

Science and Spirituality: Complementary or Contradictory?

The simple answer to this question is neither and both. Whatever concepts *science* and *spirituality* represent, the fact that two separate words exist for these fundamental approaches to human learning indicates a separation from the Divine Ground that unifies them. So the question I would like to answer in this essay is how can we *unify* science and spirituality so that there is no longer any separation between reason and mysticism?

Now in mathematics, it is sometimes easier to solve a more general problem than a particular one.¹ This is a very powerful technique because not only is the particular problem solved, but a whole clutch of similar problems is also cleared away.

In this instance, the more general question that we need to answer is how can we unify *all* opposites, not just science and spirituality and complementarity and contradiction? For Wholeness is the union of all opposites, the ultimate yogic goal of spiritual awakening.



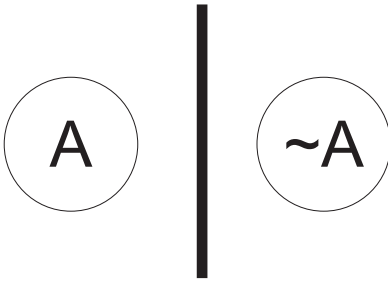
We'd like to end our recital this evening with a final death-knell for Western civilization.

To put this simple, profound idea into today's social context, it can provide the cornerstone for the life-enhancing, ecologically sustainable Sharing Economy that will emerge when capitalism self-destructs in the near future. For as this cartoon published in *Resurgence* in 1996 indicates all too clearly,² Western civilization, which provides the foundation for the global economy, is dying.

The death of the global economy will be apocalyptic, ushering in an eschatological epoch utterly different from the mental-egoic epoch (me-epoch) that has dominated human affairs since the Fall in the mythical Garden of Eden. As a species, we are accelerating towards an epoch of universal spirit (us-epoch), based on the recognition that none of us is separate from God, from Nature, or from each other.

By changing from the having to the being mode of existence,³ the selfishness of the me-epoch is coming to an end, enabling us to build a harmonious global community based squarely on Love and Peace, on Life and Freedom, on Wholeness and the Truth, and on Consciousness and Intelligence, all these words being capitalized to denote union with the Divine, with the Absolute.

To see how the healthy us-epoch could emerge from the ashes of the pathological me-epoch, let us look at the three ways that we approach the subject of opposites: dualism, duality, and nonduality. These correspond to the two approaches in the title of this essay, contradiction and complementarity, respectively, and to unity.



Dualism is illustrated in this diagram. This shows two opposites, A and $\sim A$, with a thick wall between them, where A is any being whatsoever, rather like the way x represents a number in mathematics. In dualism, there is thus a separation between opposites. In Western philosophy, dualism most commonly means mind-body dualism. But dualism is far more pervasive than this.

Most particularly, there is one dualism that is fundamental to Western civilization because it underlies all the others. This dualism arises because all the monotheistic religions regard God as other. As F. C. Happold tells us, “To Jew, Christian, and Moslem, a gulf is felt to exist between God and man, Creator and created, which can never be crossed. To assert that ‘Thou’ art ‘That’ [as the Hindus do] sounds blasphemous”.⁴

So the mystics of the monotheistic religions have needed to be very careful about what they said if they were not to incur the wrath of the Church authorities. As Elaine Pagels tells us, “Even the mystics of Jewish and Christian tradition ... often are careful to acknowledge the abyss that separates them from their divine Source”.⁵

So when the pre-eminent Christian mystic, Meister Eckhart, said, “The eye with which I see God is the same as that with which he sees me”,³ he was found guilty of heresy and would no doubt have been excommunicated or burnt at the stake if he had not died before sentence could be passed. The Sufi, Mansur Hallaj, did not escape so lightly. He suffered a gruesome death when he declared, “I am the Truth”.⁶

Even today, Western religious leaders are perpetuating this split between the Divine and the individual, leading inevitably to schizoid behaviour out of touch with Reality. For instance, Pope John Paul II, in his encyclical *Faith and Reason*, said that if reason is to be fully true to itself, it must be grounded in the “fear of God”.⁷ But why be afraid? God is Love. And when we truly know God, when there is no other, no divisions in Consciousness, all fear disappears. Then Love, pure Love, is revealed, as the mystic poets, such as Rumi and Kabir, have expressed most beautifully.

Now when God is seen as other, it is but a short step to seeing Nature as other, to be exploited and controlled for the ego-centred desires of humanity. That, in essence, is what happened to Western civilization following the scientific revolution of the sixteenth and seventeenth centuries, expressed most clearly by Francis Bacon when he said that the purpose of science is the “relief of man’s estate”.⁸ Today, this dualistic mode of living is leading to ecological devastation, as the readers of *Resurgence* are only too aware.

When Nature is other, it is but another short step to seeing our fellow human beings as other, likewise to be exploited and controlled to our bidding. It is, of course, the feeling of separation, of alienation, that leads us to fight and compete with other human beings for the precious resources of this beautiful planet of ours, a situation that is causing severe psychological distress in the world today.

What we tend to do in this dualistic mode of living is to identify with A , regarding $\sim A$ as other, maybe even as an enemy, to be afraid of. We are thus unable to see the other person’s point of view, or in the case when $\sim A$ is God, God’s point of view. There is thus a tension or conflict between opposites; in dualism, opposites are regarded as being contradictory.

Indeed, the very title of this essay competition is an example of dualistic thinking. It is asking us to make a choice between opposites, contradiction and complementarity, rejecting the other. The question

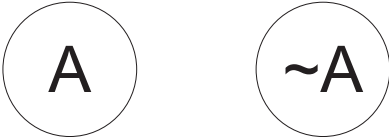
does not follow the fundamental principle of map making given by E. F. Schumacher: “Accept everything, reject nothing”.⁹

We can most clearly see our dualistic behaviour when countries go to war. When each country believes that God is on their side, they are unable to see the point of view of the people they regard as the enemy. An obvious example of this is the phrase, “God bless America”, with which George W. Bush often ends his speeches. Why not “God bless everybody”? Doesn’t everyone on this planet deserve God’s blessings, whatever they might be?

Yet there is an alternative to war, which we can illustrate with a well-known psychological test. An infant is first shown a card painted yellow on one side and blue on the other. Then the card is held in front of the infant so that she or he can see only the blue side, with the yellow side facing the tester. The tester then asks the infant, “What colour can I see?”

At six years of age, the infant generally answers ‘blue’. He or she cannot see the other’s perspective. Yet at about eight years of age, the answer is ‘yellow’. The infant has grown into childhood.

So can Western civilization, in particular, and the human race, in general, grow out of infancy into childhood and thence into full maturity as a community of divine, liberated, conscious, loving beings?

 Of course, it can. The first step in freeing ourselves of the egoic mind, thereby healing our troubled society, is to remove the barrier between the opposites, as in this diagram. We then move from dualism to duality. Duality recognizes the fundamental fact of existence that opposites can never be separated; they are like the two sides of a coin. Contradiction has become complementarity.

From the point of view of ourselves as individuals or groups, we can thereby see both our own and the other’s perspective. It is in duality that compassion arises. A familiar example of this is John Gray’s best-selling book *Men are from Mars, Women are from Venus*, helping women and men to understand their differences and so live more harmoniously together.

Not only this. It is widely recognized today that we human beings are not exclusively masculine or feminine. We all display characteristics of these opposite tendencies in some proportion or other. Psychologists recognize many other opposites, both of which are present within us, of which Carl Jung’s concepts of extrovert and introvert are perhaps the best known.

Now the key point here is that these examples show that Aristotle’s laws of contradiction and excluded middle, which are fundamental to mathematical proof and logical inference, are not universally true. As Karl Godel’s incompleteness theorem also demonstrates, it is clear that we need to develop a science of reason that accepts paradoxes and self-contradictions as an inherent property of the Universe. Otherwise our reasoning cannot possibly lead to a valid representation of ourselves and the world we live in.

The fact that the law of contradiction is not universally true led the physicists to great consternation in the first half of the twentieth century. For, as is well-known, they discovered that light, in particular, and electromagnetic radiation, in general, display contradictory properties. Sometimes light behaves as a particle, existing in a small region of space, and sometimes it behaves like a wave, spread out in space.

To overcome what looked like an absurdity, Neils Bohr introduced the notion of ‘complementarity’. As Fritjof Capra tells us, “[h]e considered the particle picture and the wave picture two complementary

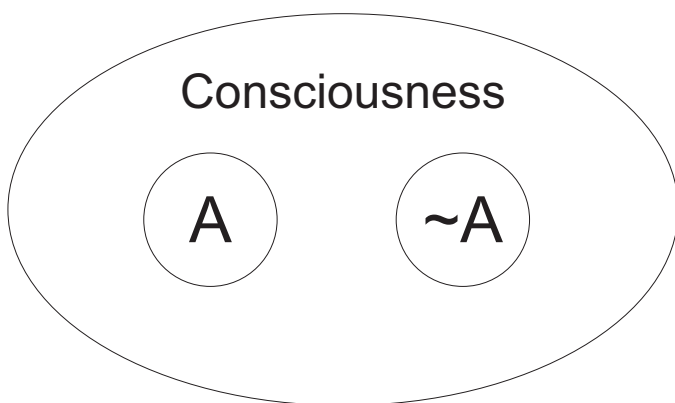
descriptions of the same reality, each of them only partly correct and having a limited range of application”.¹⁰

But there is an even more fundamental contradiction in physics, which was partially resolved by David Bohm. For the theory of relativity and quantum theory display opposite characteristics, the former having the properties of continuity, causality, and locality, with the latter being characterized by noncontinuity, noncausality, and nonlocality.

David Bohm showed that these contradictions could be reconciled by recognizing that relativity and quantum theories are abstractions of a deeper underlying reality, which he called the ‘holomovement’. As he said, “everything is to be explained in terms of forms derived from this holomovement”, which he likened to a flowing river. It is these forms that are manifest in the explicate order, like the waves and ripples on the surface of the river, these superficial phenomena having no independent existence of their own. The river itself, in the implicate order, is the underlying reality, whose “totality is unknown (and, indeed, probably unknowable)”.¹¹

These opposites of the implicate and explicate orders provide us with a clue about how we can develop the Theory of Everything, which reconciles all opposites, not just some. So far, we have mainly been considering the relativistic world of form. But this also has an opposite: the formless Absolute Whole. Now it is impossible to escape opposites in the world of form; it is, by its very nature, dual. On the other hand, the Absolute is nondual, it transcends all opposites.

So to return Home to Wholeness, we need to unify nonduality and duality. To see how this can happen, we note that there is a primary-secondary relationship between this most fundamental pair of opposites. So if nonduality is the thesis and duality the antithesis, nonduality is the synthesis, an example of Hegelian logic. There can thus be no controversy or argument about nonduality; it transcends both contradictory and complementary opposites.



This third situation is illustrated in this diagram, showing nondual, limitless Consciousness embracing all opposites, including nonduality and duality and science and spirituality. Two has become one, the unity in diversity.

Compassion has now become Love, which has no opposite. It is in this nondual state that Intelligence can function without impediment, for “Love is the sea where the intellect drowns”, as Rumi delightfully expressed it.¹²

We have now reached the Eastern world-view of Advaita, meaning ‘not-two’. For instance, Ramesh S. Balsekar repeatedly emphasizes in his satsangs, “Consciousness is all there is”.¹³

Consciousness is Reality, the only true Reality. The physical universe is not real, contrary to widespread beliefs today. Every form that we can give a name to, that is not the Absolute, is merely an abstraction from Consciousness, called *maya* in the East. These forms, whether they be physical or nonphysical, are merely the illusory play of the Divine, called *lila* in Eastern terms.

Consciousness is thus an extension of David Bohm’s notion of the holomovement. For despite the great breakthrough that he made, he was not able to go all the way and include the concept of the Absolute in his cosmology. As Amit Goswami has since observed, to make sense of the paradoxical happenings in quantum physics we need to recognize Consciousness as the primary Reality.¹⁴

But this does not mean that the physicists can tell us how the Universe is designed. Anyone who looks inwards can discover this for themselves. Furthermore, we can see that the hard problem of consciousness studies is impossible to solve. Consciousness does not arise from matter, such as the brain; matter arises from Consciousness.

So rather than likening Ultimate Reality to a river, a more accurate metaphor is an ocean, the great ocean of Consciousness. It is this vast ocean of Consciousness that gives rise to the oceanic feeling of oneness with the Cosmos that Stanislav Grof,¹⁵ for instance, refers to in his writings.

This nondual mode of being is our true nature, as the many spiritual seekers I meet today know only too well. Even though this experience of Ultimate Reality is often a mere glimpse, many experience it as life-changing. For such a sense of Wholeness utterly shatters the beliefs that have been passed on to us by the fragmented and deluded culture we live in.

Eventually, or even spontaneously, the sense of a separate self disappears completely and permanently, and we can enjoy this exquisite sense of Wholeness continuously. And then something wonderful happens. Because all opposites are unified in nondual Consciousness, what we call conception and death merge into Consciousness, in the eternal Now. Then all fear of death disappears because we realize that there is no separate entity in Reality that either is conceived or dies.

We have then reached Home, our ultimate destination. But not really, because we see that we have never, in Reality, left Home. Even though not everyone is aware of it, at no moment in our lives are we separate from the transcendent and immanent Absolute Whole; it is ever present, a word literally meaning ‘prior to existence’.

Home is the ineffable Truth, what J. Krishnamurti aptly called the ‘Pathless Land’, which is revealed when all delusions are dissolved in Cosmic Consciousness. It is in this Divine Space that we become conscious of something even more fantastic. Because Wholeness is the union of all opposites, there is no longer any separation in time between the beginning and end of evolution. We can then say, with John the Divine, “I am Alpha and Omega, the beginning and the end, the first and the last”.

That is the essence of the eschatological epoch that is emerging today. We are becoming cosmic, divine beings, conscious that we are living at both the beginning and end of time, something along the lines that Pierre Teilhard de Chardin prophesied.¹⁶

As he foresaw, in this final stage of human development, all the diverse strands of evolution will converge in one great megasynthesis: the integration of all knowledge in all cultures and disciplines at all times into a coherent whole.

I call this megasynthesis *omniology*, meaning the ‘science of everything’. In omniology, science, philosophy, and religion, as we know them today, disappear, just as hydrogen and oxygen cease to exist as separate entities when they combine to form water.

Specifically, all the different religions that have dominated the me-epoch also disappear, as Richard Maurice Bucke prophesied.¹⁷ For we can all know the Divine in our own direct, immediate experience, without any intermediaries coming in between.

Omniology is thus transcultural and transdisciplinary, providing a cosmic rather than an egocentric, anthropocentric, or geocentric view of the Universe. By thus healing the fragmentation and divisiveness of academia, omniology could provide an all-embracing conceptual framework for society. For people’s mystical, spiritual, and psychic experiences will no longer be at odds with science, defining

science as a coherent body of knowledge that corresponds to all human experience from the mundane to the mystical.

Omniology is also the science of change, able to explain why the pace of change in the world today is accelerating exponentially. In this way, we can unify all the conflicting theories of evolution, from creationism to Darwinism. This understanding is vitally important, for otherwise we are just running our personal and business lives blindfold.

The framework or system of co-ordinates for omniology is *relational logic*. This integrative, holographic, non-Aristotelian science of reason is so called because it has become manifest through the action of what Heraclitus, the pre-Socratic philosopher of change, called the Logos,¹⁸ the organizing principle of the Universe, and because it has evolved from the relational model of data¹⁹ used by business systems architects when developing information systems today.

In practical terms, we can use omniology and relational logic to make the transition from the me- to the us-epoch as smooth as possible. In this respect, the most urgent task facing humanity today is to build the infrastructure for the Sharing Economy that will come into being following the collapse of the global economy.

For when we look at the S-shape of the technological growth curve for computers, both hardware and software, we see that growth will slow down at the top of the curve within ten years. The assumption that exponential technological growth can continue to drive economic growth indefinitely will thus be shown to be false.

We can liken the critical situation facing us today to the sinking of the *Titanic*. When this great ship was built, it was believed that it was unsinkable. Even when the ship was beginning to sink few believed it, so the first lifeboats to leave the ship were only half full.

A similar air of hubris surrounds the global economy today, especially in the USA. There are, of course, many organizations attempting to make running repairs to *Titanic* as it sinks and many communities have taken to the lifeboats to build life-enhancing local economies.

However, worthy as these initiatives are, they do not go to the root of the problem. What we urgently need to do is go back to the drawing board and rebuild the infrastructure of society on Love and the Truth so that those people who want to be rescued can be provided with a life-enhancing environment that will empower them to realize their highest potential as human beings.

Sadly, many people may prefer to go down with *Titanic* rather than be rescued to live life fearlessly, freely, creatively, and joyously. This tragic situation arises from our separation from our immortal Ground. When we do not know that death is an illusion, we create false immortality symbols as a substitute for Reality to assuage our fear of death.²⁰

In the early years of human existence, it was the beliefs, myths, and rituals of the major religions of the world that provided these immortality symbols. Most particularly, in the East, the belief in reincarnation, and in the West, the belief in everlasting life after death.

Today, the primary immortality symbol in the world is money. We live in a society where people's sense of security and identity in life is based on structures that are obsessively driving humanity to extinction before we have realized our fullest potential as a species, an existential double bind.

We can see quite clearly that money is an immortality symbol from the tower blocks that banks build in the centre of major cities today. As James Robertson points out, these buildings play a similar role in

society today to the cathedrals that dominated the centres of medieval cities. Both serve to reinforce our belief in immortality symbols; in the Middle Ages, the notion of a personal God, and today, money.²¹

As James goes on to say, “The theologians of the late middle ages have their counterpart in the economists of the late industrial age. Financial mumbo-jumbo holds us in thrall today, as religious mumbo-jumbo held our ancestors then”.

This situation was tragically brought home to us all on 11th September 2001, when two hijacked planes crashed into the twin towers of the World Trade Center in New York. This was clearly an attack, not just on people and property, but on the immortality symbols that these towers represented. Because immortality symbols take on absolutist values, we thus saw the effects of a holy war, in this instance between religious and economic fundamentalism.

Given this perilous predicament, it is vitally important to show people that it is quite safe to jump off *Titanic*. But what are they to jump onto? For no viable alternative to the materialistic economies of the twentieth century yet exists. The metaphor of *Carpathia*, which came to the rescue of the passengers in the lifeboats, is not satisfactory as it is just another ship, subject to the same uncertainties as *Titanic*.

Henryk Skolimowski, the creator of eco-philosophy, has proposed that we need to view the world as a sanctuary rather than a machine.²² It is in this loving, caring space, grounded on the Truth, that we can build the information systems that will be needed to ensure the smooth running of the Sharing Economy.

The most significant change in the Sharing Economy will be that money will no longer be regarded as a commodity with value. Today, some 95–98% of financial transactions by value are concerned with the buying and selling of financial products. This is like trading in inches and grams, an activity of the utmost absurdity, as Michael Linton, the creator of LETSsystems has pointed out.

So in the Sharing Economy, there will be no stock markets and banks. And companies will focus their attention, not on making money, but on their articles of association. For instance, a railway company will be concerned with carrying passengers to their destinations safely and punctually, not on profitability.

The work we do in our daily lives will be focused on our inner development rather than on technological development, thus enabling us to become masters of our egoic minds and computers (extensions of the mind), rather than their slaves.

To conclude, we are at the threshold of the most momentous turning point in human history. In the coming years, we can envisage that a rapidly increasing number of ordinary people will realize their unique cosmic, divine nature, free of the fears and delusions that have troubled humanity for thousands of years. As the visionaries have prophesied, we are entering a spiritual epoch of superconsciousness and superintelligence, grounded solidly on Life, Love, the Truth, and Unity. What a marvellous time we live in! [4000 words, including endnotes]

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