles on pni.org, not because we wrote them but because the discipline of Dimensional Biopsychophysics is new and most are not trained in the discipline.

^f There have been numerous reviewers/ readers of the Understanding Reality article and of this recent series of several additions to Ubiquitous Gimmel. We want to particularly single out the careful and important comments of Professor Stanley Krippner and Dr Elizabeth Raver. Your contributions to this latest version are greatly appreciated.

The 3S-1t physical reality we experience is just a part of the 9-dimensional reality which might explain why there are 50+ apparent 4-D physical-world anomalies. Gimmel and the related Triadic Dimensional Vortical Paradigm data explains many of these 3S-1t contradictions by applying Gimmel with the 9D quantized finite vortical volumetric model embedded into the infinite continuity (9D+)

9D+ with gimmel allows a unification of our fundamental laws into one law of nature. Moreover, Gimmel may have always existed, implying ‘something from something’.

Gimmel is not a virtual particle like gluons and the Higgs Boson, though speculatively like them, Gimmel bestows volume for particles with mass and energy but does not contain mass or energy and indirectly therefore only delivers volume (‘BVM’). Gimmel in conjunction with mass-energy implies a necessary synergy in the finite. Therefore, we need new different categorical terms (BVM) to ensure that it can be properly integrated into reality.

Because of these factors, some Dimensional Biopsychophysicists regard the discovery of gimmel as the single most fundamental scientific breakthrough: It is ubiquitous and necessary in that single reality that unifies the finite embedding the infinite.

Gimmel is strongly linked with Consciousness. But it is subtly different. Whereas consciousness in this context describes a dimensional level hierarchically greater than Space and Time, gimmel includes this fundamental concept of consciousness and requires bestowing volume upon mass-energy.^g

Gimmel is a sine qua non that we have refined and applied over many years. The discovery of gimmel allows for stability, demonstrates how fundamental mathematics is to the very existence of the universe, and allows recognition of a need for a consciousness reflecting perhaps the deepest levels of Consciousness — possibly a ‘spirituality’, ensuring the Laws of Nature run smoothly. Gimmel provides a way to unify all of reality and apply the same Laws of Nature quantally, in the macro-physical world, and cosmologically. It also provides a unification of science with spirituality, and of the finite with the infinite. Gimmel provides solutions to the unsolved riddles of physics, of biology, and of spirituality.^h

^g This article is Section 25 of Understanding Reality. It took 5 plus years. Whereas it may appear that there are speculative statements, every single one has been either mathematically or / and empirically demonstrated (unless we, rarely, state otherwise). This paper reflects our life’s work and because not many have specialized training in Dimensional Biopsychophysics, we have tried to simplify some comments in this very complex area. We encourage reading of the several articles on pni.org/groundbreaking. There are possibly 10,000 peer-reviewed pages on this topic that we’ve authored.

^h Gimmel is not just an unseen ‘force in living beings’. It’s not ‘Prana’ or ‘Chi’; These might have philosophical and conceptual similarities referring to some kind of ‘vital force’ but without the math, and generally appearing limited to living beings. Gimmel impacts everything, organic and inorganic and is not a force or energy itself, though it bestows energy/mass to everything.

Critical summary.

In 2015, Close and Neppe ⁱ definitively recognized the existence of a third ubiquitous component of reality that is both massless and energyless. They called this component, ‘gimmel’, and they recognized that gimmel is necessarily in union with every single stable particle in the universe, and in anything that exists permanently. *Gimmel is no longer just a speculation or even just a hypothesis, but gimmel is provable mathematically ^{4, 5}, and also empirically, at the most fundamental level:*

- Quantally, the particles of reality, namely electrons, plus protons and neutrons (constituting up and down quarks), exactly equal the same normalized data results in the Large Hadron Collider (LHC). ⁶
- Additionally, in our macroworld, the data on Gimmel correlates exactly as hypothesized with the macro-reality, in which the elements of life (CHOSeN, Mg and Calcium, plus likely Si, and two Noble elements [Ne, He] contain more gimmel than all others and are all cubic multiples of 108³: These fit within the fabric of the life elements in our macro-world.
- Moreover, the proportions of gimmel correlate very strongly with the ratios of dark matter and dark energy (with differences of <1 in 1250). In effect, gimmel allows us to recognize cosmological relationships. ⁷
- Finally, there are strong correlations of dark matter with nucleons and of dark energy with electron ratios. Dark substances might not be somehow ‘located’ elsewhere’ but can be linked with the rotating atomic vortices of the 9D reality. ⁸
- Furthermore, Gimmel is necessarily in union with all stable particles, and all of these produce specific, invariant mathematical calculations based on the data: Because our universe (and any proposed multiverse) would be made up of these fundamental particles, gimmel and Triadic Rotational Units of Equivalence ⁹ are components of everything in reality.

Mathematics is fundamental and gimmel is proven not a speculation

Fundamental to our understanding gimmel is that it is not just a speculation as it was when we initially ‘discovered’ its key property: Gimmel is always existing, universal, ubiquitous, enduring forever, and an infinite phenomenon. It is expressed in our finite reality as stability for every single particle in our 9-dimensional quantized finite vortical volumetric model embedded into the infinite continuity.

We know now that the data on gimmel is proven mathematically and relevant empirically.

What is mathematics? Math is part of nature, and is real. Mathematics is more than just for calculating and applying operations that we utilize to move from point A to point B. To most people in the sciences, ‘actual’ means ‘physical’. Without recognizing the greater utility of math, we cannot conceptualize the infinite or the primary logic of the calculus of distinctions, or different dimensional levels, or the differentiation between actual or existing, and that consciousness fundamentally exists in everything.

ⁱ Technically, though named and verbalized in 2014 going into 2015 Close had proposed a third component as far back as 2012 ² by applying the Calculus of Dimensional Distinctions ³ and recognizing inequalities, and we had mentioned the conundrum discrepancies that exist in 3S-1t in *Reality Begins with Consciousness: A Paradigm Shift That Works, First Edition in 2011.*

The concept of ‘normalization’ is fundamental to making the math very easy is: The electron, being the smallest natural particle, is scored as 1. This means everything else is integral and usually a small number: For example, the proton calculates out as 1836 and the neutron—once it is linked to the proton—has a score of 1839. At another level, that of ‘TRUE unit equivalents’, Hydrogen-1 calculates out as 1 times 108 cubed; using similar calculations, water is equal to 10 cubed times 108 cubed, and we find all the life-elements are cubic multiples of 108 cubed; the other elements other than 2 noble ones (Helium and Neon) are not 108 cubed multiples and they are not integral. And a third example: Cosmologically, when we convert the Dark Substances data to volumes we can compare exact results on gimmel to TRUE ratios as Dark to all of cosmology and remarkably these ratios are very close despite the Hubble probe data having an error range.

Importantly, our 3S-1t (4D physical reality) is not contradicted, just amplified by 9D+. The world we experience is therefore also proven (and the laws that govern our physical reality are so stable and ‘solid’ that we can carry out our living in the macroworld. However, that 4D it is just a part of the 9D+ reality; This might explain why there are many of the apparent 4-D physical world anomalies (like the 50 plus quantum conundrums). Gimmel and the related Triadic Dimensional Vortical Paradigm data consequently explains many of these contradictions almost like adding pieces to an incomplete jigsaw puzzle because this is 9D+ and involves the universal rules of reality.

Mathematics can demonstrate the validity of unusual phenomena in terms of what we call ‘dimensionometry’ —the math of multiple dimensions. However, that’s hard for people to do because we don’t see or experience those other dimensions in the physical senses.

What if you could find something that is fundamental in nature where you don’t need weirdness, where you can unify the quantal macro-world and cosmological together, where you can unify the organic and inorganic, where you can realize there are differences in terms of conceptual levels and categories, that you are going to jump from dimensions 1 to 3 to 4 to 6, and that we might conceptualize mathematically in terms of real numbers, and the next in terms of imaginary numbers, the next in terms of complex, and if you want, the next in terms of transcendental numbers? Effectively, the same levels of categories (like 9D) involve different subcategories (like 3D, 6D, 9D) that are all qualitatively dissimilar. Combine this all with the infinite continuity that necessarily envelops the finite and makes for a unitary model of nature, and we can recognize how fundamental gimmel and the related Triadic Rotational Units of Equivalence including our fundamental rotating vortical particles are. TDVP is not a speculation: It, too, involves proven dimensions with quanta being volumetric, consciousness with gimmel bestowing mass-energy, and an infinite continuity that extends infinitely forever. Nothing in the past decade has contradicted these findings. It seems that TDVP truly exemplifies the laws of nature.

We have proved all the key factors. Moreover, the data on TRUE, gimmel and TDVP can be replicated by anyone trained in the Calculus of Dimensional Distinctions and dimensionometry: In summary gimmel and the information given below is real and correct—it

is no longer speculation (unless we mention an aside and indicate it is speculation, such as details on infinity which we cannot definitively prove).

The place of gimmel today

The conventional physicalist, just has to accept the “weirdness”. You either replace them by an actual very small value or a very large value related to the calculations that you’re doing or the observations that you’re making. This is all masked by the fact that they’re using a calculus that does not recognize the lower limit of the quantum. So they’re being trained to ignore anything about the infinite continuity or infinity of infinities. They say those don’t exist, because that’s what they’ve been taught. They’ve been taught to eliminate them from their mathematics their whole career. They have that deep assumption or axiom built into their whole system that there can’t actually be an infinity, that when it shows up in the mathematics, it’s not real: It’s something that then has to be replaced by a finite discrete type of calculus.

But the physicalist cannot conceptualize these. The more educated they are in the system, the harder it is, they have too much unlearning to do. Without seeing all this, they’re just trapped in a 3 or 4 dimensional description of reality.

Infinity and gimmel

The phrase ‘infinity of infinities’ is not a redundancy and the word ‘infinity’ alone does not suffice because we need to extend forever: This is what infinite progress or ascent is all about. There are sometimes *non-dimensional domains, like infinity.*

Yet, if we have mass/energy/gimmel for stable particles in the finite, and the finite is mirroring the infinite, the infinite has to have the same thing. There is a lot of psychic stuff talking about the fact that in a way, there is a physical universe in the infinite after death. This mirror is simply the mirror of a tiny portion of the infinite that is experienced through that local mirror.

Infinity never ends. There is an infinite ascent. Infinity within infinity ad infinitum.

The infinity is a reality in that the finite part of the universe, the physical part, is the trivial part.

How gimmel changes our reality.

Prior to the discovery of gimmel, the whole perspective of quantum mechanics theory, in effect, famously needed to be explained as “*it’s just weird, we have to accept that.*”¹⁰ We had to ‘just accept’ the 50-plus contradictions because we were in three different realities (quantum, macro-world, cosmological) that had different ‘rules’ and therefore could not be unified.¹¹

This ‘weirdness and unexplained contradictions were likely because we were dealing with our interpretation of physical experience being 4-dimensional materialist physical reality (3S-1t) — *the obvious physical part, the 4D, our physical living reality, which is like the tip of the iceberg.*

Without gimmel, no particle or more realistically vortical particles as they are all rotating volumetrically through 9 finite dimensions, nothing can be stable. And this is not speculation. It can be proven mathematically and it is so proven. And it can be applied to our reality with empirical data and it has been quantally, in our macroreality, and cosmologically. Gimmel

unifies the laws of nature, as opposed to our now proven existence in 9 finite quantized volumetric dimensions ¹² embedded in a continuity in the infinite (9D+) ¹³ Significantly and momentarily, this ‘9D+’ discovery when combined with all stable ‘particles’ being in union with *gimmel* allowed the mathematics to be based on integral particles (as contrasted with inequalities) effectively, allowing for the great quest: A unifying theory of reality. ^{14; 15; 16}

Without gimmel, no particle or more realistically vortical particles as they are all rotating volumetrically through 9 finite dimensions, nothing can be stable. And this is not speculation. It can be proven mathematically and it is so proven. And it can be applied to our reality with empirical data and it has been quantally, in our macroreality, and cosmologically. Gimmel unifies the laws of nature.

*Another critical principle is that everything in our reality is volumetric, not linear or cross-sectioned: We always exist in a three-dimensional reality (mathematically ‘cubic’). This allows mathematical proofs of *gimmel* and Triadic Rotational Units of Equivalence. *Gimmel* cannot exist without mass-energy- consciousness. These provide a necessary synergistic unit.*

*Because of this some of our Dimensional Biopsychophysics colleagues regard the discovery of *gimmel* as the single most important scientific breakthrough.* ¹³ This is ongoing: We have not yet explained the details such as unifying all forces such as electromagnetism with gravitation, however, vortical rotations with 9D+ explains even many components of the mechanisms of such a unified model. In other words, whereas the machine works, we need to understand the ‘how’-the nitty-gritty building-blocks of the physics machine.

Something from something, always enduring forever

Gimmel requires 9-dimensional extent in the finite, but also requires a presence of the infinite continuity. We theorize strongly that it likely also resolves the philosophical-theological problem previously regarded as ‘*creatio ex nihilo*’ – a nothingness production our reality. This with respect is incorrect: It is always ‘something out of something’—and that second ‘something’ includes *gimmel* preceding even the finite quantized reality. *Gimmel* likely originates in the infinite continuity and never did not exist. ^{17; 18} And that *gimmel* impacts the finite 9D reality making it the connection of the finite and the infinite possibly via a ‘particle’ the ‘photon’ which likely reaches the finite as ‘electrons’. The nothing (‘*ayin*’) is because our conventional philosophers and scientists regarded our existence as limited to our 4D (3S-1t) conventional physical reality. That is only part of 9D+ and the Kabbalic term ‘*yesh*’ can then be understood, we suggest, as ‘*creatio ex- nonnihl*’ (it cannot be the term some suggest namely ‘*ex-materia*’ because that suggests a physical reality).

Gimmel involves a union of everything which contains fundamental rotating particles in 9D+. *Gimmel* provides for a substance to be ‘stable’ and symmetrical while rotating on its axis because mathematically it provides balance. This has to be so, otherwise, the particle would rotate out and ‘fly away’ producing instability. *Gimmel* provides an understanding of vortices, of dimensions, of the link of the finite with the infinite, of the link with science and spirituality, and of how the empirical links up with the mathematical.

Is Gimmel Consciousness? How does it differ?

Gimmel has been equated with ‘consciousness’, but is more than just pure ‘consciousness’ because consciousness is just the critical component of gimmel.^j Gimmel itself has a necessary linkup (union) with mass/energy components in the finite reality. Gimmel, like consciousness, is important in the different distinctions of ‘Essence Distinctions’ of extent (dimensional-domain measurements of Space-Time-Consciousness), in content (with mass-energy always being in union (a necessary linkage) with gimmel, and implying a bidirectionality of impact, intent and influence (possibly implying a degree of free-will in everything²⁰).

Gimmel bestows mass and energy but does not contain mass or energy. That is a necessary synergy in the finite. Therefore we need new different categorical terms to describe gimmel as a new unitary concept. The measure we use is Gimmel TRUE units (GTUs) and these are calculated in Triadic Rotational Units of Equivalence. We could use metaphorical terms such as ‘color’ or ‘temperature’ to emphasize that gimmel is not a subquantal volume and that it could best be described as ‘Bestowed Volume’ which we call bestowing volume and mass. **BVM!**

Attempts to do this have been prior work of Gell-Mann with ‘gluons’ (which provide inequalities mathematically) and with the recently famous so-called ‘God Particle’ – the Higgs-Bosons. Both of these belong in the ‘particle soup’ of ephemeral unstable particles. In contrast, Gimmel is real and stable and necessary. We, respectfully, argue against the need for these ‘particles’ despite their winning Nobel Prizes. Gimmel is *not* a particle at all. Gimmel is a component, an operation, an organizing structure that is likely deriving from the infinite continuity.

Gimmel just might reflect Divinity, and, if so, then speculatively could be reflecting an infinite amount of higher special, elevated qualities such as love, good and spiritual progression. Gimmel would imply that the higher level theological qualities.^k of omnipotence and omnipresence are all-encompassing, that indeed with ‘vohu’, there might be a certain omnificence because gimmel has always existed and is reflecting an ongoing creation, and that indeed, gimmel could imply an omniscient Divinity linked with qualities such as omnibenevolence and yet with multidimensional good with our limited free-will for us humans contained within an infinite eternal present. Gimmel might then be the ‘God-matrix’.

We cannot definitively prove many aspects of the infinite continuity as the math has not been as developed. But it is feasible and likely given our gimmel knowledge that the mass-energy-consciousness hierarchy extends in the infinite continuity. That consciousness implies the existence of gimmel in the infinite. Gimmel is involved with ‘ordropy’ (conservation of gimmel) in our infinite continuity existence and with organic life in the infinite continuity implying that life in organisms exist forever. Gimmel and Triadic Rotational Units of Equivalence reflect the infinite continuity equivalent of entropy in 4D reality.^{16; 21}

^j Consciousness is a complex concept to define. Neppe described 12 prongs of consciousness. The key aspect here relates to the dimensional extent of volumes of consciousness. This refers to a higher awareness, likely located outside the brain.¹⁹

^k We speculate that gimmel might reflect the higher level theological qualities of omnipotence and omnipresence that are all-encompassing, that indeed there might be a certain omnificence because gimmel has always existed and is reflecting an ongoing creation, and that indeed, gimmel could imply an omniscient Divinity linked with qualities such as omnibenevolence, and yet with multidimensional good with our limited free-will for us humans contained within an infinite eternal present. Gimmel might then be the ‘God-matrix’.

We can explain factors such as abiogenesis (life arising from organic and inorganic material) because there was always a ‘consciousness’ yet that is only one category of what then produced ‘life’ (consciousness with ordropy) in organisms, in the infinite continuity.²²

We draw parallels with Kabbalah^{370, 23; 24, 25, 373}, with ‘vohu’ (likely the biblical equivalent of gimmel), and with the ‘yesh’ (possibly that second ‘something out of something’). There never was ‘nothingness’ (creatio ex nihilo). There always was a Kabbalic Yesh, though we sentient beings in 3S-1t 4D physical reality might rationalize it as ‘nothingness’. The infinite never began and always existed and gimmel was always there.¹

Perspective

‘Gimmel’ describes the third component of reality besides mass and energy. It was conceptualized only recently by Close and Neppe in 2014 and clarified in 2015.^{26; 4; 7; 27; 28; 29; 30; 31; 32; 33} For the limited number of scientists who have studied the data, gimmel likely appears to be the single most important scientific finding of our time.

Gimmel is needed to maintain stability of every aspect of our universe. Stability is a requirement so that even the smallest ‘particles’, such as electrons, must be stable. Each individual fundamental particle must remain stable and rotate so that it does not ‘fly away’ off its own axis (a simple metaphor might be a ‘spinning top’). No particle of the physical universe could ever have formed without this third form, gimmel. *There has always been ‘something’*, and never pure ‘emptiness and nothingness’. We argue that gimmel certainly fills the ‘emptiness void’ in the infinite continuity because time is an eternal present in the infinite continuity. This data is based on the Triadic Dimensional Vortical Paradigm model^{6 34 16} and also on the philosophical-theological argument of *Tohu-Vohu* discussed below.^{370, 23; 24, 25, 373}

Whole volumes

Each particle is a 3-dimensional whole volume, not a fraction. Because everything in our universe contains these fundamental particles, this ‘whole’ can continue at all levels even into the cosmological universe. Constituents of the universe must mathematically exist in a relatively permanent state, usually years, and sometimes (as in the case of protons) millions of years. That profound stability begins with the fundamental components of electrons, up-quarks and down-quarks and photons, that make up reality.

Volumes are fundamental

The key to this is that all our existing reality is three dimensional: it is a volume. This is not how we experience reality: for example, we sometimes measure our time in physical reality (past-present-future) as a single time-line (it is linear). And we can graph changes in duration into two-dimensions (how do we compare durations of our different dreams? Or more particularly, many data sheets on a computer reflect two-dimensions like cross-sections of cuts in magnetic resonance imaging? But in our overt and covert reality, everything is a volume: It is three-dimensional: We can portray Space, not only as length-breadth-height ratio-measures which stops in physical reality, but as a Space that extends forever that is measurable beyond the physical only in varying extents of ordinal change. Similarly, Time is not only one line (linear

¹ A logical *hypothesis* would be that *vohu* is gimmel, and *vohu* theologically may refer divinity-God. This would imply philosophically that God is in everything. This is outside the range of this paper but a footnoted aside.

past-present-future), but is volumetric (and so 3-dimensional). Moreover, we postulate that our consciousness is likely 3-dimensional as well. *These make up the 9 proven finite quantized dimensions. Because of this, we can calculate that everything that is stable is a whole volume, is not a fraction, although such ‘volumes’ are qualitatively different in Space, Time and in Consciousness (mathematically, the parallel metaphor is portrayed as ‘real’ numbers for Space, ‘imaginary’ numbers for Time, ‘complex’ numbers for Consciousness, and ‘transcendental’ numbers for countable infinity).*

These ‘wholes’ (3-dimensional cubic measures) apply to ‘particles’, too: In our real world, we must have a whole ‘atom’ not a half or quarter of one. This allows rotation and movements across axes but that requires a multidimensional reality of triads and the most fundamental is a 9-dimensional finite reality (9D).^{16 11}. 9D is not a speculation³⁵ but was initially proven mathematically in the Cabibbo angle derivation.^{36;37} Dimension is used here in the mathematical context of measures of extent. 9D implies there are 9-quantized rotating axes moving through Space, Time and Consciousness.³⁸

The somewhat complex mathematics proving the need for volumes^m

Mathematically, applying volumes, we cannot have half an atom, or a fraction of an electron. These would not be stable and would fly away. For stability, we must have a whole integral particle not a fraction.^{9;39} Yet, alone, without an extra mass-less, energy-less component (for example, gimmel), mathematically, it is *impossible* for an atom with just protons, neutrons, and electrons alone to remain integral as the resulting atoms of the atomic elements cannot remain whole.^{9;39 n}

To allow stability of particles and atoms, there needs to be an additional component. This is why we need a third component which has to be neither mass nor energy otherwise it would mathematically not work out integrally and we have proven this is so³⁹. This is the third component we called ‘gimmel’. Gimmel is not just a third component, it actually turns out to organize our universe. By definition gimmel must not be mass and energy. It turns out that gimmel must not be part of the atom, but in *union* with the particles: If it were part of the atom, it would have to be a subquantal structure of itself and that means that the quantum would not be the smallest possible particle (which based on quantum calculations is the ‘electron’). That would be a contradiction. However, gimmel is a fundamental, ubiquitous, stable and necessary, so it has to be in union. This is not alone: Gell-Mann proposed such a function for the Gluon^{30;42} and another Nobel prize^o was given for the Higgs-Boson.^{43 44} The problem is both of these particles calculate out as volumetric mathematical inequalities: This means they are unstable. The gluon only connects with protons and neutrons not with electrons so cannot be applied to 9D models as they would be mathematically unstable (Fermat’s Last Theorem illustrates that⁴⁵).

^m The math proofs are briefly illustrated here. If you want, you can skip these sections knowing that it proves the need for 3 components (volume) and also the necessity for something in union (gimmel). For more on this, please refer to ‘Refuting Atomic Materialism’³⁹

ⁿ These three factors alone would always be a cubic inequality because mathematically there needs to be $e^3+p^3+n^3 = a^3$ where ‘a’ is the result (for example, we have the same number of electrons (e) as protons (p) in a non-isotopic element; that means $2e^3+n^3 \neq a^3$ (where ‘a’ is atoms, applying Fermat’s Last Theorem^{40;41} because ‘e’ and ‘p’ in the periodic table are always equal in stable elements). There needs to be a third component: $2e^3+n^3+xg^3 = a^3$ (here g is gimmel; and x is the number of gimmel TRUE units in a particular element, for example).

^o The Nobel Prize in 2013 went to François Englert and Peter Higgs relating to the Higgs-Boson.

Ironically, gluons might appear adequate if they were singular points not volumes, but all particles have volume. Moreover, gluons and the Higgs-Bosons are transient, ephemeral particles with half-lives in tiny fractions of seconds: This contrasts with *gimmel*, which is permanent and always exists in a necessary connectedness making the stable ‘particle’ whole. *Gimmel* further extends to be present in union with *everything* as everything is made up of these fundamental rotating, stable ‘particles’ (even in a proposed multiverse this should be true).^p

Mathematically and geometrically, atoms are quantized, and compounds are composed of atoms. We cannot have half an atom or any half ‘particle’. Stable reality must always be quantized, and without *gimmel* we would encounter a mathematical inequality because nothing would be whole and volumetric in nature. Our reality is fundamentally three-dimensional though we might not recognize it: it never is a point of singularity.^{46 26 s}

The only way this stability can be done is by adding a third component: That cannot be mass and energy, as it would still remain mass and energy.^q

This is not a speculation. *Gimmel* exists: We’ve shown empirically that *gimmel* is this third mass-less, energy-less ‘agent’, ‘substance’, ‘vehicle’ or ‘process’ or ‘organizing structure’ besides mass and energy.

Moreover, mathematically, no subatomic particle can stably exist without *gimmel*, yet *gimmel* is not measurable using the usual physical techniques of solely applying mass and energy because there is no *gimmel* in mass and energy. *Gimmel* is something else—that third component. It is measurable using another technique that we developed namely Triadic Rotational Units of Equivalence^{47: 48} and that provides specific scores for the amount of *gimmel* in union with every fundamental ‘particle’. This implies that we should avoid the category mistake of calculating *gimmel* TRUE unit measures with the particle masses.

Gimmel in the finite is expressed through the Calculus of Distinctions³, not through Newtonian infinitesimal calculus. This means that *gimmel* cannot reflect a lower size limit than the quantum. *Gimmel* is an ‘operator’, an ‘organizer’, but in calculations has unitary size which we conceptualize as ‘volume’, yet that ‘volume’ refers to the *Gimmel*-TRUE units are a qualitatively different measure to volume, mass or energy. How then do we call this measure?

Quantum mechanics sometimes applies ‘color’ as a way to describe something different. *Gimmel* can be measured by special units (*Gimmel* TRUE units or GTUs) and we can conceptualize it as a ‘color’ scheme. But that would be quite different from ideas like Quantum Chromodynamics (QCD) which also applies color, but conceptually in a different way. We would use color here just to allow appreciation that this is a different measure to mass, energy and even volume.^r But

^p There are a large number of unstable particles because they cannot rotate on their axes. We call these so-called the ‘particle soup’ and these ephemeral unstable particles include the Higgs-Bosons and the gluons.

^q This provides an inequality. Many are not aware of this rather obvious but critically important mathematical proof. For those interested please read the article Nepe VM, Close ER: Refuting atomic materialism! A dramatic mathematical answer. *IQNexus Journal* 7: 2; 74-82.

http://www.pni.org/groundbreaking/conundrums_AtomicMaterialism

^r There’s still ‘something’ comprised of mass/energy (matter) and ‘information’ at that subquantal infinitesimal limit. But like ‘*gimmel*’ in TDVP⁷, for Adrian Klein, all ‘information’ levels exist even through to the cosmological. Like in TDVP, Klein conceptualizes the infinite expression into the quantized, but utilizes the infinitesimal.

it would be different from QCD, too.

Not subquantal

Another mis-categorization would be to classify gimmel as ‘subquantal’. Gimmel sometimes could incorrectly be conceptualized as smaller than the quantum, yet it cannot be. If it did, all of quantum models would be discounted as this would imply something subquantal and we would have to apply infinitesimal calculus instead, which based on TDVP would be incorrect. But *gimmel does not describe a subquantal component. That would imply a size like the particles.*

Avoiding Category mistakes.

Gimmel is a philosophically different quality. We must ensure not making Category Mistakes regarding the volume or the mass, for example, as the same as that in Mass and Energy. *Gimmel bestows mass and energy and promotes volume but is not volume itself.* It would be rather like we would refer to gluons or the Higgs-Boson. But gimmel is real and not virtual particles like gluons or Higgs-Bosons. Instead, gimmel is in *union with everything* that contains mass and energy. And *gimmel works across the infinite continuity which embeds the finite 9D which it requires because rotations and spin are through 9D.* Gimmel cannot be considered subquantal because of the conceptual difference. It is like ‘color’ for the blind: The problem is the idea of color already exists in quantum chromodynamics (QCD) and that is metaphorically different⁴⁹ but a way to conceptualize a new concept. Color can be quantitated ordinally e.g. dark brown, light brown, to some degree, but not possibly adequately.

So let’s look at a different metaphor.

Temperature may be applied as a different category. We measure temperature so this is easier to conceptualize as a *metaphor for endowed volume* particularly as the metaphor can be paralleled with something different but comprehensible, namely Boyle’s law where $PV=nrT$ where the V for volumes is in the equation. *We are endowing volume, or bestowing mass. So Temperature would be a metaphor for bestowing volume and mass (except that temperature is measured linearly in 1 dimension, whereas everything is volumetric). BVM!*

To clarify these conceptions avoid category errors or mistakes. Our linguistic and conceptual systems lack obvious frameworks and they reveal the limits of, and interactions among different systems. Gimmel and volume do not reflect the same measures even of consciousness. Gimmel involves bestowed volume, not volume itself: These are categorically different. Without volume or mass we cannot describe gimmel. They are different nosologically: We can refer to ontological categories of bestowed volume/ mass/energy (BVM)

In the mathematics of it, at least in the Diophantine Equations, gimmel occupies or at least endows a volume in the structure, so it’s kind of akin to a dimension or space, kind of similar to space and time, but not in the exact same way they are. The volume it occupies is the *equivalent almost of a “Volume of Consciousness”*. This is technically a *volume of organized structure*: it’s a different kind of volume. *It occupies organizing volume, it occupies operational volume in a way. But that’s not directly a 3-dimensional structure, of itself.*

If gimmel has finite structure, it would be 9-dimensional conveying a conscious logical structure to something else. Without that other component (e.g. mass-energy), it does not exist. Gimmel is symbiotic necessarily with mass-energy. To describe it you cannot go to a scale lower than the

same scale as the electron and the quarks. So it's not really subquantal, even though it exists in a sense in a subquantal manner: this is not a contradiction because, in a way, it's a different metaphoric color or temperature. We have quantitative gimmel TRUE units scores, which are different, yet can be put into the math equations of physics.

Gimmel is not consciousness. We initially thought it was the same possibly. But conceptually they're different. Consciousness is one important and necessary component of gimmel, but without the 'symbiotic' mass/energy and maybe that bestowed volume, that gimmel must have. Consciousness is the background, the substrate, the matrix, whatever you want to call it of all things, consciousness is *a priori*. Consciousness is axiomatic because you can't even discuss anything without consciousness. But Gimmel provides the meaningful union with other particles. It is less confining than Consciousness.

The Higgs Boson dilemma

Gimmel also contrasts with the Nobel-prize winning and, at the time, groundbreaking discovery of the Higgs Boson, at one point called 'the God Particle' (by Nobel Laureate Leon Lederman)⁴, despite the Higgs Boson not reflecting anything spiritual. The Higgs Boson is another postulated virtual particle. But the link with TRUE^s is far less direct: The Higgs Boson bestows mass, too, but appears problematic, possibly, because it's so ephemeral (not existing beyond 100 septillionths of a second), and with gimmel may be redundant because gimmel would serve this function just as well. How would such an ephemeral concept work in our real world, and where does it fit in?

Gimmel contrasted

In contrast, gimmel is not ephemeral, but real and necessary and allows for all particles—including the six *enduring* quarks^t and the electron—to be stable. Without gimmel, no world would exist even temporarily.^g

The life elements

As a further example, when analyzing the properties of the elements and of related gimmel, Close and Neppe have definitively demonstrated that what they call the most fundamental 'life elements' namely, Carbon, Hydrogen, Oxygen, Sulfur, Nitrogen (spiritually with the acronym 'CHOSeN' which are the contents of spices in holy temples [e.g., Jewish and Hindu]⁴) plus two other critical ones Magnesium and Calcium, plus the noble (inert) gases Helium and Neon.⁴

Predictably, each of these elements have more proportionate gimmel⁴ than any other elements. Because Hydrogen is without a neutron yet very stable, it is profound in its 'gimmel' proportions.^u The rest of the life elements have *exactly* the same proportion of gimmel to 'Triadic Rotational Units of Equivalence' (TRUE)^{47; 48}, with specific TRUE unit scores of these life-elements based

^s TRUE: Triadic Rotational Units of Equivalence.^{47; 48}

^t There are other quarks but they are all unstable. The only quarks we need be concerned about in our stable universe are up-quarks and down-quarks.

^u Technically, the 'gimmel' in Hydrogen replaces the neutron. Some could argue that 'gimmel' is not really gimmel, so we've called it 'daled'⁷ but when we calculate we apply the total data as 'gimmel-equivalent'.⁴

on their mathematical Diophantine equation figures all being multiples of 108^3 . Water, too, as a molecule, fits this profile.⁴

Application in reality

By applying the empirical findings of chemistry and physics and mathematical equations, including new derivations, we must extend quantum-to-molecular level analyses in a 9-dimensional (9D) spin model. Our current Classical physics involves 3 dimensions of space in a moment in time (3S-1t). This is because our usual awareness is only capable of comprehending the 3 dimensions of space at one (dimensional) point in time. 3S-1t can explain a great deal, and our material world runs well at the macro-reality level. Everything physically works, it appears. However, there are some contradictions and unsolved problems in Quantum and Cosmological Physics.^{50; 51} These can be resolved by applying the 9D quantum volumetric finite spin model. They cannot resolve using 3S-1t because everything must be volumetric and, for example, 1t is linear, just a moment of time. We function within that material reality, but that is not everything that exists for us. *Existence, including consciousness, is greater than our overt 3S-1t experience. This again is not a speculation but demonstrated by the 9-dimensional quantized finite vortical volumetric model embedded into the infinite continuity that we have proven mathematically and empirically.*¹³

We might not recognize volume or gimmel because our common *physical experience* does not include either of these two overtly. We call this 3S-1t. We experience purely one linear dimension of time, and, in fact, only the present time ‘quantum’, remembering the past and postulating on the future. But that produces a wonderful stable physical worldly time-experience which moves forward in one direction (present to the future), but where physicists must accept those 50 plus contradictions to reality of 3S-1t (the so-called ‘quantum weirdness’)^{50; 51} because we still exist in a mathematically *proven* and *empirically demonstrated*^{52; 53, 6} 9-dimensional quantized finite vortical volumetric model embedded into the infinite continuity which continuously impacts and influences our reality. Within this fabric is stability and that stability requires the third component, Gimmel.^v

Stability is sometimes very complex but it is required in our universe. For example, even in complex cases, stability is a fundamental tendency: the neutron has a half-life of about 10 minutes. Yet it remains stable because in our empirical reality, it always is linked with the proton which has the largest half-life (existence in the real-world) of any particle. This is complex but demonstrates how our real-world has adapted through factors called ‘decay’ (a misnomer, as it really is usually ‘logical-particle-adaptation’) working with ‘gimmel’ (as we have described) to ensure stability mathematically and empirically.

Mathematics and Gimmel

This Section on Gimmel relies on persuasive mathematical proofs, demonstrating the necessity for this third component. Gimmel is critically important and the newest major discovery of TDVP. It is the most exciting part of TDVP because it changes our appreciation and understanding of reality.

Some have regarded gimmel (also spelt ‘gimel’) as the most important discovery of this century:

^v Again, this is not just something to accept. The whole article on understanding reality discusses the complex rotations.

Time might tell if this is correct.

Surely gimmel is critical?

Gimmel is complex, particularly as pioneering the infinite continuity has just begun, and yet gimmel reflects possibly the union of the finite with the infinite. However, gimmel can also separately suggest some speculative philosophical and theological links.

- Surely, if something exists in everything stable that must be important?
- And surely, the equivalent of consciousness content in union with mass and energy is a critical finding? And that is gimmel.
- And surely, the ability to mathematically quantitate gimmel and show it is unique for all fundamental particles (electrons, up-quarks, down-quarks, photons) is remarkable?
- And surely, if one can empirically quantitate such findings so that gimmel correlates *exactly* with the Mass-energy equivalence normalized data in the CERN Large Hadron Collider, that is definitive?
- And surely, if gimmel can be applied not only to physical experience, but to all our finite dimensions plus the infinite continuity, that is critically important?
- Gimmel must exist: Only mass and energy without gimmel cannot be the ‘something of materialism’ as the problem is that without that extra third substance, *instability necessarily exists*, as is clearly proven mathematically.³⁹
- And finally, as an extension, surely the unification of science with spirituality, and of all the laws of nature into one law is a critical discovery?

Gimmel does all of this. And it is linked or depending on definitions appears to be consciousness! But, the reader will recognize this is not exactly so. *Gimmel bestows volume in mass-energy particles and molecules via consciousness. But consciousness as a category is not describing that bestowing of consciousness itself.*

Gimmel and consciousness

Gimmel is likely linked with consciousness but it is not necessarily exactly consciousness. It could be the template—the process that can allow for consciousness, or it may be the vehicle of consciousness, or consciousness may be just one component of gimmel, or it may be the organizing factor for consciousness.^{7; 9; 35; 53; 109; 110; 111} Most likely consciousness is a necessary aspect of gimmel, but gimmel must exist in union with some other content, and that is mass-energy, and it is quantitated in extent as space-time-consciousness where that consciousness reflects the gimmel union with space-time and yet requires mass-energy to itself exist. This leads to the complex conundrum that the infinite is not only consciousness but actually has space-time-consciousness.

Vortical physics

We have placed ‘particles’ in quotation marks as the electrons and quarks are not static particles. They are rotating ‘particles’ across 9-finite dimensions. ‘Particles’ are more complex because of what we’re calling *vortical physics*, the electrons and the up-quarks and down-quarks are dynamically rotating in union with gimmel, across 9 finite volumetric dimensions, but that does not mean that they are ‘conscious’.^{52; 54} The quarks, or the electrons or photons, might in some way respond or receive. We *speculate* that consciousness might require movement impacts of the passively rotating quarks and electrons: This is passive in the sense of no activity or impact or influences; it becomes active when enveloping consciousness via the gimmel vehicle.

Table 25.1: Tabulation of elementary particles including their gimmel and TRUE scores

Elementary Particle	Particle	Mass/Energy	λ Gimmel	Total TRUE Units	Combined Particle
e	electron	1	105	106	Electron =106
u1	proton	4	2	6	
u2	proton	4	4	8	
d1	proton	9	1	10	Proton= 24
u3	neutron	4	5	9	
d2	neutron	9	3	12	
d3	neutron	9	8	17	Neutron =38

This distinction of a third content (gimmel) in stable particles, exists at every level from the subatomic, such as in elementary particles like electrons and quarks, through to the cosmological such as dark matter and dark energy.^{2; 4; 25} Gimmel is key to maintaining stability and symmetry of subatomic particles, of atoms, of the elements, of molecules, and of compound chemicals. Without gimmel, these substances could not maintain stability in our physical existence and would be ephemeral and transitory, perhaps like the famous Higgs-Bosons.⁴³ In effect, we have empirically and unequivocally demonstrated that this third massless-energyless substance, called gimmel, always necessarily exists. This is based on the data below of each and every fundamental stable particle with gimmel TRUE unit scores (e.g. Table 25.1)^{9; 39 9 30; 55}

Gimmel is *not a subatomic particle*. But gimmel involves processes *in union* with mass and energy. Gimmel is not only in the physical 3S-1t, but it moves through the different dimensions of Space-Time and Consciousness, and, we postulate rather cogently, it is also contained in the continuous infinite. In fact, we argue that it might originate in the infinite and in that way might originate before the ‘Origin Event’; Most regard that origin event as the Big Bang. Because gimmel would be infinite and the infinite involves all of Time (eternity), it does not have a beginning.^w

What is gimmel?

Where does *gimmel* come in?^{26; 4; 7; 27; 28; 29; 30; 31; 32; 33} To clarify, we initially thought gimmel was the same as consciousness, but we could not define it as such, because people could argue that it could technically be something else: Could it be like gluons, just acting as a glue to complete the volume of protons and neutrons^{30; 42; 56} ? That is unlikely, because we’ve effectively shown gluons are mathematically incorrect as electrons must be in the 9D calculations.³⁰ Could gimmel be just a *mathematical* ‘operator’ to fill missing volume? No, it’s not, because we know *empirically* that there is an exact correlation of neutrons and protons and electrons and quarks with the figures from the Large Hadron Collider⁵⁷ and that the atom (e.g. Hydrogen) exactly correlates in our TRUE analyses with Atomic Mass units.^{58; 59}

Table 25.2: Gluons are mathematically incorrect

^w Later in this we article, we describe Tohu u’Vohu a most exciting discovery. Apparently, no-one before this realized that vohu ostensibly is synonymous with gimmel.

Substance	Cube	Cube root	Integer?
Gluons	$68,697y^3$	40.995338y	No
Gimmel	$125,971,200y^3$	108y	Yes!

However, there is a *logical* alternative: We just know that gimmel is an extra third substance which occupies volume, but does not contain mass and energy. We argue cogently that gimmel is the remarkable third substance that is necessarily linked with stable subatomic particles that are rotating vortically in three-directions (*volumetrically*) that are symmetrical on their axis. There must be an axial symmetry as without that the ‘particles’ would simply fly apart. This stability is allowed for by gimmel. Without the gimmel corrections such calculations could not work out from the point of view of any 3-dimensional or volumetric mathematical analyses ^{7; 9; 60}; (we apply the Calculus of Dimensional Distinctions and Diophantine Equations). This symmetry is so even if the volume is not a perfect sphere (which it never is in our empirical reality): ⁶⁰ We know this mathematically. This is because Fermat’s Last Theorem would show that we could not get a cube that way. ^{45; 61; 62} So there has to be something else, and this is what we call ‘gimmel’. Today, we would argue about ‘gimmel’ playing a logical role instead of consciousness because we can more easily measure gimmel. And we can find that gimmel has that correlative role in Dark Matter and Dark Energy. This raises the whole question of what consciousness or gimmel is. Could it be 95% of our cosmos is gimmel, or is that 95% just in conjunction with the Dark substances? ^{2; 4; 25; 57; 99; 103} (The remaining 5% would be our stable physical reality with possibly spinning vortical particles, like electrons and quarks.)

Is Consciousness just one aspect of Gimmel? Or vice versa?

Initially, we would ask: “*What else can gimmel be but consciousness?*” We now think that *gimmel is a necessary but not sufficient component for consciousness. Gimmel is the vehicle by which consciousness comes in:* It is the necessary vehicle; but one still has to have that ‘spark’—maybe that ‘G-dly spark’?—that impacts and that influences, at every one of the dozen prongs of consciousness. ^{63; 64} So in the finite and transfinite, we cannot have consciousness without gimmel, because at that fundamental level we need a third substance to produce stability and symmetry. Gimmel appears to be essential in the infinite continuity, too.

Nevertheless, speculatively, could we be able to have consciousness without gimmel in that external, infinite component? Indeed, because gimmel and consciousness are so related, we’ve hypothesized that gimmel originates from the infinite ^{4; 7; 8; 30; 32}. For example, we have argued that the photon at the infinite level likely has an infinite amount of gimmel. ⁶⁰ By the time it reaches our 3S-1t level as light, it exhibits the same amount of gimmel as the electron—as in Einstein’s photoelectric effect ⁶⁵. Importantly, again, all of this is volumetric: It a three-dimensional structure, and it is spinning, and therefore it is vortical, involving fundamental shape rotations. ^{53 54 55 53; 66; 67; 68} And this is why calculations in our real world involve stability.

As indicated, the question arises whether the gimmel must exist only in union with elementary subatomic particles like quarks and electrons and with photons. If so, do these particles exhibit some rudimentary consciousness because the gimmel would necessarily include consciousness?

This may be how Consciousness is differentiated from *Life*. ‘Life’ only involves organisms, not subatomic particles We used to argue that they did, because this would mean a progression all the way through our particle universe at the quantum level going upwards. However, we know that results are not stochastic: In other words, there are times when these particles are not random suggesting something is going on, like a primitive rudimentary ‘quantal consciousness’.^{64; 69 26}

Our thinking has greatly changed: We now realize that the situation was reversed. Yes, Gimmel requires Consciousness, but gimmel is not just consciousness. Gimmel bestows volume to mass and energy. This means that Gimmel needs to fundamentally be consciousness but it also requires more: Gimmel, without endowing or organizing or bestowing consciousness or maybe some divine spark to every stable particle gimmel would not be gimmel: It needs mass-energy as well as consciousness. This is likely in the finite and therefore we hypothesize it is likely in the infinite too. The mass-energy in the infinite is a different hierarchical category to consciousness which completely envelops it. But it is illogical to stop at mass-energy in the finite, it has to continue into the infinite continuity.

Gimmel photons and the infinite and the photo-electric effect

Gimmel is also in union with photons in the infinite continuity: Photons are energy, but effectively are massless, subatomic ‘particles’ at the infinite continuity level. Mathematically, we’ve proposed that there is an infinite amount of gimmel in union with photons in the infinite reality because everything in the infinite continuity is infinite in quantity: Photons are therefore in union with an infinite amount of Gimmel TRUE units (GTUs). However, the gimmel in union with photons in the quantized finite 3S-1t, would be the same amount as for electrons – namely 105 gimmel TRUE units (or GTUs). This is likely so based on Einstein’s photo-electric effect.⁶⁵ However, in the discrete (quantized) finite, the photonic state is different: photons must be in union with the *same amount* of GTUs as electrons, because of electron involvement in the photo-electric effect⁶⁵. There is some supportive data for this in our derivations as when calculating the gimmel scores of quarks which differ for each of the three pairs of up or down quarks in proton and neutrons. They range from 1 to 8: Why are they different?^{4; 31; 32; 33 32; 70} We don’t know except through their math derivations. We know only that certainly something works through the human to impact on quantum data. We know this based on random-number generator data.⁶⁹

In Table 25.3, we translate these results into protons, neutrons and electrons and show the end point MREV (“**minimal rotational equivalent volumes**”) derivation at 108 cubed. This reflects a volumetric result of TRUE units.

And, in that instance, gimmel might work through the human to impact on quantum data (e.g. double-slit experiment^x).⁷¹

^x Double-slit experiment: Famous quantal mechanics research showing that light and matter can display characteristics of both classically defined waves and particles. It displays the fundamentally probabilistic nature of quantum mechanical phenomena.

Table 25.3. Tabulation of neutron^y subatomic particles including charge, gimmel, TRUE and MREV scores

Particle	Charge ^z	Mass/ Energy	λ Gimmel	Total Units	TRUE	MREV
Electrons (e)	- 3	1	105	106		1,191,016
Protons (P ⁺)	+ 3	17	7	24		13,824
Neutrons (N ⁰)	0	22	16	38		54,872
Totals	0	40	128	168		(108)³

Daled in Hydrogen-1

To be precise, we have called the component instead of the neutron—in union with hydrogen ‘daled’.²⁷ Is daled a separate property or property to gimmel? Or is it just some other way to conceptualize gimmel? We don’t know. But it might be legitimate to regard ‘daled’ as a separate kind of gimmel that is in union with electrons and quarks, though it likely might turn out to be gimmel itself or a component of gimmel. In this paper, when we refer to ‘gimmel’, it includes ‘daled’ (so daled then is a subset of gimmel).^{aa}

Essence Distinctions

Gimmel’s properties appear to range all the way from the subatomic to the cosmological, and it impacts dark matter and dark energy, too:^{7; 8} Gimmel may or may not ultimately turn out to be Dark Matter or Dark Energy based on these dark substances correlating with nucleons and electrons in the ‘atomic nucleus’. Then there is the concept of union where gimmel is necessarily in union with the *content* of mass and energy (not inside or part of the mass-energy). This is similar for different *extent* dimensions where ‘tethering’ of measurable ‘extent’—such as the substrates of Space and Time—are not only inseparably attached to each other at one or more roots, but Consciousness as a fundamental axiom of TDVP is also tethered^{2; 26}. Just as Minkowski in 1908⁷³, spoke about “no longer will space and time be separate, they will forever be a union”⁷³, gimmel too is always a union: Similarly, at the ‘content’ level, gimmel is necessarily *in union with* mass and energy. This is the Mass-Energy-Gimmel Triad:’ it’s a ‘hovering over’ of mass and energy with gimmel. And completing these essence distinctions, not only is there content measured by extent³, the third distinction is always *impact or influence*, meaning gimmel (or gimmel-consciousness) can play a role *bidirectionally* in such consciousness aspects as prayer.^{74; 75} This implies that we can pray to the ineffable, and any prayer (not only the most eminent) could be responded to.^{bb} Is our consciousness dancing with the ineffable, with back and forth reciprocation?

^y Neptons: Composite term for Neutrons, Electrons and Protons, as components of the atom.⁷²

^z Why is the charge 3 and not 1? It’s because of the triadic nature of the 3 up-quarks and 3 down-quarks.

^{aa} For practical purposes, we calculate everything in Hydrogen based on gimmel reflecting all the data. It might be that some of it is daled but that effectively is treated as a subset of gimmel. That works out empirically in the calculations of Dark matter and Dark energy.

^{bb} We recognize some scientists may find any mention of ‘prayer’ to be inappropriate. This is a scientific article, but sometimes there is a unification of science with spirituality and data to demonstrate it. We have, for example, 26 different papers on the effects of prayer and healing. Some ignore this without even understanding what such spirituality implies. Do we ignore the science because some scientists have an aversion to this? Instead, you can skip those sections though they’re interesting and we make comments non-prejudicially.

The applications of gimmel have progressed enormously even in diverse areas such as catalysts, homeopathy and fundamental Kabbalah.

Catalysts

When assessing the value of a concept, we like to find one that has appropriate application. Gimmel appears to come out *unchanged* in terms of reactions. So do catalysts. Catalysts considerably impact speed of reactions: This might be that gimmel is involved in this profound acceleration of chemical reactions? ^{53; 54; 66; 67; 68} Sometimes, reactions might even involve, so-called, ‘*beta-decay*’. ‘Decay’ is often a misnomer. The term ‘decay’ for many implies something prejudicial ⁷⁶: But it is usually not rotting or decomposition but a necessary part of nuclear chemistry. It could be a necessary part of our existence in nuclear reactions. ^{77; 78} Instead, the ‘decay’ is appropriate, e.g., the neutron which on its own has a short half-life of minutes achieves stability through the proton. It is essential in existence: a necessary part of nuclear reactions. ^{77; 78}. The parallel might be extended here, where the catalysts are reflecting the good parts of the decay reactivity. ^{54 79 66; 67; 68 53} This is why we have postulated that gimmel is a ‘catalyst’ as catalysts come out unchanged in chemical reactions. Catalysts and likely gimmel impact those reactions, for example, by speeding it up considerably. ^{53; 54; 66; 67; 68} *It is possible (and likely) that gimmel is an important component for catalysts.* ¹³

Homeopathy

We have also proposed a *mechanism for homeopathy*: Greater dilutions may increase the potency of the homeopathic treatment because water is in union with more gimmel than any other molecule.^{9cc} This is fascinating empirically-based research. We hypothesize that *homeopathic substances are more potent when diluted more because* there would be more gimmel around as the water (H₂O) contains more gimmel than any other common living compound—the Hydrogen contains the most gimmel and therefore, the combination of H plus OH (hydroxyl) radicals should contain more gimmel than any other molecule we use in life on our Earth and it does. Homeopathy supposedly does not work without tiny amounts of the treating medication. It could be that the dilutions of these tiny amounts of these other compounds or medications may activate the proportionate diluted water which just utilize the other substance as a vehicle to be in union with gimmel. *Our bodies are comprised mostly of water and that water responds to different vibrations.*

In essence, in homeopathy, we propose that the paradoxical reason there are absolute increased therapeutic effects with the tiny, tiny dilutions (which some argue is even below the molecular level), is that it is the increased amount of gimmel that is union with water, which has proportionately more gimmel than any other molecule (other than Hydrogen-1 itself which is the most abundant component of the cosmos). ⁹

So what do we know about gimmel? We know that gimmel:

- Is the fabric of reality.
- Is correlative with Consciousness, but it may just be the vehicle, or some other component or it may be that consciousness is the necessary component of gimmel that bestows volume

^{cc} In August 2021, we added a small number of extra comments on gimmel and its possible links with catalysts and homeopathy.

from mass-energy.

- Is an extraordinarily important concept that has allowed a major advancement in TDVP.
- Amplifies TDVP because the ‘Extent’ in dimensions now incorporates the ‘content’ in *gimmel*.^{dd 30}
- Is calculated exactly for each particle: the number of ‘gimmel TRUE units’ (GTUs) in atoms made up of protons, neutrons and electrons varies with each element and compound (one made up of two or more elements united in specific proportions): Different Gimmel TRUE Units (GTUs) scores exist in each of the 6 up-quarks and down-quarks have. This is not just illustrating a principle here.³⁰ It might imply that even though we ‘label’ all up-quarks and all down-quarks as the same, every quantal particle is subtly different—could it be the *gimmel* impacts and influences?
- Is very versatile: We have now authored many articles on *gimmel* ranging from the Periodic Table, to gluons, to Dark Matter and Dark energy, and to the contents of atoms.^{7; 8; 28; 29; 32; 33; 80; 81; 82}
- Appears to be a necessary part of the content of stable structures that are symmetrical about their axes of rotation—this makes them stable over time as opposed to subatomic particles that are ephemeral. Some of these particles when on their own are stable only for a short time, but can be sustained over time when linked with a very long half-life ‘particle’. The most important example in our physical universe is the neutron. The neutron, alone, has a short half-life of 10-15 minutes (depending on the study)^{83; 84; 85; 86}. However, when it uses *gimmel* with the proton, it is effectively ‘converted’ to a much larger $\frac{1}{2}$ -life.^{79; 87}
- Is part of the union when a free unstable particle becomes attached to a stable particle, e.g. the neutron becomes part of the union with the proton, or the neutrino or the positron: Prior to that moment in time⁵⁷, a potentially massless, energyless (maybe) ‘particle’ such as the gluon and the Higgs boson²⁰⁸ or *gimmel* itself is likely not in union with that ‘particle’—this means *gimmel* can be like a Higgs boson but providing a *stable not ephemeral* reality. Does it exclude the need for Higgs Bosons or gluons?
- It is a mathematical and physical fact that there could be no stable atoms without *gimmel*, which means that *gimmel* had to be operating to form the first proton and H atom.
- Is linked with all stable particles: there is a need for mass and energy, and *gimmel* likely provides maintained stability over finite time as contrasted with any ephemeral particles which are unstable.
- It may be a necessary vehicle, but not sufficient component, of Consciousness.
- Could be analogous to an arm to a body, in union with all stable subatomic particles.
- Is not only a container (content) but shows (measurable) extent plus, almost certainly, the likely consciousness impact potential.
- Is that substance or process with 3 different distinction qualities—content, extent, and impact: These are all likely linked with consciousness.

^{dd} The amount of *gimmel* units is fixed with each subatomic particle. For example, remarkably, the tiny electron is in union with 105 *gimmel* TRUE units (GTUs). There are also different GTUs for each of the 2 down-quarks and the one up-quark in neutrons; and again, different GTUs for the protons, which are made up of 2 up-quarks and 1 down-quark. Consequently, each of these six quarks has a different and very specific numerical mathematically based equivalence of *gimmel* (1, 2, 3, 4, 5 and [not 6] but 8).

- Is only exhibiting the impact where the consciousness is there, but it might influence mass and energy;
- Is contributing necessarily to stability, but it cannot be directly observed or measured.

The beginning of finite time: Was gimmel always present? A biblical interpretation

First, we issue *a warning to readers*: We have a dilemma here: Do we even discuss gimmel as something spiritual or mystical or Biblical? We report this, as a possibly important aside comment, and not specifically as science, but as a *feasible though mystical speculation*. We find it very interesting but conjectural. But it might turn out to be a most remarkable description. *The reader can skip this section if it offends their sensibilities: We hope not. Marcus*^{370, 23; 24}, *Riskin*²⁵ and *Neppe*³⁷³ list many footnotes below. And yet this may be the single most important idea in this whole paper: Without understanding that there is / was always something because of the infinite, we cannot understand why gimmel is so critical. And unfortunately the mistranslation from the Hebrew has ostensibly led to generations of misinterpretation of the key Tohu v Vohu phrase, possibly the most fundamental in the whole bible! If you don't accept the bible, you still are left with the dilemma of the relevance of the infinite and it being eternally before ('without beginning and without end').

We postulate gimmel was possibly the first existing component preceding the formation of mass-energy in the finite reality: We suggest that gimmel would have preceded mass and energy and therefore preceded the finite existence of the Big Bang or other 'Event Horizon'.^{2; 26} This remarkable conclusion could be supported theologically for those who want to refer to this source. Biblically, in Genesis 1:2, there is a unique Hebrew phrase 'tohu u'vohu'. תהו ובהו These two terms do not exist elsewhere in the Bible, or in regular Hebrew, and, we argue might have been mistranslated into the English. 'Tohu u'vohu' has largely been ignored by commentators, but the common key meaning is 'formlessness and nothingness' or even 'chaos'.

Based on our detailed study, including evaluating the scant commentaries, we strongly argue that 'vohu' actually refers to gimmel.^{ee} The 'vohu' is linked up (in union) with the tohu, the

^{ee} To some scholars, gimmel now appears mystical²⁵: Gimmel (the letter) is likened in the Talmud to "a rich man rushing to give charity to a poor person."²⁵ The letter Gimmel in Hebrew refers to a connectivity—a link.²⁵ For those who are curious, the name we used scientifically 'gimmel' is not accidental to us: Gimmel appears to be far more than just 'the third letter of the Hebrew alphabet because it is the third (not mass or energy) component, and all Greek letters were taken'. In naming gimmel as a scientific concept, Neppe argued that it was necessary to be precise and accurate with our formulation—hence, 'gimmel'.²⁵

- Gimmel uses the same Hebrew root word ('shoresh') as 'camel' ('gammal'): Camels carry or transport or assist. Only camels can deliver water all across the desert: This is a unique attribute for any animal.^{23; 24} (In the TDVP model, water (H₂O) is in union with the most gimmel in any molecule: It is likely the most 'mystical' compound of all.)^{4; 27}

- Gimmel (written Gomael) also means a 'helper' in Hebrew: 'Gomael' means 'assists' implied in a good way, and it is even recited in Judaic prayer.^{ee 23; 24} This second meaning of gimmel reflects that unique attribute of giving—and, in TDVP, the link is also stability and bestowing. By comparison, the Higgs Bosons⁴³ and gluons³⁰ function 'ephemerally' hypothetically influencing particles like protons and neutrons, but that ephemeral action would possibly require continuous refurbishing in microseconds; yet the massless-energyless gimmel has remained stable (possibly over millions of years) and still bestows mass and energy. 'Gimmel' also implies a 'bridge', but we see this as a spiritual union more than just a 'link'.²⁵

- An aside: Another (rare) Hebrew meaning of gimmel is 'weaning' (off the breast) indicating independence of thinking.²⁴ TDVP has certainly required weaning from the conventional physics!

ff‘formlessness’. But it is still *something, never nothing*. This explains why there is a *biblical pairing* and not just a single term like ‘nothingness’. The sentence that follows in Genesis 1: 3 supports this.¹⁷ The dual wording implies both ‘tohu’ and ‘vohu’ appear theologically important, and are needed for Biblical meaning: Why? We propose that *‘tohu’ was equivalent to that formless component that required ‘vohu’*: ‘Tohu’ would refer to the *precursor* of the mass and energy (the formlessness of ‘tohu’ before the ‘Big Bang’ equivalent, sometimes incorrectly translated as ‘chaos’).

There is no other phrase *Tohu v Vohu* in the bible. Why two words? And why should this be translated as ‘chaos’? There is no reason other than the original translators’ attempts at making sense of a word that had not existed. And why should this involve a kind of ‘nothingness’ when the infinite should theoretically always be ‘something’ as it eternally exists?

May we present one interpretation based on Gimmel and Triadic Dimensional Vortical Paradigm?

The finite began with the Big Bang or its equivalent ‘Event Horizon’²⁶, and, *we argue, that the infinite already would have had ‘gimmel’* (which we regard as the same as the Biblical term in Genesis 1: 2 ‘vohu’). *The vohu bestows tohu to become mass and energy*: A similar parallel has possibly been incorrectly attributed to ‘gluons’ or to the ‘Higgs-Boson’ but in the finite existence. *We have proposed that TDVP²⁶ implies that the cosmos never was a ‘nothingness’*: It

- Also, Rabbi Yaakov Marcus represents the letter ‘gimmel’ as the *‘spiritual glue’* of the Torah: It has special unifying meanings putting concepts together.²⁴ Similarly, in TDVP, we’ve recognized gimmel is not only *glue* (as in the ‘gluon’ concept³⁰) but *far more than gluons* because gimmel involves *all* particles—when applied within the 9-dimensional quantized volumetric finite reality embedded in the infinite continuity. Marcus also recognizes a Kabbalic duality of Aleph and Beth (the first two letters of the Hebrew alphabet) as ‘unstable’ until there is that third letter, ‘Gimmel’. Gimmel in this alphabetical *triad* makes the Aleph and Beth stable (as an aside, perhaps we could compare the ‘Holy Trinity’ in Christianity). To Marcus, the *‘three-ness’* creates a stability impossible only with a duality. This Kabbalic interpretation regards Gimmel refers mystically to *‘nourishing’*²⁵. Marcus also points to the blend of three patriarchs —lovingkindness (Chesed) with law (Din) with bringing truth (Emet) as part of the gimmel letter.^{23; 24}

- In TDVP, the Kabbalic ‘three-ness’ is a metaphor for the fundamental ‘Triads’ of TDVP.⁸⁸ In TDVP, the equivalent stability is fundamental to our universe not flying apart: without gimmel, it would! In *TDVP, nourishment could potentially imply* the union that gimmel bestows to the triad of mass and energy. Gimmel assists *all* substances and particles and chemicals and, in reality, everything, even in the cosmos: In TDVP, gimmel allows a numerical integral stability for everything by allowing particles to be *whole, integral and stable, and not fly apart*. Gimmel provides *more* than the virtual ‘glue’ proposed in ‘gluons’^{30ee} and the always-existing gimmel works with all stable physically existing particles, unlike the ‘virtual particles’ (gluons and Higgs Bosons).²⁰⁸: The stable, *eternal gimmel* (‘Tohu’) existed apparently before any finite particles in the infinite. Thus *‘Reality Begins with Consciousness’*²⁶, our book, was aptly named, but only at that point (2012)!

- The gimmel reality is likely conceptualized as consciousness. Gimmel (Consciousness plus’) originates from the infinite continuity that has eternally *impacted* finite *existence* including our physical 3S-1t *experiences*. In retrospect, our book could have been *‘Finite Reality Begins with Consciousness’* as the infinite has no beginning and no end. We could even call Gimmel the *‘God Matrix’* (It is more than just the *‘God Molecule’*: both reflect Gimmel’s inherent spirituality.

- ^{ee} Gimmel ‘glues’ or ‘links’ all particles together across the 9-finite volumetric dimensions, but the much better portrayal of gimmel is *‘in union with as it is separate to mass-energy, but always necessary to ensure stability*:

- *Dimensionally, Gimmel is tethered* to the dimensions of Space-Time but Space and Time and Consciousness are three separate substrates. *Gimmel* certainly fills a dynamic function over 9 finite quantized dimensions and is embedded as a unit into the infinite continuity.

never became ‘something (such as the Big Bang and our universe ⁸⁹) out of nothing.’ ⁹⁰ ‘Out of nothing comes something’ (*Ex quidem nihil fit*) is often the aphorism quoted, but we regard that as incorrect: *Something must come from something, not nothing*. And that something is the finite reality deriving from the infinite. We argue that our universe (and if existing, the multiverses) *always had something* infinite before (this ‘before’ technically implies an anachronism because when discussing the eternal infinite as there would be no ‘before’ or ‘after’: there is ‘*eternal time*’). This might be an example of how the careful study in Hebrew of the full context of Genesis 1:1-4 illustrates how spirituality can directly support science: We regard *gimmel* as always having been present, displaying itself in the infinite continuity enveloping the quantized finite.

A related example is the commonly accepted belief that ‘*something came out of nothing*’ which philosophically and theologically apparently might even be the prevalent view (speculatively in Judaism, Islam, Christianity, Hinduism). This does not reconcile with ‘*Vohu*’.

But the ostensible contradiction may be clarified in Kabbalah⁸⁸ The term ‘*Ayin*’ אֵיךְ which refers to ‘nothing’ is an example. But there is another term ‘*Yesh*’ יֵשׁ which means ‘there is’. One explanation is that *Ayin* is the ‘nothing’ that we in 3S-1t physical reality perceive: ‘nothing’ is there, but it’s a nothing as we are not physically experiencing it. However, if you extend this to the infinite continuity (the ‘*Ain Sof*’. אֵין סוּף which literally translates as ‘without an end’ with the implication of ‘without a beginning’ too) the *Yesh* is there.

Something comes out of something. Something always exists in the infinite. There is no beginning and no end. The idea of ‘*Creatio ex nihilo*’ (creation from nothing) then should be perceived as *relative to 3S-1t alone*. The opposite has been cited as ‘*creatio ex materia*’ (creation from material). The problem here is the term ‘*materia*’ which implies ‘material’ and something materialistic or possibly in 3S-1t. That would be incorrect using the model above: ‘Something from something’ is, we believe, correct but that something would not be material: Therefore that mystical term ‘*yesh*’ is likely best: That would imply something from something but the ‘*something*’ would be *non-material which we interpret as the Yesh*. For 3S-1t physicalism, it is not conceivable so ‘nothing’ might be applied (*Ayin*), but for the infinite continuity, in the never-beginning timelessness, or even in the higher consciousness perhaps in 9D, it already exists (*Yesh*).

In summary, it’s relative. It might appear that ‘something out of nothing’ is that we’re describing that ‘something from nothing’ in 4D, but if we’re describing it in the infinite, so it’s ‘something out of something’—that is *Yesh*. This progress resolves a millennia-old contradiction. It’s exciting that we could call ‘relative something’.

Scientifically, this same ‘*gimmel*’ fills these finite and infinite requirements as a foundation for TDVP: Importantly, we’ve proposed ‘*conservation of gimmel and TRUE*’ with ordropy ^{26 21; 88; 91; 92; 93; 94; 95} likely originating in the *infinite continuity*. ²⁶ But in the *quantized finite*, the ubiquitous *gimmel bestows* the role of ensuring mass- energy and all chemicals are *stable, and life* is supported. The ‘present’ in the infinite is eternal and the Present Time is eternal, applying the infinite continuity. *Time is relative related to the framework of reference and the experient*.

⁸⁸ This concept ostensibly originates from the author of the ‘*Tanya*’—possibly the most important volumes of Kabbalah—Rabbi Schneur Zalman of Liadi (1745-1812).

Gimmel is not only structure as consciousness, it's the substance or the essence of the infinite cosmos. Looking at it from the top down, it's conveyed into physical structure in a very mathematical way that we've shown can be quantified and identified in every atom of the physical universe.

In summary:

- *Gimmel exists in union with every stable particle of the physical universe including the up- and down- quarks and the electrons. All these particles are rotating in the 9D finite and make up the atomic rotating vortices in the quantized volumetric 9D existence.*
- *Gimmel, too, exists in union with the photon and the photon is a component of the infinite continuity, as well as the finite.*
- *These principles also apply even in cosmology in the galaxies.*
- *These all reflect mathematically exact calculations in the Triadic Rotational Units of Equivalence (TRUE).^{47; 48}*
- *All stable structures are symmetrical round their axes.*
- *Moreover organic life-forms and even the elements in the Periodic Table of the Elements^{96;}⁹⁷ are all in union with gimmel, with the highest gimmel ratios being in the essential life elements.*
- *Water has the most proportionate gimmel-union of any molecule other than elemental Hydrogen-1.*
- *The link of the Quantal, Macro-physical 3S-1t and Cosmological provide for ostensible unification of the Laws of Nature—it's all one reality!*
- *These principles apply in the inanimate consciousness and in the animate life which also reflects consciousness. Technically, this is gimmel which may be even more than consciousness because the gimmel must be in union with mass-energy.*
- *Life cannot exist without gimmel.*
- *Life extends beyond bodily death, and before physical birth, and this is likely necessarily linked with the infinite continuity and gimmel.*
- *All gimmel reflects the endpoint of mathematically exact calculations in the Triadic Rotational Units of Equivalence (TRUE) as part of TDVP.^{28; 72}*
- *Gimmel is never any kind of matter or energy, but it, nevertheless, has organizing effects on the matter and energy of all the universe.*
- *Gimmel analyses generate exact figures for everything measured as Gimmel TRUE units. These can be calculated mathematically through the Calculus of Dimensional Distinctions. This allows for integral numbers as the electron is normalized to a score of '1'.*
- *The exact gimmel-TRUE unit scores (GTU) for the fundamental particles calculate as follows:*
Electrons and photons in 3S-1t 105; photons in the infinite continuity likely ∞ . 3 up-quarks (u1 2, u2 4, u3 5) and 3 down-quarks (d1 1, d2 3, d3 8). This means that the 2 pairs of 3 quarks run from 1, 2, 3, 4, 5 but not 6 but 8. Protons with 2 Up-quarks and 1 down-quark calculate at 7. Neutrons with 1 up-quark and 2 down-quarks score 16 GTUs.
- *Importantly, these derived GTU scores are fixed and can be applied to any particle in the universe. We have speculated pertaining to the photon scores but this is based too on extending Einstein's Nobel-prize winning photo-electric effect. Photons might become*

electrons in our 3S-1t or 9D finite reality.

- *Combining the particle scores of electrons being 1, the total TRUE unit score with gimmel is $15+1=106$; with protons are 24 as u1 and u2 particle scores are both 4, and d1 is 9; with neutrons are 38 (u3 =4 ; d2 and d3 are each 9). Note these are particle scores which combined with the GTU scores make up a total TRUE unit score.*
- *We cannot explain why the third down-quark GTU score is 8 as the other 5 run 1, 2, 3, 4, 5; originally we thought it had to be 6 given the sequence but that is incorrect.*
- *But importantly, despite there being 6 quarks each has its own specific score. This could have remarkable implications as even at the elementary particle quark level, each quark is different in GTUs. Does this imply that each has its own specific consciousness level and that even elementary particles have consciousness?*
- *This, in turn, allows reality to be understood as the quantized, stable universe: Matter and energy reflect the ‘content’ of the universe. Space and Time reflect the ‘extent’ of the universe. But each is combined with the union of ‘gimmel-content’ and ‘gimmel-extent’. These rules apply for everything as they’re invariant even if there were many multiverses.*
- *Similarly, Gimmel is not measurable as mass or energy content, but is the necessary mass-less and energy-less organizing third component, likely Consciousness equivalent, that allows for a stable universe, where ‘particle vortices’ would not fly away.*
- *Without gimmel, there would be the ‘great heat-death’ of the universe predicted by materialists, based on Newton’s second law of thermodynamics and that entropic instability would already have happened.*
- *And gimmel reflecting consciousness is tethered in ‘extent’ with Space and Time. Gimmel reflects the 9-dimensional finite and relates to the angular momentum of spinning objects—this explains the way things rotate, move and interact.*
- *This reflects the dimensional measure of interaction in the Space-Time domains (the ‘extent’). At that extent level, gimmel allows for exact mathematical derivations calculating the specific number of units of possibly consciousness or spiritual component in each physical structure (protons, neutrons, electrons, photons).*
- *Describing it on a more technical level, gimmel organizes elementary distinctions into symmetrically stable patterns that are meaningful relative to the formation of physical structures that make up conscious organic life-forms and all molecules.*
- *Gimmel is a key factor in the manifestation of the self-referential nature of consciousness. It is also a key element of the logical structure reflecting the innate logic of spirituality and reality.*
- *At the infinite continuity level, Gimmel is associated with conservation of order (ordropy) and life.*
- *Gimmel, we speculate, originates in the infinite continuity.*
- *This allows, inter alia, the finite ‘something’ to come out of ‘something’ (not the philosophical ‘nothing’): ‘tohu’ becomes mass and energy, and ‘vohu’ is gimmel.*
- *Gimmel is the great organizer in the finite and the infinite (like Consciousness or some aspect of spirituality would be).^{17; 18; 98.}*
- *These two (gimmel and Consciousness / spirituality) may be almost synonymous, as again we ask: By exclusion, what else could gimmel be but some aspect of consciousness? The difference is Gimmel must be applied to its union with physical mass-energy in the finite world and possibly in the infinite, too.*

- *Gimmel, therefore, reflects a necessary solution for the important unification of all of reality: The quantal, the macrophysical world, and the cosmological.*
- *And there is more:*
 - *Gimmel also provides a remarkable unification of the finite quantized volumetric with the infinite continuity.*
 - *Gimmel might also greatly contribute to unifying science with spirituality (a spiritual consciousness).*
 - *We are witnessing a remarkable coming together: Mathematics, science and spirituality.*

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