

Is Consciousness the Unified Field?

Transcript of a presentation by John Hagelin

Introduction

Good afternoon. It's been an amazing conference so far—we're just getting warmed up. I'm going to be asking the \$64 question: Is consciousness the Ultimate Reality? Is it the unified field glimpsed today by superstring theory? To really address that question, we need to remind ourselves about what we mean by consciousness, what we mean by the unified field. I'm going to take those questions in the opposite order.

The Unified Field

The unified field is the culmination of centuries of scientific investigation into the nature of reality. This one very simple chart summarizes everything we know about the universe. Although the details may look complex, the overall structure is pretty simple. It shows the universe fundamentally unified and superficially diversified.

Physics has been about exploring deeper and deeper levels of reality. That inward exploration of the structure of physical reality began with hundreds of years of Newtonian physics. It actually began long before, but that's the domain we call classical physics—physics that explores the macroscopic sensory world of day-to-day perceptions.

That understanding of the universe wasn't good enough. It does not work, for example, to understand the atom at all. So a whole new language, a whole new logic, a whole new mathematics had to be developed to properly characterize and understand the behavior of atoms and molecules. That is quantum mechanics, which we've heard a bit about in the conference already.

The quantum mechanical world of atoms and molecules is not just smaller but completely different, radically different than classical objects. Midway through the 20th century, there was a complete reformulation of quantum mechanics to what is called Quantum Field Theory. Quantum Field Theory is yet a newer language of nature—subtler, more profound, necessary to understand the world of elementary particles more fundamental than atoms. They behave differently partly because this is a relativistic world, a world of fast-moving particles close to the speed of light, and early quantum mechanics was not compatible with Einstein's relativity.

This is a beautiful theory, seemingly infinitely accurate as far as experiments can tell, very profound. It sheds light on some of the puzzles of earlier quantum mechanics, particularly the relationship between particle and field, particle and wave. But we're not going to spend much time on it today because the smart money, certainly the attention of the theoretical

community, has moved on to unified quantum field theories, initially based on supergravity theory and then the more successful superstring theory and M-theory.

These theories are extraordinary. They fulfill Einstein's lifelong quest to discover the unified source of the diversified universe, the fountainhead of nature's intelligence, the origin of all the streams of the laws of nature that govern the universe at every level. The mathematics of these theories are not just beautiful—because you could say that was probably true even of quantum field theory—but are staggering, mindblowing, unbelievable. Physicists like me aren't particularly fond of mathematics; that's why we're physicists and not mathematicians. But this absolutely blows your mind.

The Structure of the Unified Field

We're not going to talk about that either, but we are going to get a little bit of a feeling for the unified field by looking at its basic structure. The unified field is an ocean of pure existence, an ocean of pure abstract intelligence at the basis of the universe—universal intelligence. But this ocean of intelligence isn't dead; it's not lifeless, it's not inert. Due to the quantum principle or uncertainty principle, it is teeming with unmanifest energy. It is shimmering, reverberating within itself, and in fact so incredibly dynamic, so infinitely energetic that it's erupting and boiling within itself.

In the process of this dynamical self-interaction, this boiling of the absolute, it erupts in a foam of effervescent bubbles like ginger ale fizzes. By the way, it's called vacuum energy, zero point energy, or dark energy today. It may not surprise you to learn that these bubbles aren't ginger ale actually. They are actually infinitesimal elastic loops called superstrings.

That's amazing—that the universe boils down to a sea of rubber bands. A rubber band is actually an interesting thing, lives an interesting internal life, relatively speaking, relative to a particle, that is. Because the earlier concept of a particle—particles can't do anything except move. You can throw a particle and it'll go from A to B, but that's all they do. In comparison, the life of a rubber band is more interesting because you can throw a rubber band and it will also move, but they vibrate within themselves.

If you're a particular type of mathematical physicist, you can count the different ways a rubber band can vibrate to the left and to the right and longitudinally and laterally and transverse. These superstrings actually live in 10 spacetime dimensions, including one of time and nine spatial dimensions. This gives you a lot of wiggle room in which to wiggle, so there are lots of different ways these super bands, these rubber bands, can vibrate.

When you do the math and you calculate those different frequencies, each vibrational state has a different energy, a different frequency, represents a different tone. When you count those different tones or frequencies of vibration of this universal intelligence—those

frequencies which mean those energies, which means those masses (because energy and mass are interchangeable concepts in relativity theory)—those different masses correspond to the known particles of nature.

So in the early days, we had the idea that there was a graviton, a field of gravity. There's a photon, particle of light. There are particles that have to do with the nuclear force and the radioactive force, and then there are the particles like the electron and the quarks and the neutrinos and such. It was rather a hodgepodge, an arbitrary world in quantum field theory. But superstring theory explains all those particles as the inevitable predicted consequence of the unified field in its natural states of vibration.

The so-called material universe isn't material at all—it's just the vibrational tones, the natural reverberant frequencies, the music of the absolute. So it's one theory, one universal field that supports different waves of vibration like an ocean supporting smaller waves and higher frequency waves and slower, lazy waves representing different energies, different mass particles.

In a sense, it's extraordinary that one relatively simple concept of a quantum rubber band—or more precisely, a universal ocean of intelligence of being that percolates rubber bands—that one concept explains the details of our universe. So the picture is really more like this: you have this universal entity, this abstract, unmanifest, silent ocean in waves of vibration rising in waves of vibration that appear as the universe. All of the ingredients that we see in the universe are just striking the different tones of the unified field.

Beyond Strings: Multiple Universes

One more point before we end the physics lesson and come back to consciousness: In addition to these superstrings that percolate from this ocean of pure intelligence, pure existence, pure being, the unified field also has the incredible capacity, incredible capability of percolating entire universes. These universes begin as baby universes, infinitesimal bubbles, but lots of them—like ginger ale, about 10 to the 144th bubbles per cubic centimeter per second. That's a lot of baby universes.

Most of them are duds. Most of them pop, they disappear in a blink of an eye, but under the right circumstances, some, like our own universe, start to grow exponentially. It's called inflation, and they spawn galaxies like our own Milky Way galaxy and billions of others. Each galaxy, like our Milky Way galaxy, has hundreds of billions of suns, many, most with planets, perhaps many of those planets teeming with life, as is our own.

I just wanted to mention that to give a taste at least of the immense intelligence of the universe and this universal ocean of being, ocean of intelligence at the basis of it all. It governs not only Earth with its seven million mutually interacting species in this intricate

web of mutual interdependence and mutual nourishment, but billions of planets in our own Milky Way galaxy and billions of universes that, probably as of recent measurements, are probably an infinite number—an infinite number of galaxies. Huge. That's a little bit about nature's organizing intelligence.

Understanding Consciousness

What about our intelligence? What about consciousness—us? Well, the concept of meditation sheds light, sort of new light I think, on what consciousness is. Meditation, classically understood in the yogic sense that gave birth, for example, to the Buddha and the techniques taught by Shankara and so forth, was about leading the mind effortlessly within—taking the outwardly directed, active mind typically directed outward through the senses and turning that attention powerfully within to experience deeper and deeper levels of mind, quieter and quieter levels of the thinking process, slipping beyond thought altogether to experience pure being, pure consciousness, purely consciousness beyond thought, beyond sensation, beyond the intellect, beyond emotion—pure abstract unbounded awareness.

According to the Yoga Sutras, according to the first verse and the second verse of the Yoga Sutras: "Yoga, the experience of unity, the non-dual consciousness, is the complete settling of the activity of the mind. Then the seer is established in the self."

It's interesting that Patanjali describes consciousness as the self because we might think of our self as something quite different—something six feet tall, something four or five feet wide, something this or that, something to do with beliefs, gender, race, religion. But according to Yoga Sutras, the self is the seer within the field of consciousness, the non-changing, the immortal, the unbounded, the knower. We all have a knower or we wouldn't be knowing, seeing. But we are different from the seeing, different from the knowing. We are consciousness, our own subjectivity.

This experience of pure consciousness is a fourth state of consciousness, the meditative state. In the literature of yoga, there's the expression: "The peaceful, the blissful, the undivided non-dual is thought to be the fourth. That is the self that is to be known."

It's not just a state of subjective experience; it has in the brain its corresponding measurable coherence. At every level of the settling of the mind, the electrical activity of the brain, the firing of the neurons in the brain, looks completely different. Outwardly directed activity, active mind, concentration, focusing, quieter levels of self-reflection (as in, for example, what's called open monitoring in the scientific literature, but self-reflective, self-observing Vipassana-style meditation or mindfulness is generally in this category)—completely different style of functioning of the brain.

Going beyond thought completely, now having nothing to do with thought, no mind, no intellect, but pure unbounded universal abstract awareness, pure existence has its own completely unique style of brain functioning. The meditative state is characterized by not just the frequency, which is Alpha 1, but the uniform or synchronous firing across the total brain.

That's from a brain standpoint amazing. It's absolutely amazing because normally the brain is not that coherent. In case you can't tell that in waking consciousness, even sitting restfully with the eyes closed, if you look at the electrodes on the scalp as you measure the electrical activity of the brain in waking consciousness, there's not a great deal of coherence or communication or correlation between different parts of the brain. Some neighboring parts of the brain are talking to each other, but mostly the brain is functioning in a rather asynchronous and chaotic way.

This is the same subject. Learn to meditate, three months later in the meditative state, and you see something you don't see in hypnosis, waking, dreaming, sleeping, or drug-induced states. You see the whole brain functioning in a completely synchronous, coherent way. That is one of the signatures of a new state of consciousness, fourth state of consciousness, samadhi, the meditative state.

Now, in addition to simply being interesting, for practical purposes, orderly brain functioning is a good thing. It correlates with intelligence and creativity and learning ability and moral reasoning, ego development, psychological stability and emotional maturity. Everything good about the brain depends on its orderly functioning. When people experience samadhi regularly, you see marked improvements in every measure of human intelligence, highly significant improvements, which suggests that transcending is good for you. It's also very good for the health, but I won't go into that. Something real is happening, something very different is happening, something rather radical is going on in the meditative state, state of samadhi.

Relationship Between Inner and Universal Intelligence

But back to the first question: What is the relationship between that inner experience of unbounded awareness (when the mind, the intellect is temporarily left behind, because transcending can be a rather fleeting experience—as the Rosicrucians like to say, "One split second in eternity, it's a holy experience: 'Oh my God, what was that?'" It's radical, but it's universal and it's unbounded and it's infinite)—but what is the relationship between that field of intelligence within, at the basis of thought, and the intelligence at the basis of the universe, our Atma, our self, the observer, the seer within, and Brahman, the unified source of the entire universe?

A physicist might at first say: "Forget it. How could there be a relationship? Because this is purely subjective and that is purely objective, material stuff." But at this conference, we probably know by now that quantum mechanics, quantum field theory, and the unified field are non-material realities—absolutely non-material. It's not a material source of the material universe; it's a non-material source and pure potential, pure intelligence. And intelligence is a perfectly fair word because the deeper you go into nature and the more you explore the laws of nature (for example, at the level of electromagnetism, at the level of the Nobel prize-winning electroweak unified theory, grand unified theories, and super-unified theories), the more concentrated the intelligence becomes.

The very simple mathematical formula that describes the structure and functioning of unity contains within that compact form all the intelligence, all the laws of nature governing life at every level—Maxwell's equations and quantum chromodynamics and the electroweak theory and theory of general relativity. All of that is found in most concentrated form here. So the unified field is the most concentrated field of intelligence in nature—and dynamic intelligence. And dynamic intelligence is consciousness.

You can take that sort of qualitative relationship or discussion quite far in philosophy. Philosophers of science would love this dialogue. For a quantitative physicist or quantitative scientist, anything that could be related to semantics is not well trusted. So I'm going to touch upon arguments that you can sink your quantitative teeth into to establish the identity of our own inner intelligence and the intelligence at the basis of the universe. I'll do this very quickly, but if we tape it, if you're interested, you could go back and try to make sense out of it.

Quantitative Correspondence

Quantitative correspondence between pure consciousness and the unified field—let's look at them quantitatively. What does that mean? Well, we have a unified field, but we also have its structure of vibrations, its calculable frequencies. These fundamental frequencies, the natural reverberant tones of the unified field—just dial it down just a tiny bit—those frequencies of the unified field are the elementary particles and forces of nature. That's all they are. They're just the fundamental reverberant frequencies of unity, and we know what they are.

There's the spin-2 graviton responsible for gravity, the spin-1 forces like electromagnetism, the nuclear force, spin-1/2 particles like electrons and quarks, the spin-0 Higgs, which has finally been seen. All of these different vibrational tones of the unified field are well-mapped, well-known, and calculable.

But what about consciousness? What emerges from the abstract field of consciousness is thought, physiology, matter. When the awareness settles, all of that dissolves into pure being. But getting familiar with the process of emergence and submergence, emergence and convergence, emergence and submergence, you get familiar with the fundamental tones, the vibrations or waves of consciousness rising from pure silence into activity.

You can enumerate those waves, the fundamental frequencies of consciousness. Initially, there are three as the pure knowledge, pure knower, pure consciousness is seen as the knower, but also that which is known, the object, and the dynamic relationship between the two. That is Sat, Chit, Ananda—that is the Holy Trinity, that's the three-in-one structure of unity.

But the moment you have three, you automatically have the relationships among those three. The number of relationships—well, skipping the mathematics and the group theory—there emerge really a total of eight entities from the three, including something that you can call in the Vedic literature Vata, Pitta, and Kapha, which means pertaining to ego, pertaining to intellect, pertaining to mind, and then the five fundamental elements—Akasha, etc.

Well, that's kind of a coincidence that you get this three-in-one emergence of this from the ocean of unity both from the self and from the superstring theory. If you look at it, it really is a very striking structural and functional correspondence. Because both in the world of physics, in today's supersymmetric world, you have the five spin types, the five fundamental categories of matter and energy responsible for the universe that are related to each other in these three doublets or these pairs, which unites, for example, the spin-2 with its nearest spin neighbor, spin-3/2, graviton, into one more holistic entity called the gravitino superfield, and so forth.

But these five fundamental elements are also fundamental in the science of consciousness. And what we see feel emerging from the ocean of consciousness on a subjective level—this is what yoga is about. The Yoga Sutras of Patanjali are about experiencing the ocean of pure existence and then stimulating that ocean into waves of vibration and experiencing the fundamental building blocks of mind and creation. These five elements (Akasha, etc.) are bound together in exactly these pairings and only these pairings, which are called, not superfields, but pranas. These are the fundamental, most fundamental three ingredients of the universe.

This is not just numerically coincidental. What are they? What is Akasha? What is gravity? Gravity is curved space. Gravity is purely a manifestation of the curvature of space. So space is not just nothing; it's a relativistic fluid. It curves and it flows according to Einstein.

But what is Akasha? Space—not as nothing, but space as subtle substance, space as relativistic fluid. And similarly with all of these.

It's interesting because when people maybe hear about the five elements, which you'll find in the Vedic literature and in the Chinese literature, the typical response of a modern scientist is to say: "How quaint, how delightfully primitive." But after all these years of scientific exploration, we are back to the fundamental five, and they are the same five.

So anyway, we have this correspondence between the vibrational expressions of consciousness and the unified field, the so-called internal string modes. Without going today into a huge arugula roll, which I love to do, the structure of the superstring is a series of harmonics of natural internal reverberant frequencies.

When you look, using M-theory, at the sequential process of emergence of the unified field preparing to assume the role of the big bang, there are a series of somersaults. The initial eight-vibration superstring has eight fundamental vibrational degrees of freedom.

Maybe I'll explain that much. Superstring theory lives in 10 dimensions—one dimension of time, nine dimensions of space. So you have strings, thinking very concretely because it helps, moving and vibrating in nine dimensions of space. If you want to excite a vibration in a string, you strum it. How many ways can you strum a guitar string? Well, moving the string back and forth this way doesn't produce any sound. It doesn't count; it's not a vibrational mode. But you can strum the string down, and it'll vibrate like this. You can pluck the string forward, and it'll vibrate back and forth like this. There are two perpendicular or independent vibrational degrees of freedom of a guitar string in three-space.

You put the guitar string in nine-space—there are eight perpendicular, independent degrees of freedom, different ways of strumming the string, giving eight fundamental frequencies. That is the basic vibrational music symphony of the superstring.

But life at the superstring is rich. When you add quantum mechanics to this, an incredible dynamics unfolds that, as described in M-theory, the superstring twists itself like a pretzel, the Yogurt-Y-shaped pretzel process, into what is called the heterotic string, which lives in 26 dimensions of unmanifest space, within which the string has 24 vibrational degrees of freedom.

And then something really amazing happens: You get rid of all of these embarrassing extra dimensions which don't exist in the relative universe by hyperspooling them or supercoiling them. Like this two-dimensional sheet of paper—presto, voila! It's one-dimensional. Magic! But all I've really done is I've spooled the extra dimension up so that you can't really see it from the back row. It looks like a one-dimensional sheet of paper like that. The extra dimensions of space practically disappear, but they're always there on a very fine scale.

Superstrings wrap themselves around these extra dimensions and can vibrate back and forth along these tubes, giving us extra vibrational tones, extra vibrational degrees of freedom. What happens is this $8 + 24$ structure of vibrations of the string in higher dimensions collapses to 64 fermionic and a total of 192 bosonic degrees of freedom in the $3+1$ -dimensional space in the process of creating the universe.

Anyway, there's a definite sequence here. If we had the time to go into it, we could look into the internal vibrational dynamics of consciousness—not emerging to become mind and body, but reverberating within itself. This is called Vedic cognition. Just like the Yoga Sutras are to learn how to excite and create the specific vibrational modes of consciousness responsible for the universe, there's something called Karma Mimamsa, which is all about learning to fathom in the unmanifest field of consciousness the internal vibrational dynamics of the self knowing the self.

When you do that, you find the same incredible structure. I should skip it because I'm going to run out of time before we're through, but the fundamental eight, which is okay—you get the sequential unfoldment of unity. Ultimately it's one, but one sees itself (because it is consciousness) as knower and the known and the process of knowing. The moment again you have three, you really have a total of eight because the relationships among those three, according to mathematics of quantum mechanics called the eightfold way both in physics and in yoga, really—those three immediately create the existence (conceptual, it's all conceptual) of eight.

Among those eight are the five fundamental elements: Akasha, etc. When those five are seen from the perspective of ego, intellect, and mind, those five become the seed of the five senses, five organs of action, and five gross elements (liquid, solid, gas, etc.). That gives you 24. Those are the 24. These are the eight of Vaisheshika. These are the 24 of Sankhya, and on and on.

But this whole process of unfoldment within consciousness of number giving rise to a more elaborated view of the same thing, and a more elaborated view of the same thing—in the universe it emerges. That's called Vedic cognition. That is the structure of the Rig Veda that you could look up, because those who see it and chant it and speak it—of course, it's been recorded by now—and it has this structure, and that's really amazing. It's just the tip of the iceberg.

The amazing thing also is that the human nervous system is as if hardwired, as if designed, engineered to reverberate in that structure of totality, in that structure of wholeness. So you look at the central nervous system and its 192 ascending and descending reticular formations or nerve endings—these are the gateways to consciousness, 192—and it allows

one of the many things that allows our nervous system, purring within itself, humming or reverberating within itself in a state of yoga, in state of samadhi, with no external disturbance. What gets created is this wholeness, this holistic structure of unity. The nervous system resonates in the structure of the unified field.

Field Effects of Consciousness

Well, that was one type of argument that allows you to start to see that when we talk about the unity between self and Brahman, Atman and Brahman, it's not just philosophy. There are really solid theoretical reasons for it and experimental ones. You're probably familiar by now of all kinds of fascinating long-range or so-called field effects of consciousness. The random number generator experiments showing global coherence. Another example, which is very statistically significant, is the effects of group meditation. When samadhi is experienced by many people, especially in a group, and the effects of group meditation on dissolving crime and social stress and social violence has been quite a big deal now in the industry for—oh dear, for almost 40 years.

What these experiments show—this is an experiment I helped conduct, but I was one of 27 authors, and getting 27 independent scientists to agree on the wording of any document is hell. Nevertheless, we gathered statistics on what was called the murder capital of the world back in 1983, Washington D.C., where there were large groups of meditating experts from all over the world who came to lend their nervous systems to this experiment and collectively meditate—yogic meditation, transcending meditation—to experience together the ocean of pure awareness.

As had been seen 52 times before, mostly published as well, there was, at the time the numbers became significant, a highly statistically significant drop in not just the crime levels as defined by the FBI part-one violent crime, but pretty much everything in the city transformed in the most amazing way.

I'll mention there's an addition to this research, which has become extremely strong by now and convincing, really even to any skeptic who's willing to actually read the paper because there are plenty of skeptics like Galileo that won't look through the telescope. But in any case, the correlation between the size of a meditating group in an area of conflict, like the Middle East during the peak of the Lebanon War, just looking at the raw data before any analysis has been applied, there's a correlation in progress towards peace. It rises and falls fairly observably even in the raw data based on the size of the meditating group.

Once you apply proper statistical analysis—and social science research is challenging, and I've really gained a bit of a respect for it having gotten involved with it—this is a highly

statistically significant effect. It amounts to an 80% drop in war deaths and war injuries in war-torn areas.

I should mention when that was first published in the Yale Journal of Conflict Resolution, it created a firestorm. It took two years to publish, for one thing. But once the analysis had been reviewed anonymously, which is a painful process, believe me, and many, many suggestions were implemented, the results were unchanged. Nevertheless, the editor wrote a note saying this article, the implications of it are so enormous, and frankly, the hypothesis so strange that a few thousand meditating experts embedded in the center of conflict could calm, reduce the societal stress and ease the violence, is so unexpected. They pleaded for other groups to go out and to repeat the experiment, which seven other groups did over the next two and a quarter years.

Every intervention, every group produced a highly, highly statistically significant effect. When you put them together—and there's a publication that analyzes all of these in an integrated way—the likelihood that this is a statistical fluke, that war and war deaths just stopped by accident during the days and weeks when the meditators were meditating, is tiny. It's tiny.

But the point for today's discussion is these are field effects of consciousness—long-range societal effects of individuals embedded in society. That is a paradigm-shattering fact. You cannot think of consciousness as purely the result of the neurological firings, the electrical impulses of the brain, because my firings don't affect yours at this distance. There has to be a deeper connection involved, and you won't find that connection at the classical level.

This means that consciousness is at least quantum mechanical. If you really try to make this work and explain these experimental results, it's not easy. But the more connectedness of us all at our core reality, which is one... Ultimately, there's only one consciousness in this room, and it is you, and it is you. But at that level, we are all one, and these experiments demonstrated it.

One of the things we're trying to do is build bigger and bigger groups in different places throughout the world, with the hope to create more coherence and more harmony in a world that, in my opinion, still desperately needs it.

Supernormal Abilities

And finally, by way of arguments, since the Superman movie is coming out next week, I wanted to touch on the idea of supernormal abilities. We have to ask ourselves the question whether ever in history—whether today or at the time of Christ or at the time of Shankara or at the time of St. Francis or St. Teresa, who are often seen rising in the air in a

state of religious euphoria—if any such supernormal, so-called ability has ever happened, that is extraordinary proof of this thesis.

Now, you raise such a hypothesis in different audiences, you get very different feelings. In an audience of physical scientists, no one would raise their hand probably if you asked whether Christ ever walked on water or whether anybody has ever levitated. In an audience like this, you might get the majority who believe that is possible. In fact, many of you who have experienced these things yourselves.

But if you accept as a premise that such supernormal abilities like levitation is possible, you are immediately driven to the conclusion that such abilities can only occur on the basis of conscious functioning at the level of the unified field, at the level of the Planck scale. For example, if you look at the structure of spacetime—and spacetime curvature is what's responsible for gravity, it's what holds us down, it's the downward curvature of gravity at our feet due to the Earth, which is holding us down—if you look at the emergence of spacetime from this ocean, the so-called spacetime foam which is the roiling and boiling of the unified field at the foundational level of creation, spacetime starts out looking multiply connected and very complex. But it smooths itself out as you average over space and time. The details get washed out, and the overall average is flat. That flat may be downward sloping in the vicinity of the earth, and that's that emerges due to the assumption that all of this activity, this boiling and roiling of the unified field, is random, is arbitrary, chaotic.

But if you could introduce some purposefulness to it, some orderliness, if it were possible to sustain a desire, to hold an impulse at that deepest, deepest level of thought, the deepest level of consciousness, you can easily upset the averaging process. Then what will emerge is macroscopic space may be curved up, in which case we would fall up and not down.

It's like that with all these abilities. If you take the possibility of entertaining a thought not on the chaotic, noisy, active thinking level, but at the deepest, deepest impulse of mind, as a desire just emerges from the ocean of consciousness, there you will see that a mustard seed of faith can move mountains. That's where the power of thought is. There's dramatic proof of this that led to the Nobel Prize a couple of years ago. That is that, yes, you can control gravity at that level.

So you may be aware of some of you of dark energy, which is propelling the universe into a state of expansion today, accelerating expansion. What is fueling that gravitational repulsion of space, or what's called anti-gravity, is this activity. If you can dial up the energy of the vibrational structure of consciousness at its source, you can increase the so-called

cosmological constant or the anti-gravity impulse and overwhelm the attractive effect of matter. So this is something we know works. It's working right now in our universe.

Conclusion

Putting that together and cutting it short: Based on incredible quantitative correspondence, based on experimentally known long-range field effects of consciousness, based on certain supernormal abilities when demonstrated, based on what we know and what we think we know—Atman is Brahman is the most parsimonious explanation. Pure consciousness is the unified field.

That's a big deal. It's a very big deal to say that yourself, your subjectivity, your inner being, is the intelligence that created the universe and indeed many universes. If that were somehow practically relevant, it would be amazing. Generally, it's not so practically relevant because in waking consciousness, we are utterly unaware of the self. It's there or we wouldn't be awake, but we don't see that. We see the objects, the thoughts, the feelings.

The meditative state, which is again radically different from anything in waking, dreaming, or sleeping, is the opposite. We sacrifice everything. We transcend all mental activity, all feeling, all belief, and just plunge into universal consciousness. It's a fleeting thing. You wouldn't want to live there. You might be tempted to live there—it's immensely blissful—but you'd starve eventually because that state of consciousness is transcendental alone. That's this fourth state of consciousness I mentioned before.

But that's not the end, of course. That's not why one would undergo a path of meditation, a path of regular transcending. The idea is by alternating the brain activity from active focus to non-focused, inactive, unbounded, specific to non-specific, the brain gets sufficiently flexible that that inner silence and unbounded awareness and maximum orderliness of brain functioning becomes permanent during dynamic activity, during sleep, during dreaming, during anesthesia. Once the light of life has really turned on, you can never extinguish it. That's called liberation or enlightenment because, although one experiences the upheavals of day-to-day activity, one is anchored in something that is beyond and so huge, bigger than the universe, that the ups and downs of life simply do not overshadow at all the continuum of bliss. The whole rise and fall of civilization in that state of consciousness is just an eye-blink.

I wanted to end with a slide that life doesn't stop at liberation, nor does it stop at 40 years old. It keeps on going, fortunately. What happens over time—I don't think there's a technique for this—but over time, living this state of unbounded inner awareness with the state of outer dynamism and alternating back and forth between the two, one becomes

more exposed, exposed not just to the surface thought but deepest, deepest levels of reality, deepest levels of creation, and even the celestial, most divine level of creation through the senses and then pure being.

So it happens—the appreciation of the outer universe continues to refine and evolve, and it becomes so incredibly near and intimate and dear that even eventually a spark of realization occurs: the big realization, the big enlightenment, in which case the self realizes it is all myself coming into it, seeing creation emerge from it, submerge into it, emerge from it, submerge. You see the dynamics of how the self, the superstring, expresses itself as particles and forces and thoughts in the universe so often that you realize: I am that, and that is me.

My last slide—beautiful, beautiful expressions of that in the literature. But ultimately, you can capture, encapsulate it in the single expression: "Aham Brahmasmi" (I am that). But I already knew that that was true even in mere liberation. Now I see that thou art that. In fact, all this is that, and that alone is.

Thank you.

[Based on a transcript of a video presentation by John Hagelin titled "Is Consciousness the Unified Field?"]