

THE PHYSICS OF TIME, SPACE,
AND MULTIDIMENSIONALITY IN THE
TRANSITION PHASE

An excerpt from

THE TOTALITY OF GOD
AND THE IZUNOME CROSS



Unlocking the Secret to the Riddle of the Ages

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The Physics of Time, Space, and Multidimensionality in the Transition Phase

A great deal of interest has been placed recently by the media on the *Theory of Strings* as a way of explaining everything in the Universe, to the extent that it seems to be becoming a part of our popular culture. As I was working on this *ENCORE*, PBS devoted an entire 3 part series to it, "The Elegant Universe," based on the book by Brian Greene. (13) To me this is especially remarkable, since, according to the NOVA presentation the theory itself is unresolved, with its five current models contradicting one another. Only the one that eventually bears fruit will describe our Universe, with the other four describing universes that may still exist but not from the tangible perspective of this one. And there is no guarantee one of these five will even do it.

Nonetheless, the prospect of the possibility is intriguing, and the bait that has kept the scientists nibbling is the way it seems to resolve the orderly macrocosmic universe of Gravitational Certainty with the chaotic microcosmic universe of Quantum Probability. These are the factors that have kept gravity at odds with the other three forces re the equations that can be used to describe their operation.

Now, some of the string theories under consideration use strings that are open in the sense that the ends don't connect – what we would categorize as linear. Others use strings that are closed, their ends connecting – what we'd describe as cyclic. But all have the ability, being so small as to defy comprehension (100 billion-billion times smaller than a proton), of vibrating in more dimensions than the four of space-time – from ten to as many as twenty-six! Who can relate to that? Even so, with the ability of these microcosmic points of energy to do so comes an averaging out of the Universe as described by *Relativity vs. Quantum Theory*. The extremes of Order and Chaos find a common ground in equations that are so complex as to be even more incomprehensible to the non-scientist than the dimensions they're trying to depict!

I've always felt that for a theory to describe everything it had to be simple, and, as I have noted Professor Hawking as saying, something the average person would be able to discuss. And in the past, the most profound theories in physics, with the greatest diversity in application, seemed to have as their basis very simple equations. What could be simpler than $F=ma$? Yet, all the fields of classical physics obey it. And Einstein's $E=mc^2$ was likewise elegant in its simplicity. Even when Maxwell unified electricity and magnetism, the four equations were still relatively simple. Now it is certainly possible that the equations of *String Theory* will be able to resolve the issues they're hoping to. But my feeling is that it is the complexity of these equations that will prevent them from describing everything. After all, with five theories, if one rises above the rest, the other four "everythings" will be missing.

13 (Except for the article "The Superstring Supermystery," credited in the text, all info on and references made to String Theory in this essay come from two sources:

The program: *The Elegant Universe*, A NOVA Production for WGBH/Boston and Channel 4, based on the book by Brian Greene. © 2003 WGBH Educational Foundation.

The web site: *Nova: The Elegant Universe*, web site was produced for PBS Online by WGBH. © 1996-2003 WGBH Educational Foundation. <http://www.pbs.org/wgbh/nova/elegant>.

All references found in this *ENCORE* will be listed in a separate *EXTRA CREDITS* section after the original *CREDITS* prepared for the text of the First Print Edition.)

This leads to a serious limitation imposed by physical formulas upon a theory of everything. There are too many specifics to consider. On the spiritual side of the equation, it is really no different than trying to find a religion that could have a set of integrated tenets embracing those of every other world religion. I don't think the *personality* of tenets or formulas can do it. But I have felt it could be done from the *essence* of *Rules* and *Structure*. This is why I began with the approach that I took: to resolve the question at the level of the energy common to Religion and Science – the energy of everything! And as long as you're limiting yourself to tangible energy, you are leaving out the energetic range of values wherein lie the solutions to many of the Universe's riddles – intangible energy. How else can you explain 26 dimensions? What kind of energy and what sort of place could make those possible? The current attempts to resolve the divergent string theories center around finding the underlying theory for which the others are its offspring – like children of a single parent. But the issue I have with this even if attempts are successful, is that it still wouldn't be a theory of everything. After all, if you consider everything in terms of the balance of Science *and* Religion, Evidence *and* Faith, Deism *and* Theism – Universe *and* God – half of everything is still missing. And it is the half that really matters – the one responsible for the *Rules* and *Structure* it all began with.

So, is the *Theory of Harmonic Creation* the theory of everything? The last essay will provide my version of a formula, though it may not be one scientists will accept as such. Neither may it satisfy the theologian, who requires no theory beyond the tenets of his or her specific faith. The *Theory of Harmonic Creation* transcends the specifics of scientific formulas and religious tenets. But it is my feeling you don't need a formula to have a comprehension, any more than you need a tenet to have a belief. What it does uphold are the *Laws of Being and Existence* for the spiritual energy in all belief, and it contains the *Rules of Quadrality* and *Structure of the Quadralitic Cube* for the physical energy in all comprehension. While that statement may sound like the ravings of an egomaniac, it actually comes from someone who prays daily to be more humble in the knowledge of its *Source* and worthy of being entrusted with presenting it to you. Left to my own devices, I would have gone astray long ago in my professional pursuit of this truth. And personally, I doubt if I'd even still be here. I can't count the number of times Jesus had to carry me.

Is *Harmonic Creation* really all we need? Truthfully, I hope to see Science find its unifying formula one day. And I wouldn't want what I've done to replace a single tenet. All I have tried to provide is something the average person can discuss to learn more about what makes everything tick, and Who started the clock ticking!

In that regard, what has *Harmonic Creation* offered us to resolve the disparity between *Relativity* and *Quantum Theory*? This resolution is especially crucial for understanding what scientists often refer to as the Universe's initial conditions. But while theirs concerns the Planck time, since that is when Science considers the Universe of *Relativity* and *Quantum Theory* to have begun, ours concerns that mysteriously infinite interval of time before – the *Transition Phase*. The subject has already been touched on in earlier articles within this *ENCORE*, but let's now give it the attention it deserves, for, once we do so, I think you'll see why no scientific formula could ever do it justice, or even hope to depict it. Where is the physics to go faster than light, or the geometry to draw microcosmic infinity?

The equations of *Harmonic Creation* are simple, balancing word structures based on the realization that those words describe the energetic *content* in all

creation, and those balances depict the energetic *activity* in all manifestation. Its formulas are simple *Rules* beholdng to no thing other than the nature of the energy itself, and how each energy exists within an infinite range of values with all the other energies in God and the Universe. And its tenets are the basic *Laws* that govern everything within that infinite range, regardless of whether it references Religion or Science, Order or Chaos. And when the tenets and formulas of *Harmonic Creation* are understood, it provides us with an archetype for all *consciousness* and *awareness* – the *Four Pathways to Light and Truth* – and a paradigm for all *content* and *activity* – the *Quadralitic Cube*. Drawn in 3-D, we'll soon see how 4-D to infinity reflect into it.

So, if the *Quadralitic Cube* is the paradigm for all *content* and *activity*, how does it resolve this conflict between *Relativity* and *Quantum Theory*? And not just in the physical world as we presently know and continue to study it, but before, while it was in that seemingly contradictory transition from Infinite to Finite and Nothing to All!

Consider the present world first. The *Quadralitic Cube* establishes itself as a paradigm for the macrocosm and the microcosm, with no limit on the size of either. What it essentially shows is that no matter where you go or when you go there, the *Rules* and *Structure* are the same. Order and Chaos are not limited to one being in the macrocosm and the other in the microcosm. And why assume that certainty is likewise a phenomenon of the former, and probability, of the latter, or that either is a limiting behavior? Chaos exists in the macrocosm every time solar systems collide; and it was a requirement for existence right from the Big Bang. The *Quadralitic Cube* accounts for chaos in certainty because it places no restrictions on the distortion in the waveforms it can contain, or the turbulence in the energetic spirals. It is only there to serve as the Absolute Frame of Reference from which all relatives frames can deviate. Its only requirement is that when everything averages out, the order of the Absolute Frame is upheld. Order exists in the microcosm in the precision of the quantum mechanics within every electron shell, even if there is the element of probability in a given electron's exact location. And the *Quadralitic Cube* likewise accounts for order in probability since it establishes that any possible state or condition within it can be anywhere and at any time.

Of course, while the *Theory of Harmonic Creation* was arrived at by me through an observation and study of the physical world and the sciences that depict it, the theory is admittedly a philosophic construct. This is why I referred to it in the *OVERTURE* as *Philosophysics*. I make no apologies for that. Taking a median position between Religion and Science has allowed me to find the Balancing Center that embraces both, unhampered by the exclusive territory of one or the other. And the most mysterious and intriguing issue both have attempted to consider, and in which their exclusive territories are most in conflict, is perhaps the Universe's creation. I think only a philosophic common ground can resolve it. Such a position will likely never adequately satisfy the scientific community. In fact, scientists on the aforementioned NOVA series were firm in requiring a non-philosophic, provable theory to claim one has found the theory of everything. And the proponents of *String Theory* admit that tangible experimentation is the theory's weakness; no particle accelerator may ever be able to produce entities that small.

A philosophic position will likewise never satisfy the theologian, since there is an inherent logic in it that goes against the very nature of faith in a God that defies logic, as well as against the profession of dogma that in the context of increasing evidence contradicts it. However, I believe there is a growing group of individuals from each

camp who are dissatisfied with the lack of resolution that has occurred as a result of a strict adherence to either exclusive territory. They are open to finding a way to embrace the God that both defies logic and demands it.

In order to do that, we have to try to comprehend, with our limited human ability, the simultaneous existence of microcosmic and macrocosmic infinity – from the perspective of both time and space – as well as the simultaneous occurrence of All and Nothing. It is only in the philosophic sense that multidimensionality can be easily understood; for, even in the NOVA program the beautiful computer graphics that were being used to illustrate it were doing so in a realm limited to three spatial dimensions. The formulas may be describing nine or ten spatial dimensions, but the graphics can only present them in three – and the third in the screen is actually an optical illusion!

This is where the idea of what infinity really means is most overlooked. Ten dimensions? Twenty-six dimensions? Try infinite dimensions! We clearly don't get it. We're still limiting ourselves to finite thinking!

You can't turn infinity on and off when it's convenient. The Big Bang is thought of as the moment when it all began. And I have continued to promote that position by referring to it as the Zero Moment, which is reasonable, since, from the perspective of linear time in a realm where such time has finite and measurable intervals, it was zero. But that is not the only realm from which there is a perspective, and from the other it's infinite. The smallest interval using the convention of seconds as a person on Earth would know them is the Planck time, 5.39×10^{-44} seconds. But realize, that convention was established on this planet based on its cosmic conditions of existence; and every other measurement dependent on it, including the speed of light, only exists in the context of that relative frame of reference. Who knows what a second might be on the Planet Zeetops! So, right away we can start to release our hold on finite thinking. And you have to do that in order to ever begin to hope to understand eternity or infinity as God knows them. From God's Absolute Frame of Reference, everything that has occurred in the billions of years since the Planck time may not even occupy a second. In fact, His clock isn't moving at all!

Starting to see the *Big Picture*? If our eternity is like Nothing to God, what is infinity? All! And we can't just think of eternity and infinity in terms of the macrocosmic. Planck time is so short as to almost appear laughable to discuss. And the minimum increment of space, the Planck length – against which the strings in the theories based on them are compared – is likewise almost too bizarre to consider. And yet, within that minimum increment of time is eternal time, and within that minimum increment of space is infinite space.

While a theory of the microcosmic – *String Theory* – is helping scientists resolve the connection between gravity and the other forces, it is Einstein's theory of the macrocosmic – *Relativity* – that should help us resolve our present mystery. For, there seems to be something inherently philosophic in a theory whose equations break down once you satisfy its presumptions. Nearing the Big Bang's singularity from our frame of reference, the curvature of space-time becomes infinite, i.e., space becomes infinitely small, matter, infinitely dense. The equations can get really close, but not right to it. Yet, is that what is occurring from the singularity's perspective? After all, in our frame of reference time at the singularity is zero – when our clock started; but in its frame of reference time is eternity – its clock never moves. Suppose the reverse has likewise occurred for space – a point to us is actually infinity to the singularity. *String Theory* has attempted to use extra dimensions to handle how space can compact within them to make the myriad of string vibrations possible. Now consider

infinite dimensions. I wasn't joking earlier in this essay. Nor was I when I explained on p. 538 how infinity in all its forms during the *Transition Phase* was doing whatever was needed to manifest the finity that would be required for tangibility. This is why you can end up with one frame of reference that starts at zero coexisting with another that's infinite. Our quadralitic equations reflected this. There were two essential understandings, which we summarized on p. 532. One is the linear idea that allows an equation to reflect the progression of energies. Then, I was referencing Means between Spiritual and Physical Extremes, but any progression from infinite to finite is applicable. The other is the cyclic idea that allows, as first noted on p. 448, the finite Physical Means to exist between infinite Spiritual Extremes. Those equations coexist. With this realization comes the awareness that there truly was something "before" the Big Bang. The Big Bang only marked the moment that tangible dimensions began. So, from its tangible, relative frame of reference, the Big Bang established an edge and boundary to time and space – which will then continue for tangible eternity and infinity. But we shouldn't then assume eternity and infinity didn't also exist before. In the ubiquitous, intangible, Absolute Frame of Reference – with its infinite dimensions – it did. I referred to that microcosmic period between Zero Moment and Planck time in our tangible relative frame of reference as the *Transition Phase*. We can now get a clearer sense of what was going on then and what was transitioning. It was a transition between the Absolute Frame of Reference of the Spiritual Realm, where infinite dimensions of space always existed and always will in reference to time that never moves, and the relative frames of reference of the Physical Realm, where space and time must conform to physical constraints. It doesn't matter how you define the increments of tangible time or space. No definition for them will ever limit an undeterminable process like Birth, Death, and Rebirth. And perhaps the most important contribution of the *Transition Phase* was the resolution of the inherent contradictions in the two frames of reference – one where All and Nothing are coexisting conditions of existence in time and space and one where they're not.

It is then no surprise to me that scientists have needed to go smaller and smaller, ever closer to microcosmic infinity, to unify *Relativity* and *Quantum Theory*, and to do so with additional vibrational dimensions. Unification theories, most notably that of Edward Witten, are pointing to further, even more bizarre string phenomena. As the NOVA series explained, the string, which is a one-dimensional energy form that can be either open or closed, is now being expanded to a two-dimensional membrane that could resolve how gravity functions differently from the other forces. The linear strings would be attached to the membranes and account for the three forces apart from gravity, while the graviton would be a cyclic string that could somehow leave the membrane of our tangible universe and travel to the parallel membrane of a higher dimensionality. Now, is that *science*, or *science fiction*? The scientists from the program queried that themselves. But I want to know, if it is *science*, wouldn't also then be *Harmonic Creation*? In fact, from the perspective of *Harmonic Creation*, the idea of parallel membranes with a potential for a perpendicular interconnection through the graviton is only covering the tangential aspect of realm, or dimension, coexistence. It misses the concentric. Without it the assumption is made that you can be only in the plane of tangible space-time or the plane of higher dimensionality, but not both; and they use the analogy of slices of bread to illustrate it. But I don't think that analogy is any more adequate for higher dimensionality than the balloon analogy is for expansion during the Big Bang. Separation and Interaction are just as fundamental to the functioning of the Universe as is Order and Chaos.

There are some intriguing aspects to *String Theory*, though, that find remarkable parallels in our discoveries. We ascertained, as a result of the evolution of harmonics in the *Transition Phase* and its effect on the appearance of the first two forces, that the graviton is the only force carrier still in the *1st Level Tangible Spiritual Realm*, upholding the energetic fabric of Root Physical Realm intangibility! And in doing so, it contributes to the ability of *Harmonic Alignment* and *Dynamic Stability* to have access to the resources in the Root Spiritual Realm needed for the *Law of Universal Use*. *String Theory* is considering that the graviton may be the one force carrier that makes the transition to higher dimensionality. The symbolic similarity in the two visions is unmistakable, and there is yet more. By allowing the equations of *String Theory* to describe two-dimensional membranes, the vibrational properties of one-dimensional energy forms, confined to the universe of the microcosmic, can apply to the universe of the macrocosmic in planar energy forms that can literally span the Universe. And as you know, the *Quadralitic Cube* does the same, serving as the paradigm for the Macrocosm and the Microcosm, with energy forms that unfold in one, two, and three tangible dimensions. In fact, planar forms were established as being essential to non-harmonic resonance, and thus the Physical Realm itself.

Though *String Theory* may successfully afford the scientific community a way to interconnect the previously disparate equations of *Relativity* and *Quantum Theory*, conceptually I don't think it goes far enough. Physically speaking the obstacle is clear – its complexity. With bigger and better equations to resolve more and more disparities, the theories move further and further away from Hawking's supposition that a theory of everything should be simple. And even with these complex equations only ten dimensions are considered. Witten's theory adds an eleventh. Earlier in this article I mentioned twenty-six, noted in passing by Brian Greene. I had first seen the number in a very informative article on the history of *String Theory* called "The Superstring Supermystery," which I ran across during my research in May 2002. [P. Gibbs, 1998. <http://www.weburbia.com/press/html/g06.htm>] It seems the forerunners of the present string theories were only workable given that many. Still, I was quite clear earlier that we have to consider not 10, not even 26, but infinite dimensions! Why? The graphics on the NOVA program illustrated the strings as existing at points within a 3-D matrix, and it is around these locations where the extra dimensions get compacted. It is not said if the grid is being used for illustrative ease, or is part of the structural model for *String Theory*, similar to grids I've seen for vibrational models of particles; and later, strings are also depicted as flying freely through space. But either way it shows that there is still some space between those locations. On p. 171, I spoke of what infinity means within any interval, be it space or time. Given an initial interval, whenever you cut it in half you are doing so at a Mean point between two initial Extreme points. That Mean point then becomes an Extreme point for either of two smaller intervals, which then gets cut in half, and so on, and so on. Since you are always left with something that can be again divided, there is no end to the divisions – no final cut that produces a length of zero. It is a paradox of geometry taught in high school (attributed on p. 171 to Zeno of Elea). Now, realize that any different initial interval will produce divisions that are also slightly different. And all subdivisions are moving toward infinity. There is no interval between two points where this doesn't happen. Plus, we must consider that there are three tangible spatial dimensions for which this is occurring! Strings resolve the issue of compacting divisions as you approach the Planck length by adding dimensions. But, what I've described doesn't stop there. It keeps going. And who is to say where the Planck length begins and

where it ends, or if it can somehow wrap around these extra dimensions once you get smaller than it. Not only that, but since space-time is incomplete with just space, the same must be said of the Planck time. Now you can begin to understand what it means to talk of the range of values from the infinite to the finite. Our four dimensions of space-time are way down at the finite far end. That is where we live and breathe, go to work, enjoy nature, make love, and ponder the cosmos. And still it is so immense and majestic as to be mind-boggling. But it is truly only the tip of an inverted dimensional iceberg to what really is in the Universe beyond and at the same time within space-time.

That speaks to the physical issue of not going far enough. Now, for the spiritual. To begin, it seems a shame to provide a way for the graviton to connect to higher dimensionality without giving it a purpose for doing so. This is because those higher dimensional membranes themselves seem to have no purpose in contributing to the continuation and functioning of the lower ones. They're seen as separate, parallel universes that if our Universe would collide with one could actually destroy it, not as part of the infinite energetic range of values to be found in a single Universe, dimensionally separate from 3-D but having the ability to interact with it. Moreover, even with the potentiality of higher dimensionality to take us beyond the realm of the seen and into the unseen, this is still all occurring in the context of the Physical Realm – where even and odd harmonics integrate. There is no attempt, or for that matter desire, to consider the Spiritual Realm – where odd harmonics, integral to physical existence, function on their own to create a spiritual existence we can barely fathom.

And of our four tangible dimensions, I think the importance of time is truly being missed. In all the talk of higher dimensionality, I've heard little said of how time works in it. I noted above that it is not just within the intervals of space that infinity is occurring. It must also be occurring within those of time. And as those intervals approach eternity, as with the intervals that approach infinity, we move further and further away from the realm of the tangible physical and closer and closer to the realm of the intangible spiritual. As noted often before in our discussions, the efforts of scientists to resolve their physical mysteries have brought them to solutions that appear more and more godlike. This is easiest to see at the Zero Moment, when the linear event-line begins in the Root Physical Realm. Consider it only from our present relative frame of reference. The interval between the Zero Moment and Planck time is 5.39×10^{-44} seconds. But at the Zero Moment is also found the cyclic event-line perpendicular to the linear, and for it time is eternity – the clock isn't moving. Now, as eternal moments of time and infinite dimensions of space become the three spatial dimensions at the Planck length and the one temporal dimension at the Planck time, eternal moments and infinite dimensions still remain in the energetic fabric of intangibility. The infinite dimensions make possible the transfer of unlimited energy in and out of higher dimensionality in any tangible dimension, the eternal moments make possible the communication of timeless consciousness at any tangible moment. For this reason the energy of God never changes in its ability to manifest either universal mind or body. On God's side of the Veil the space never ends and the time never starts. That's how God can provide the Universe with everything it presently needs for the *Law of Universal Use* and knows everything it ever did need or ever will. Now, it is certainly possible the intangible particles of strings may provide the scientific means for the manifestation of the corporeal, and the intangible waves of inertons (p. 546) that for the manifestation of the mental. But whatever does so, can, only because just as when you approach the microcosm of infinity you arrive at

infinite dimensions, as you approach the microcosm of eternity you arrive at infinite moments. At every linear moment there is an infinity of cyclic moments.

It is in the *Transition Phase* where all that gets worked out. The linear event-line begins in all relative frames of reference at the Zero Moment with evenly spaced finite intervals based on the established time convention for your frame of reference. Yet, in that very first increment we've called the Planck time, the infinite cyclic event-line of the Absolute Frame of Reference is moving from the vertical to the horizontal as infinite spiritual moments are becoming finite physical moments, and infinite spiritual dimensions are becoming finite physical dimensions. From those infinite higher dimensions comes **Q**, which between Zero Moment and Planck time will procreate the conditions that make up the four dimensions of space-time. It comes out of Infinity and Eternity to serve as the damping mechanism and formative clay of the *Tangible Physical Realm*. And within that intangible Eternity, the tangibility of time begins with the start of the Planck clock. Think of it as the range of values from spiritual Eternity to physical Zero Moment; and from that Zero Moment will come a physical eternity of time. And within that intangible Infinity, the tangibility of space begins with the point source. Imagine it as the range of values from spiritual Infinity to physical Zero-dimension; and from that Zero-dimension will come a physical infinity of space. But the Universe requires more than the independent *content* of space and of time. It needs their cooperative *activity*. And since frequency is a function of space and time, both actualize through the vibration of the *Source Frequency of God* in the *First Harmonic of the Universe*, from which will then come two, then three, then four, and so on to a physical infinity of harmonics and their frequencies. Thus it is through harmonics that the Universe achieves the unification and manifestation of space-time.

This is why to my way of thinking *String Theory* has its drawbacks. And from the scientific community's viewpoint, the most difficult for it to overcome may be its provability. Admittedly, *Harmonic Creation* has them, too. As I earlier acknowledged, it is a philosophic construct, and I recently reminded you of how the scientists feel about those. But I knew from the start I would never be able to make them completely happy. And the committed theologian will likewise not be pleased. However, I have not left your acceptance of my ideas totally to a matter of faith. I've tried to balance both sides of all equations, including the one faith has with evidence; and *Harmonic Creation* does provide us with some testable predictions. One clearly concerned the remaining resonant frequencies in the Great Pyramid of Giza. That was perhaps the biggest limb I climbed out on, because someone does know what they are and someday may release them. But I feel the most notable discovery could be the four resonant frequencies at the Big Bang. After all, according to *Harmonic Creation's Principle of Harmonic Alignment* they had to be there, and the evidence for them could be within the CMBR. Even with the creating four frequencies spanning the macrocosm and the microcosm, there should be evidence for all four within it determined through the same connective process of harmonic multiplication and division that allowed Susan Alexander to bring the frequencies of DNA within the range of audible sound. I'm not claiming there are only four frequencies, but four discernible tone centers – as was evident to me when analyzing the frequencies Ms. Alexander found in the four DNA bases. And once determined, though not necessarily with the same root, do they then also follow the same music intervals as those within DNA and the Great Pyramid? Not only would they resolve the coexistence of Consonance and Dissonance, as well as the former being the ruling principle, but they'd clearly establish God's providence in providing them. These are exciting prospects indeed.

With all this talk of multidimensionality, you may still be wondering how what I have described applies, or, for that matter, what multidimensionality even is! If so, I can certainly understand your puzzlement. That's a question even the scientists involved with *String Theory* have a difficult time answering, since, although the existence of extra spatial dimensions is easily handled mathematically and without which strings couldn't work, our minds have evolved processing only three. There are some clever, interactive graphics that help to make the point on the PBS web site for "The Elegant Universe." However, it is Brian Greene's explanation on the program that I think offers us the best way to understand and apply it to my premise. He says that what extra dimensions represent are actually degrees of freedom – independent directions in which anything can move. He refers to them as Up/Down, Left/Right, and Forward/Reverse. For me, that serves as a vindication of my effort to create a model for the energetic nature of the Universe based on the balance of word-energies. Now, consider what those word-energies mean in terms of geometry. They're the perpendicular X, Y and Z axes of Cartesian coordinate systems. While they can be used to represent a specific location, it must be within a particular frame of reference, since the rotation of coordinate systems is infinitely relative. Though we understand rotation as occurring in 360° around each of the three axes, again, those degrees can be subdivided, and subdivided, etc., etc. So, rotation presents us with the same issue of infinity as does linear displacement. In the three dimensions of tangibility, we generally find a quantity at which further subdivisions for either length or rotation are no longer useful or even logical. Still, the point must be made if we don't want to limit ourselves to finite thinking. And somewhere within that infinite range of values, the fixation of our reference coordinates must be made.

Nonetheless, once your system of coordinates is fixed in such a way as to provide a frame of reference for a location within it, that point establishes the end of a vector with its origin at the intersection of the axes. And that vector can be described geometrically as a diagonal in each of the three planes formed by the axes of that system. (I discussed this on p. 389.) So, even though you may not be moving exactly along one of the axes, your movement is still understood in terms of components on those axes – still in terms of three dimensions.

Now for the big leap into multidimensionality. Imagine that this movement along a diagonal is no longer in those three dimensions but in a new one, a fourth, separate from the other three. It is a dimension we can't see from our three dimensions. The notion is not as wild as you might think, and occurs in the same way that a circle will only appear as a line if looked at from the side. (Again, this idea was illustrated in the text, with the example I used of a spinning plate on a pole, p. 391.) Granted, it's not the easiest thing to visualize, but from what I can make of it, that is essentially what the mathematicians are doing each time they add another dimension to their equations. Each new dimension is adding an additional degree of freedom – an independent direction in which to move.

You may ask why we can't see them during the normal course of everyday life. For one thing, I'd say we don't need them to function in tangibility; for another, we're too big – we conform to different physical laws. Or, their disappearing act may occur simply because so little of infinite possibility can adjust to the limitations of finity. As you approach infinity things get very strange. Einstein showed that for time through *Relativity*. As matter approaches the speed of light – the limit of the speed at which energy can move in three spatial dimensions – its volume goes to zero, its density goes to infinity, and its clock stops ticking. That takes care of gravity, the force of the

enormous. The string theorists encounter similar issues with the other three forces – the forces of the minuscule. As matter gets closer and closer to the Planck length, it needs more and more dimensions – greater degrees of freedom – to exist. Greene demonstrates that by playing a movie of himself about to be run over by a car. The only way he can avoid collision is to move out of the plane of the 2-D screen on which it is occurring and into a third dimension. So, as matter gets smaller, it has to find higher and higher dimensional planes of existence to avoid conflict – a crash – with the activity of matter in the lower planes. They are higher dimensions indiscernible to anything much bigger than strings, and yet they are required for their existence.

The scientists are forced to stop at the Planck length because that is all the rules of physics will allow them. By the time they've gotten to within a few orders of magnitude of that distance, the size of the strings, they've required ten dimensions at least. But I am not limiting myself to the Planck length because it's still not microcosmic infinity. Same thing happens for the speed of light. Time is zero at the speed of light. If you were sitting on a photon, time wouldn't be moving. And yet, theories postulate the existence of energetic entities that can travel faster. That's a scary thing for Science because it seems to imply conditions in which time is not just zero, but may be going in reverse – where past, present and future are indiscernible. In both cases – space and time – we have entered a domain reserved for God.

How does this apply to my envisioning the compaction of distance? I began by thinking of it as occurring in three dimensions, as scientists have with the matrices they use to illustrate the point locations of strings. But I soon got the sense that as you became smaller, you started to lose your connection to your relative frame of reference. As I said before, you wouldn't know where a Planck length began or ended, or which division of which interval you were a member of. Your position on your diagonal has become a position on a diagonal in a relative frame of reference. Essentially, you have moved off your system of coordinates and into another – an additional degree of freedom. But that relative frame would contain a dimension apart from your original ones, and so only be relative in the sense that it would have a reflection on your old frame of reference. Thus, though it would be apart from your original frame of reference, it would be intrinsically connected to it. And as you get smaller this continues to happen – since greater numbers of dimensions are needed to avoid conflict with whatever else is there. Each time, you find yourself in a place where you need more coordinates to describe where you are. And since these divisions never end, neither do the extra dimensions their frames of reference need. I don't know for sure if this is the way it's pictured by string theorists, who use models that have dimensions curling within each other to visualize it, as on the NOVA series. But the scientists on the web site acknowledge this may not be the truth in terms of what is actually occurring, so I feel comfortable with my vision.

Each dimension of space has provided an additional degree of freedom, another coordinate. Now, if we follow along with the reasoning of any point in 3-D space as being reflected on each of its three axes, the same thing occurs on each added axis for a point in 4-D, 5-D, 6-D space, and so on. But we can only discern its reflection on our three. Practically, by this I mean we can't see it for what it is, and only have an awareness of its existence by whatever effect it may have on us – be it a string or an angel. I feel this also happens for time, which earlier I noted scientists seem to be overlooking. Consider the logic of it just in terms of space. At every point in the horizontal event-line you have a vertical event-line. As those intervals between points on the horizontal go to microcosmic infinity, the vertical goes to macrocosmic infinity,

something that can only be done by adding extra dimensions. Now consider time. As you approach the infinitely short on the horizontal event-line for time, the vertical event-line becomes infinitely long, something done only by adding more moments. This is because unlike the three dimensions of tangible space, there is only one of tangible time. No matter where you are or how big, the same amount of linear time has passed since the Zero Moment. For time to then be simultaneously infinitely short and long, the *never* of horizontal-linear merges into the *always* of vertical-cyclic. It is then in the vertical-cyclic where past, present and future are indiscernible – where infinite light marks the extreme of how fast energy can travel. It is the same vertical-cyclic from which the horizontal-linear was born, and it is the Eternity of zero tangible time and the Infinity of formless tangible space that forever remains the constant in the Universe – its Absolute Frame of Reference – God.

Why do I keep bringing up God in an essay whose focus is scientific? I don't see how it is possible to do otherwise. I believe many scientists know in their hearts this is the direction their discoveries are pointing, but acknowledgment is precluded by insistence on evidence. Even Einstein, though he disavowed a personal God, seemed to sense Who ruled the realm in which might be found a theory of everything.

I've made the claim that the *Quadralitic Cube* serves as the paradigm for everything from the infinitely large to the infinitely small; I can now add to that the presumption of doing so, as hinted on p. 798, in all dimensions. As we look at it in the three of tangibility, the ability is clear now that we understand how any additional dimensions can imprint components on them. And through the *Principles of Analysis and Synthesis*, the converse is true! But you may say, how can that be? These extra dimensions exist only in the infinitely small. Not so. The most recent revolution in *String Theory* was sparked, as noted before, by Edward Witten when he proposed an eleventh dimension that would apply string principles to 2-D and even 3-D and higher membranes. His model, called M theory, thus hoped to tie together the five disparate theories through these membranes, which, given sufficient energy, could grow to the size of the Universe! Strings could go from Microcosm to Macrocosm – another key balance in the *Theory of Harmonic Creation*. That macrocosmic strings might exist should come as no surprise to any person who understands the *Principle of Balance*. If a dimension exists in the microcosm, it has to exist in the macrocosm, as well.

The existence of extra dimensions is allowing scientists to travel a road that may lead to the eventual unification of the four forces, as well as any others they might discover – which theorists see as a real possibility. But as I said earlier, something is still missing. Couldn't there be things in those extra dimensions other than as an aspect of physical evolution and the harmonics of *Duality*? I'm talking now about spiritual evolution – the harmonics of *Triunity*. And while these harmonic evolutions can be considered as separately occurring, there is an intrinsic connection that is simple to understand. If you were at the 12th harmonic, could you discern if you had gotten there by multiplying 4x3 or 3x4? Only if you went back to the *source*.

So, let's reflect on that *source* more specifically. Theorists depict their strings as submicroscopic energetic entities that can exhibit the properties of all forms of force and matter simply by their variations in vibration. At that scale such vibrations need at least six more spatial dimensions in which to function. Still, scientists seem to model them as having some sort of tangible shape, and thus a matter-like quality. The point particles of quantum mechanics and deformations of field theory do likewise, but as such they become subject to the problems of zero dimensions as volume goes to zero. By allowing strings to manifest as entities with at least one

tangible dimension that can be either open or closed, the singularity problem seems to be resolved as these entities take on mathematical characteristics Ed Witten describes as fuzzy. In this way, *Relativity* and *Quantum Theory* become unified. Nonetheless, while these entities take on their identity through vibrational variations, the focus for the study of the entity itself seems to be on its tangible shape, as well as its ability to achieve movement in and out of the extra dimensions.

Now, while this model may certainly serve the physical side of the balance between force and matter, even in a physical sense it is still at the low end of the multidimensional spectrum. And, the spiritual sense is nowhere to be found. But I feel that to best understand multidimensionality it should be considered in an infinite sense, and when you do so I don't think it can be as the movement of a particle alone, no matter how it is theorized to exist. You need to consider movement as it is known through the balance particle has with wave. This balance is fundamental to all 3-dimensional existence, and as the physical reflects the spiritual, it must also be for higher dimensions. But as you approach infinite dimensions, only wave is in actuality.

Let us then consider movement strictly as a wave knows it. When a medium is involved, it occurs longitudinally in a wave as pressure – the physical side of Vibration and Force. And that movement is parallel to the propagation of energy. Yet, there is no large scale movement of matter – only energy. So, even in multidimensionality I think it can be included. The medium may not exist as our 3-D world knows it, but as whatever would allow for this movement in the dimensions beyond. And string theorists are pursuing strings to find the answer to the riddle of Dark Matter – that mysterious, non-detectable, 90% of the matter in the Universe. The other way waves occur is transversely, unconstrained by the need for a medium and unaffected except by gravity. Their movement is perpendicular to the propagation of energy and occurs not through pressure, but oscillation – the spiritual side of Vibration/Force. And these two movements are intimately related. Consider the balance of Light and Sound. Light is an electromagnetic transverse wave. But transverse waves can also be mechanical, as in vibrating strings, which produce sound pressure waves in the same direction as the transverse displacement – perpendicular to the oscillating source. So, my inclination is to refer to movement into extra dimensions as being vibrational. Though we may talk of a particle as doing the moving, the movement is wave related. Of course, given the duality of Wave/Particle in *Quantum Theory*, the differentiation between them is itself “fuzzy.” But beyond 3-dimensional materiality I feel it is best to think of microcosmic higher dimensions in terms of waves with deformations however they may occur in those dimensions – a subject now worth considering.

When the *Theory of Harmonic Creation* was developed, *Wave Theory* played a critical role in allowing us to construct our harmonic model. A second principle played a likewise critical role, that of *Resonance* in electric circuits. It allowed us to apply the harmonic model we'd constructed to the evolution of **Q** and thus to the Birth of the Universe. But it is the phenomenon of *Resonance* as it applies to *Wave Theory* that has a profound impact on our present discussion. That is the ability of waves to communicate information about themselves to one another through *Harmonic Alignment*, and I believe this can be said regardless of the number of dimensions in question. And you'll recall that in my main presentation the energetic balance to the microcosmic Dark Matter of *Quantum Physics* – Dark Energy – was the macrocosmic communicating glue of *Relativity* that allowed the former, the messengers of information, to function as a cohesive unit (pp. 449-450). Now, one of the questions string theorists are trying to answer is if the relationship of microcosm to macrocosm

applies in multi-D. My answer is it does, but not just in the 3-D form of M Theory. We experience three large spatial dimensions because they are the ones our tangible Universe needs to manifest as the low end of the spectrum of energy and matter. The others are microcosmic to us because it is through the microcosm that we have been able to arrive at a logic for their existence. But within their harmonic existence, they are just as macrocosmic as ours are. The point that to our frame of reference is somewhere within the Planck length, takes on a real form in those extra dimensions.

Plus, couldn't our relationship to them through the microcosm also be because it is in the microcosm that the transition between Realms occurs? This is not just in terms of energy, as is needed for the *Law of Universal Use*, but for the information that can serve to accomplish it in ways too subtle to imagine. What does it really mean to have access to, and then receive, everything we need, even when we don't realize we need it? Psychiatrists explore dreams as doorways to repressed memories. But haven't you received in a dream the answer to a problem, a sudden inspiration, or perhaps even a premonition of a future event that came for your greatest good, maybe to avoid a disaster? I certainly have for all three.

And ponder this if you will. In the main text I spoke of the possibility of Heaven and Hell as being real places (p. 557), not just states of bliss or misery here on Earth, though they can certainly be that. This study of what I've termed *Philosophysics* is based on the balance of word-energies, with the understanding that those words represent the energy in the actual experience. We've all had tangible experience of Good and Evil in our world, but intangibly they're more a mystical conjecture. Yet, Good and Evil as intangible word-energies were shown on p. 39 to form by combining the *Spiritual* and *Physical Models*. Is it not possible then that the word-energies of Good and Evil, Heaven and Hell, have manifestations in dimensions beyond tangible limitations, where such intangible intersections are harmonically real?

From thoughts of the source as it applies to *String Theory*, let us now move to consider the *Ultimate Source* – God. We've talked of God as being at the top of an infinite range of frequency values, but the impulse is to think of those frequencies in a tangible sense. While existing in all frequencies, it is actually into the infinite dimensions where one must go to see God as their *Source*. These vibrations then get reflected into the lower dimensions, ending with our tangible three. This parallels our understanding of the *further levels* of the *Quadralitic Cube*, where each *further level* exists in the context of those before. And they all begin with the Unity of God. Frequencies in the higher dimensions are able to resonate in vibration with ours because what all frequencies contain, regardless of which dimension they're contained in, is the relationship they have to one another through harmonics. In other words, higher-dimensional frequencies are harmonically related to those in the lower through *Analysis* and *Synthesis*, a process similar to the vector application cited earlier that showed how higher dimensions can imprint on the lower. And as was discussed in *Footnote 169*, to have the greatest influence on a fundamental in the Physical Realm, the advantage goes to the highest frequencies. Now we know that those don't stop in our tangible three dimensions, and it is only God, at the highest frequencies in the highest dimensions, that can have that kind of affect on everything.

It may be best if I leave you now to ponder on your own what I've shared with you. As I insinuated in the introduction to these essays, we are still at the beginning of this exciting trip into the *realm of 21st century possibility*. But before I go, there is something I can add that will tinker with your imagination. When asked if extra dimensions were real or merely the things of mathematics, Ed Witten replied that he

felt they were real. I feel likewise. But while his belief is based on his faith in the mathematics, formulas that are experientially real to him, mine is based on a faith in something else, experientially real to me. Is there something that exists in the other dimensions, which are apart from ours but with which we constantly and unknowingly interface and to which we may occasionally be shown a portal? Twice (that I'd care to share for now) such a thing happened to me. I mentioned the first in my *OVERTURE*. It was an experience of great joy and peace, and the memory of Jesus hugging me in the midst of all those Beings of Light is still vivid. At the time, someone unaware of all the details said I'd had an out-of-body experience. But I never felt as if I left it, rather, that it had been occurring in another place exactly where I was. I understand now why I felt that way.

The second, however, was an experience of great sorrow and suffering, and its memory is just as vivid. I realize that by recalling this I may lose all those scientists who have come along for the ride; but I've never held back on what I've perceived to be as truth, regardless of the personal impact. I hadn't seen the movie ***Pearl Harbor*** while it was in theatrical release, and decided to watch it one night on cable. As the bloody battle scene unfolded before my eyes, I became overwhelmed with a feeling of sadness, not just for what was occurring on the screen, but in a sense of experiencing that sadness as a real presence around me. It was a sadness at the level of soul, and suffering at the level of heart – an energy engulfing us and yet one we couldn't see. This was more than energy as a field, but energy with personality, real souls in turmoil. I felt their suffering, and the tears poured from me. Now I understand that, too. And I know that if there is a Day of Judgment to come, or a purification that has to take place before we can have a *Paradise on Earth*, their sadness and suffering has to be resolved. I believe those souls can only find peace if their lives serve a purpose. We had first-hand experience of that recognition in the aftermath of 9/11. It's a pity how quickly such awareness seems to fade. As long as Humanity keeps adding to the suffering in the dimension containing it, their reason for enduring what they did will never be assuaged. We will have given their suffering a purpose only if we learn our lessons and change.

Are those other dimensions real? Decide for yourself, not through what I say but through your own exploration. There is one experiment that is sure to work. Change your own way of going about the business of living and see what happens. You already know how I cast my vote. They are more than just mathematical degrees of freedom that make possible the vibration of microcosmically small entities of energy. As the microcosm of those dimensions expands into the macrocosm, they become as real to the things within them as our dimensions are to you or me.

Some may say that what I experienced was a fabrication of the mind, and even a lunatic will appear fully conscious in the midst of a delusion. But I know I had not left my body, that I was wide awake as I sobbed in front of my TV, and that each was an experience of something tangible as we would understand it and yet was not. Were they real people I met or merely my mind finding a way to put a form to the experience? It is an answer I cannot offer with any evidence that would satisfy you. And it is within the Path of Mind – the *1st level Tangible Spiritual Realm* – where these dimensions begin; so, perhaps it is the mind that we need, not just to put a comprehensible form to the experience, but for the experience itself. All I can say is that I consider both experiences as gifts, the joyous and the sorrowful, because they made me aware of things I had not known before, and they changed my life forever.