The Cosmic Equation Unifying All Opposites Paul Hague

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Abstract. The Cosmic Equation—also called the Principle of Unity and the Hidden Harmony—is the key that unlocks the innermost secrets of the Universe: what it is and its Grand Design. By unifying all opposites—including science and spirituality and mysticism and mathematics—it explains the root cause of conflict and suffering, enabling us to bring Inner Peace to our deeply troubled world.

This short essay offers a novel approach to the age-old question, "Why have we humans suffered so much for so long?" It suggests that the root cause of our suffering is a deep sense of separation, derived from being unable to realize that our True Nature is undivided Wholeness, never separate from the Divine for an instant. This sense of separation has been augmented by the tendency in the human psyche to identify with one of a pair of opposites, rejecting or ignoring the other.

For example, the sense of separation arises from being identified with the sex of our bodies, the colour of our skins, our nationalities or religions, including atheism, and our conceptual structures and occupations. Being cognitively and experientially separated from Reality has led to split minds. These last examples arise, in particular, from academic specialization and the division of labour in the workplace, leading to a fragmented view of reality.

We are thus inhibited from viewing our lives as an intelligible totality, preventing us from solving the immense problems facing humanity today, such as economic instability, climate change, peak oil, global water supply, species extinction, and population growth.

The Theory of Everything

Over the years, several individuals have attempted to heal the fragmented mind by integrating all knowledge into a coherent whole. These include Roger and Francis Bacon in the thirteenth and seventeenth centuries, René Descartes and Jan Ámos Komenský (Comenius) in the 1600s, and Charles Sanders Peirce and Ken Wilber in the USA in the nineteenth and twentieth centuries.

A number of physicists have also been engaged in this undertaking, seeking to go beyond the limits of their specialist disciplines, including Johannes Kepler and Isaac Newton in the seventeenth century and Albert Einstein and David Bohm in the twentieth, each of whom unified or tried to unify pairs of opposites.

In recent years, this quest for wholeness or unity has become well known as the Theory of Everything, defined by Brian Greene in *The Elegant Universe* as "a theory capable of describing nature's forces within a single, all-encompassing, coherent framework".¹ Indeed, a film titled *A Theory of Everything* was released in 2014 dramatizing this prodigious enterprise and was nominated for five Oscars in 2015. It is a

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biopic of Stephen Hawking, portrayed by Eddie Redmayne, who won Best Actor, and his relationship with his first wife Jane Wilde.

In the movie, Stephen told Jane when he first met her that he was a cosmologist, worshiping "one, single, unifying equation that explains everything in the universe". A few years later, when being awarded a Ph.D. for his extraordinary theory about a space-time singularity as a black hole at the origin of the universe, he told his professors that he was seeking, "One, simple, elegant equation that can explain everything." But "What is the equation?" Jane had asked Stephen when she met him. "That is the question. And a very good question. I'm not quite sure yet. But I intend to find out," was his reply.

The Principle of Unity

In my effort to develop a cosmology that could unify the nonphysical mental and psychospiritual energies working within us with the physical forces recognized by physics—gravity, electromagnetism, and the strong and weak nuclear forces—what was to become this simple, elegant equation emerged in my consciousness around midsummer 1980 as a form of insight. The primary purpose of this cosmology of cosmologies is to use systemic self-inquiry to answer the most critical unanswered question in science: "What is causing scientists and technologists, aided and abetted by computer technology, to drive the pace of scientific discovery and technological invention at unprecedented exponential rates of acceleration?"

To establish this self-inclusive map of the Cosmos as sound, objective science, I felt I needed a rigorous mathematical language in which to express it. To match the duality of physical and nonphysical energies, I sought similar patterns in mathematics and logic, at first experimenting with truth tables in the propositional calculus, the principle of duality in projective geometry, and catastrophe theory, which contain the pairs true and false, point and line, and smooth and sudden change, respectively. What I call today the Principle of Unity evolved from these mathematical structures as examples of this universal truth: *Wholeness is the union of all opposites*.

(However, in the end, I found that I needed very little mathematics in the all-encompassing, coherent framework or system of coordinates for the Theory of Everything, unifying all nature's forces, psychospiritual and physical. All I needed was the semantic business modelling methods that information systems architects use to build the Internet, as explained more fully in the essay 'The Evolution of Universals', the second of a trilogy of essays on conscious evolution.)

The Principle of Unity, as the fundamental design principle of the Universe, can also be expressed in mathematical symbols, which I call the Cosmic Equation, where A is any being, W is any whole, \cup is union, and ~ is not:

$$W = A \cup \sim A$$

In human terms, this equation represents Self-reflective Intelligence, the ability to see both sides of any situation, without any separation between them. This relationship is the key to Inner Peace and hence World Peace, the essence of bipartisan politics, which is a sign of strength, not weakness, as anthropocentric and egoic either-or thinkers generally believe.

When the creative power of Life presented me with the essence of this idea nearly thirty-five years ago, I realized at once that I had been given the key that would unlock the innermost secrets of the Universe that had puzzled me since I was a boy of seven in 1949. It was the most exciting moment of my

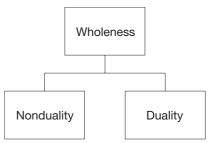
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life. As I have realized in the intervening years, the Cosmic Equation, at the heart of the Theory of Everything, does, indeed, explain everything that is explicable.

To understand this, we just need to note that the Principle of Unity represents the observation that whenever we form concepts we always form their opposites, as poles or duals, within the context of some domain of discourse, like black and white, past and future, female and male, hope and despair, beauty and ugliness, red and not-red, I and not-I, Love and love, Truth and truth, Wholeness and Oneness, and so on. In Reality, opposites can never be separated; they are just two sides of the same coin.

The Principle of Unity has no predecessors in the entire history of human learning. It emerges directly from the Formless Absolute, as the first form to be created, from which all other structures evolve through a complex process of bifurcation, terminating in Wholeness at the Omega Point of evolution its glorious culmination. This means that the Cosmic Equation, which has limitless explanatory and creative power, is a mathematical theorem that cannot be proven to be true from any set of axioms, such as Euclid's self-evident or assumed postulates.

Rather, the Cosmic Equation, arising from Oneness at the Alpha Point of evolution, is an irrefutable, universal truth, applicable in all domains of discourse. We can intuitively see that there is a primary-secondary relationship between many opposites, which we can express in the Cosmic Equation thus: $A = A \cup \neg A$, depicted in this diagram. If Nonduality is the thesis, and duality is the antithesis, then Nondual Wholeness or Unity is the synthesis.



In human terms, this paradoxical truth is not easy to find, for this primordial paradigm or pattern lies buried deep in our collective unconscious, as the Hidden Harmony that Heraclitus spoke of. Nevertheless, it is vitally important for conscious evolution to bring what is hidden in the depths of the psyche into consciousness, unknowingly guiding our thoughts and actions at every moment of every day. To reveal the Cosmic Equation, we need to return to the Origin of the Universe, challenging the fundamental cultural belief that underlies Western civilization: God is Other. For this belief inhibits us from recognizing that none of us is ever separate from the Divine for an instant, the key to overcoming the fears that arise from being cognitively and experientially detached from Reality.

The call of experience

The life experiences that gave rise to the Principle of Unity, the Cosmic Equation, and the Theory of Everything are naturally similar to those of others, but in their entirety are somewhat different. So as I do not wish to appear separate from my fellow human beings, here is a brief outline of what has happened to me in my adult life.

My experience as a systems engineer and manager in an IBM sales office in the 1970s led to an unexpected epiphany in 1980, which left me almost bereft of words, as I passed through a death and rebirth process, like an apocalypse, from Greek *apokaluptein* 'to reveal', literally 'draw the veil away from'. For I could suddenly see the Universe in its Totality, rather like people who have a mind-shattering, near-death experience, sometimes describing such experiences as 'coming home' or a 'vision of paradise'.

Gradually, I have adjusted to this dazzling light, as the sense of separation from our Immortal Ground, which has for so long been part of human experience, including my experience, has disappeared, culminating in a series of awakenings in the Scandinavian wilderness in the early years of this present century. This awe-inspiring sense of Wholeness has both set me apart from people and also stimulated

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my longing to convey the boundless, ineffable essence of what I experience in words and actions that others can understand and appreciate.

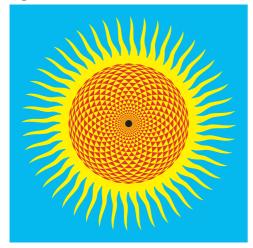
To illustrate this point, I am a generalist in a world of specialists, rather like a general practitioner working with physicians and surgeons in hospitals or an information systems architect working with managers and professionals in diverse departments to build integrated business systems. However, when objectively integrating all academic disciplines and spiritual cultures into a transdisciplinary, transcultural whole, we need to stand outside ourselves, saying, with the perception of Meister Eckhart, the preeminent Christian mystic, "The eye with which I see God is the same as that with which he sees me."²

Overall, although I was educated as a mathematician and worked during my business career as a computer scientist, today, I feel closest to the mystics, especially those in the East, where we are encouraged to live in union with the Divine, in contrast to the West, where realizing our Authentic Self has been discouraged for hundreds and thousands of years. As Elaine Pagels points out, "Even the mystics of Jewish and Christian tradition who seek to find their identity in God often are careful to acknowledge the abyss that separates them from their divine Source."³ In brief, what I am doing in my scholarly treatises is expressing the ancient wisdom underlying all the religions in a language derived from science and business, simplified in essays such as this.

What this experience has taught me is that a theory is primarily a form of insight—as a conception or mental view—from Greek *theoria* 'contemplation, viewing', not the external symbols that represent this inner cognitive map, explained more fully in 'The Evolution of Universals'. In turn, conceptual knowledge is experientially grounded in Gnosis or inner knowing of the Divine, beyond both concepts and the symbols that represent them.

Specifically, the Theory of Everything is a Big Picture, a coherent conceptual model, grounded on the Truth, revealing the simple patterns underlying the Universe prior to interpretation by a knowing being, the most significant being the Principle of Unity or Cosmic Equation. So to view this one, single image of the Totality of Existence, it is necessary to read the words on the page like a musical score, playing the music inwardly, feeling the healing energies through introspection, where all is revealed as being ever present. No one can return Home to Wholeness, for nobody has ever left Home.

This experience is not unique to me. The world does not exist outside us. We see the world through our mental pictures, which create our sense of identity and reality and govern our behaviour. So for evolution to become fully conscious of itself within us, we need to consciously include our mental mapmaking in the territory being mapped, rather like a television camera filming itself filming. We cannot separate ourselves as observers from the map of the world that we are observing.



When the observer and observed are one, our maps can be allinclusive and fully integrated, viewed with Self-reflective Intelligence, which is the eyesight of Consciousness, providing the brilliant coherent light we need to view the Cosmos holographically, rather like the way a laser creates a hologram and enables it to be seen. The dazzling light of Consciousness paradoxically emerges directly from the black hole at the Origin of the Universe, as this diagram illustrates.

In the case of any synthesis of all knowledge, the territory being mapped includes everybody's theories, opinions, points of view, beliefs, ideas, concepts, values, principles, propositions, theorems,

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etc., in all cultures and disciplines at all times, past, present, and future. Nothing is left out, leading to the wondrous joy of Wholeness, free of the conflict and suffering that arises from separation, from identification with or attachment to one particular perspective. Paul is not the author of the Theory of Everything, for neither he nor anybody else exists as a separate being. Rather, to live in Love and Peace, we are simply channels for the Divine, free of attachment to the fruits of our action, as *The Bhagavad Gita* advises.⁴

A tool of thought

We now need to explore a little what the Cosmic Equation could mean for the future of the human race, explored more fully in 'Being an Involutionary Evolutionary: Grounded in the Eternal Now'. To assist this learning process, we first notice that a central issue of our times is that the stored-program computer—designed by the polymath John von Neumann in 1945—is a device quite unlike any other that our species has invented during the past two hundred thousand years. For unlike the flint axe, wheel, printing press, telescope, steam engine, and telephone, for instance, which extend our rather limited physical abilities, *the computer is a tool of thought, able to extend the range of the human mind—even in some cases replacing it*. Physics, as the science of space, time, and matter, is thus quite unable to explain what we have invented or what it truly means to be a human being.

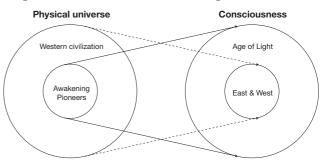
Nevertheless, Martin Rees, the Astronomer Royal, writes in *Our Final Century: Will the Human Race Survive the Twenty-first Century?*: "A superintelligent machine could be the last invention that humans need ever make." As a consequence of this and other potential technological threats, he writes a few pages earlier, "I think the odds are no better than fifty-fifty that our present civilisation on Earth will survive to the end of the present century without a serious setback."⁵ Going even further, Stephen Hawking told the BBC on 2nd December 2014, "The development of full artificial intelligence could spell the end of the human race."⁶

These physicists have made these dramatic statements because a number of computer scientists, including Victor Vinge⁷ and Ray Kurzweil,⁸ are predicting that we are currently accelerating towards a technological singularity at the end of time, corresponding to the singularity at the beginning of time—the source of a big bang, 13.8 billion years ago. For instance, Hans Moravec forecast in *Robot* that robots "could replace us in every essential task and, in principle, operate our society increasingly well without us,"⁹ effectively making *Homo sapiens sapiens* redundant within a decade or two.

Scientists are making such claims because they are working within the materialistic, mechanistic paradigm that the so-called natural sciences have inherited from the first great revolution in science over three hundred years ago. But computer software—simulating mental skills, such as reasoning and calculating, but not thinking—shows us that this paradigm is as obsolete as Newton's absolute space-time framework, which Einstein overturned with his theories of relativity.

By inverting today's predominant contextual paradigm, in a similar manner to the heliocentric revolution of the sixteenth and seventeenth centuries, it is possible to find the hidden equation that can

explain everything. For the physical universe, including the brain, arises from Consciousness, not the other way round. If evolution is to heal our fragmented, specialist minds, and thereby become fully conscious of itself, we thus need to actively engage in a contextual inversion, depicted here, putting science back on its feet, for it has long been standing on its



head, putting the cart before the horse, to mix metaphors.

Awakening in the Age of Light

The Cosmic Equation is like an acorn that has the potential to grow into a mighty oak, indeed into a vast forest of oaks. However, for the acorn to grow to full maturity, it must be planted in fertile soil that is well nourished, watered and lit, free of thistles and stones, which is a metaphor for our mechanistic conditioning, especially that which we introject from the cultures we are born into.

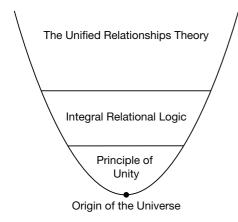
Such a nurturing environment does not exist in society today, essentially because of the way we are taught to think and view the world we live in from an early age, putting humanity into a pretty perilous predicament. To resolve this critical, life-and-death situation, I am planning to invite other visionaries and concerned scientists to co-create the Alliance for Mystical Pragmatics with the motto 'Harmonizing Evolutionary Convergence'. For breaking free of our conditioning is the key to overcoming our existential fear of death, essential if we are to deal intelligently with the inevitable collapse of the inherently unstable global economy, which is causing much psychological distress and ecological damage.

The intention is that the Alliance should act as a network of networking networks, generating the synergy that we need to work harmoniously together with a common vision, recapitulating what Joseph Campbell called the Cosmogonic Cycle: "Redemption consists in the return to superconsciousness and therewith the dissolution of the world. This is the great theme and formula of the cosmogonic cycle, the mythical image of the world's coming to manifestation and subsequent return into the nonmanifest condition."¹⁰ By being liberated from our cultural and personal conditioning and awakening Self-reflective Intelligence—the Divine quality that distinguishes humans from the other animals and computers—we could bring our worries to an end.

The Alliance's projects will focus on integrating and accelerating the evolution of four global movements spreading around the world today: Spiritual Renaissance, Scientific Revolution, Sharing Economy, and World Peace, leading us into the exquisitely beautiful, eschatological Age of Light. The first two, consummating the sacred marriage of science and spirituality, are prerequisites for the others.

First, by recognizing that Consciousness is Ultimate Reality and thereby realizing that we are all Divine beings, the Cosmic Equation ends the long-running war between science and religion and the Holy wars—wars about the Whole—which have bedevilled human affairs through the ages. It also has immense therapeutic power, enabling us to heal our fragmented ways of thinking by developing a coherent body of knowledge that corresponds to all our experiences, from the mystical to the mundane.

Specifically, the Cosmic Equation is the keystone for Integral Relational Logic (IRL), the holographic, all-embracing art and science of consciousness that we all unknowingly or implicitly use every day to form concepts and organize our ideas. In turn, this transdisciplinary, transcultural system of thought provides



the Cosmic Context, coordinating framework, and Gnostic Foundation for the genuine Theory of Everything, which I have named the Unified Relationships Theory (URT) or Panosophy: the union of all sciences and humanities and of science, philosophy, and religion.

This diagram illustrates how this coherent system of universal thought arises from the Singularity at the Origin of the Universe, generalizing Stephen Hawking's notion of a space-time singularity. Integral Relational Logic, as the union of mystical psychology and

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holographic mathematical logic, is thus the primary science, not deductive logic, mathematics, physics, or biology, sometimes attempting to usurp physics' throne.

As Integral Relational Logic has evolved from the abstract modelling methods that underlie the Internet—a symbolic expression of the Theory of Everything—we could use these modelling methods for co-creating the infrastructure for the Sharing Economy, realizing that none of us is ever separate from God, Nature, or any other being for an instant. To help us to realize our Genuine Identity—literally 'that which we all share as the same'—self-inquiry will become not only socially acceptable, but also actively encouraged. As we focus our attention on learning what it truly means to be a human being, free of the fear of death, trade will become a secondary activity, the most fundamental change in the work ethic since our forebears settled in communities to cultivate the land and domesticate animals, some 10,000 years ago.

It is by understanding ourselves without the filters that distort our learning that we could bring about World Peace. By realizing that the Principle of Unity brings an end to human suffering, we would awaken Self-reflective Intelligence—the ability to see both sides of any situation—free of the false belief that we are separate beings.

From a cosmic perspective, we shall be helped on our way by recognizing that evolution is currently passing through the most momentous turning point in its fourteen billion-year history, called its Singularity or Accumulation Point in mathematical and systems-theory terms. As this is actually a Spiritual Singularity in the Eternal Now, we have the wonderful opportunity to realize our fullest potential as a superintelligent, superconscious species, living in Love, Peace, and harmony with each other and our environment.

³ Elaine Pagels, *Adam, Eve, and the Serpent*, reprint, original edition, Weidenfeld and Nicolson, 1988, Harmondsworth, England: Penguin, 1990, p. 65.

⁵ Martin Rees, *Our Final Century: Will the Human Race Survive the Twenty-first Century?*, London: Arrow Books, 2004, pp. 19 and 8.

⁶ http://www.bbc.com/news/technology-30290540.

⁷ Victor Vinge, 'The Technological Singularity', VISION-21 Symposium sponsored by NASA Lewis Research Center and the Ohio Aerospace Institute, March 30–31, 1993, available at http://mindstalk.net/vinge/vinge-sing.html.

⁸ Ray Kurzweil, The Singularity Is Near: When Humans Transcend Biology, London: Gerald Duckworth, 2006, pp. 14–21.

⁹ Hans Moravec, *Mind Children: The Future of Robot and Human Intelligence*, Harvard University Press, 1990.

¹ Brian Greene, *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory*, New York: W. W. Norton, 1999, p. ix.

² F. C. Happold, *Mysticism: A Study and an Anthology*, revised edition, original edition, 1963, Harmondsworth, England: Penguin, 1970, p. 72.

⁴ Eknath Easwaran, trans., *The Bhagavad Gita*, Harmondsworth, England: Penguin, Arkana, 1986, chap. 18, 'Freedom and Renunciation', p. 205.

¹⁰ Joseph Campbell, *The Hero with a Thousand Faces*, second edition, original edition, 1949, Princeton University Press, 1968, p. 259.