

IS THE WORLD AN OBJECTIVE PHENOMENON? (last revised: 5-20-19)

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This Article consists of excerpts from several different essays written at different times in the past few years; I have pulled them together in an effort to construct a coherent statement of my position regarding the question of whether the world that we experience actually exists 'out there' or simply resides only in our minds.

Part One

Elsewhere, I have described what I believe to be the method by which God created the universe as an emanation of high-frequency Light, which subsequently converted into material wave-particles that formed the atoms and molecules that constitute the many forms of the universe. It must be recognized, however, that not everyone believes that the universe was 'created', either by a divine Light or any other means. There are some thinkers like Shankaracharya, the 9th century Indian philosopher, and his late neo-Advaita counterparts, such as Sri Nisargadatta and Ramesh Balsekar, who deny that an objective universe exists; i.e., they deny that there is really a universe that is created by God and perceived by everyone. They believe, rather, that the one divine Consciousness-Bliss produces in each and every mind the illusion of a universe that does not actually exist anywhere but in the mind. An excellent summary of this philosophy may be found in an online book by one of the advocates of this philosophy, Stanley Sobottka, the late university physicist. Professor Sobottka was highly enamored of this philosophy as it was espoused by Shankara and more recently by Sri Nisargadatta and his disciple, Ramesh Balsekar, and he embodied that philosophy in his online book, called *A Course In Consciousness* (www.courseinconsciousness.org).

I and others, including most of the traditional Upanishadic rishis, as well as the author of *The Bhagavad Gita*, have a different theory: we hold the opinion that God has created an apparently objective universe through His Power of Creation (variously called Shakti, Maya, Ishvara). And so, the question is: 'Does God create in our minds an illusory universe of objects that does not really exist, OR has God, the one divine Consciousness, created an apparently objective universe out of an insubstantial 'stuff' that

simply *appears* to us to be substantial?’ Which of these cosmological theories seems to be supported by the observations of current science? Scientists, like philosophers, are divided, since it is impossible to know for certain which of these theories is correct, or, in fact, if either one is correct.

It should be noted, however, that both of these theories lead ultimately to the same overall metaphysical conclusion: They both assert that the universal appearance is produced by the power of the one Consciousness-Bliss; and that, *whether* we live in an objective universe or a subjective one, that universe is essentially illusory and that the one and only permanent reality is the nondual Consciousness-Bliss (often referred to as ‘God’), which is our own eternal Identity.

Similarly, there are those who believe in the temporal existence and evolution of individual souls; and there are those who believe that there are no such individual souls but that it is always only the undivided nondual Consciousness-Bliss alone that we are and which we misinterpret as a soul. And here again, whether or not individual souls actually exist in the temporal universe is ultimately irrelevant; for in both theories, our only permanent and everlasting reality and Identity is the divine Consciousness-Bliss, and the existence and evolution of transient individual souls or the non-existence of such individual souls does not alter that ultimate fact.

Perhaps that is as close as we humans can come to resolution of this controversy, but let us investigate further with some relevant background information:

The Mystical Tradition of Vedanta

The people of India call their indigenous religion, ‘the eternal religion’ (*Sanatana Dharma*). It existed even before the Aryan incursion, before the Vedas. From the Vedas came the philosophy of *Vedanta*, ‘the end of the Vedas’, embodied in the *Upanishads*. The philosophy of Advaita Vedanta, or Nondual Vedanta, was beautifully expressed in the Upanishads, written by some nameless sages perhaps a thousand years before the Current Era. The *Bhagavad Gita* (Song of God) was written ca. 500 B.C.E., as part of a larger work, the *Mahabharata*, (reputedly by the legendary sage, Vyasa), as a dialogue between Krishna (an incarnation of God) and Arjuna on the battlefield of Kurukshetra. And it is Krishna who, speaking as the Divinity itself, teaches to Arjuna the perennial philosophy, explaining that in His

Divine unmanifest state He brings forth the entire universe, which he describes as his 'lower' nature; and He manifests this 'lower nature', the material universe, in a cyclic fashion, periodically creating, then dissolving it:

"At the end of a cycle, all beings, O son of Kunti, enter into My *Prakriti* [His creative Power], and at the beginning of a cycle, I generate them all again. Controlling My own *Prakriti*, I send forth, again and again, all this multitude of beings, helpless under the sway of Maya." ¹

But, as He tells Arjuna, He contains a 'higher nature' [*Purusha*] that is not subject to this cyclic manifestation:

"But different from it, know, O mighty Arjuna, My higher nature—the Indwelling Spirit by which the universe is sustained.² ...By Me, in my unmanifest form, are all things in this universe pervaded." ³

Pervading the material universe, He (*Brahman*) is the invisible Spirit, or soul, in all:

"The Lord (Krishna) said, Brahman is the Imperishable, the Supreme. Dwelling in each body, Brahman is called the individual soul." ⁴

This soul, says Krishna, "is indivisible, and yet It is, as it were divided among beings."⁵

"It is never born, nor does It ever die, nor, having once been, does It again cease to be. Unborn, eternal, permanent, and primeval, It is not slain when the body is slain. Only the bodies, of which this eternal, imperishable, incomprehensible Self is the indweller, are said to have an end. That by which all this is pervaded know to be imperishable. None can cause the destruction of That which is immutable."⁶

He goes on to explain to Arjuna that this indestructible soul or Self is not limited to one embodiment only:

"Even as the embodied Self passes, in this body, through the stages of childhood, youth, and old age, so does it pass into another body. Even as a person casts off worn-out clothes and

puts on others that are new, so the embodied Self casts off worn-out bodies and enters into others that are new."⁷

Much later, the illustrious teacher (*acharya*), Shankara (seventh to ninth century C.E.), attempted a reformulation of *Advaita* (Nondual) Vedanta, and in the process, introduced some ideas which are controversial to this day.

Shankaracharya (7th – 9th centuries C.E.), following in the Upanishadic tradition, set forth in very explicit terms the nature of the One without a second. Using the ancient terminology, Shankara spoke of the ultimate reality as *Brahman*. In the Advaita Vedanta of the Upanishads as well as in the philosophy of Shankara, *Ishvara* is regarded as the Lord and ruler of Maya and its world-appearance, including all souls. Brahman is the conscious Ground and Source, while *Ishvara* serves an executive and creative function. *Ishvara* can be prayed to, worshipped, envisualized, and realized; Brahman, however, is formless and absolute, far beyond human relationship, though It is the transcendent Source and Foundation of all. Since It cannot be described in speech, Brahman is sometimes simply referred to as *Satchidananda*, “Existence, Consciousness, Bliss”.

Shankara asserted that the phenomenal world produced by *Ishvara*'s *maya* was *mithya*, “illusory” or “unreal”. The phenomenal universe, said Shankaracharya, is an *adhyasa*, a “superimposition”, upon Brahman. This statement is not extraordinary in itself, but what is extraordinary is his statement that the superimposition of the world upon Brahman was an act of *Ishvara*'s Maya produced through the individual minds of those perceiving the world. For Shankara, “Brahman remains eternally infinite and unchanged. It is not transformed into this universe. It simply *appears* as this universe to us, in our ignorance. We superimpose the apparent world upon Brahman, just as we sometimes superimpose a snake upon a coil of rope.”⁸ According to Shankara, “There is no reality independent of our knowing minds.” “The apparent world,” he said, “is caused by our imagination, our ignorance. It is not real. It is like seeing the snake in the rope. It is like a passing dream.”⁹ In other words, according to Shankara, there is no objective world; there is only the world that exists in our minds and that we individually invent.¹⁰

Shankara, following in the tradition of his *paramguru* (his guru's guru), Gaudapada, taught that only Brahman exists, and that the universally perceived phenomena of ‘the world’ appear, not because they are ‘created’

by God, but rather because we humans, while actually perceiving only *Brahman*, project, or “superimpose” names and forms upon that invisible substratum by the power of *maya*. He interpreted God’s power of *Maya* (illusion) to be, not God’s power to ‘create’ an illusory objective universe, but a power placed by God within the human soul to project, or imagine, a phenomenal world where there is truly only Brahman, much as one might imagine a snake where there is actually a rope, or a body of water where there is only a dry desert. But since Brahman is not an object of our perception upon which an illusory object might be superimposed, we must wonder how such analogies could apply.

Thus, while in the traditional philosophy of Vedanta—supported by the *Vedas*, the *Upanishads*, and the *Bhagavad Gita*—the world is represented as an illusory, but objective, phenomenon produced by God through His Creative Power (*Shakti, Maya, Brahma, Ishvara*), Shankara’s ‘doctrine of superimposition’ asserts that the perceived universe is merely an imaginary projection by the individual mind or soul of a world of objects superimposed upon the substrate of *Brahman*—in other words, that it is a subjective illusion that takes place solely in the human mind, or individual *jiva*. [Let me remind the reader, however, that “the individual *jiva*” is, in reality, the *Atman*, the divine Self, Brahman, or the one Consciousness-Bliss.]

In the West, Plato and Plotinus postulated an all-pervading radiation of the Divine Consciousness throughout the material universe, which they called “Soul”. It is by means of this pervading Divine Consciousness, says Plotinus, that God is present as the Self of everyone. Shankaracharya offers no such explanation, however; in fact, for him, there is no universe to be pervaded. There is only *Brahman/Atman*; and the perceived universe is but a projected illusion existing only in the consciousness of the *jiva* (which is really the *Atman*).

Nevertheless, he concedes that, from a relative point of view, *Brahman/Atman* is omnipresent as the absolute Consciousness that is the substratum of the universe and the inner Self of man, falsely appearing to us as an *ego*, soul, or *jiva*. He explains that it is due to *Ishvara*’s power of *Maya* that one *appears* to be an individualized soul; but this soul is actually *Atman*, the Divine Self, and can be realized as such. Here, Shankara explains the identity of the individual soul and the Divine Self (*Atman/Brahman*):

"The transmigrating soul is not different from the Lord. ...Just as the light of the Sun and the Sun itself are not absolutely different, so also the soul and the supreme Self are not different.

"...Because all souls are essentially non-different, and their apparent difference is due to ignorance (*avidya*) only, the individual soul, after having dispelled ignorance by true knowledge, passes into Unity with the supreme Self."¹¹

"The Self...can be directly realized as pure Consciousness and infinite Bliss. Its appearance as an individual soul is caused by the delusion of our understanding and has no reality. By its very nature, this appearance is unreal. When our delusion has been removed, it [the individualized soul] ceases to exist."¹²

So far, Shankara's philosophy is in accord with the mystical philosophy of all true seers; however, it is when Shankara explains the illusory nature of the universe that some difficulties arise. The *Upanishads* and the *Bhagavad Gita* hold that Brahman possesses a creative Power, called *Maya*, by which He creates or projects, an objective universe of visible objects. Passages from certain of the works attributed to Shankara, such as the following from his *Atma Bodha*, would lead one to believe that he held a similar position:

"Visible objects, like the body, mind, etc., are born of the primal Energy (*Shakti*) and the ignorance (*avidya*) attending it and are evanescent like bubbles. One should realize the pure, eternal Self, which is other than these, and know, "I am Brahman (*aham brahmasmi*)."¹³

But Shankara clearly believed that the world was never actually created, that it is merely a "projection" (*adhyasa*) upon Brahman produced by the individual soul or mind, due to an ignorance (*avidya*) divinely inherent in it. From his considerable body of works, it is apparent that Shankara believed that we "project" or "superimpose" an imagined world upon Brahman, as one "projects" a mirage upon the desert, or an imaginary snake upon a rope. This is known as 'the doctrine of superimposition' (*vivartavada*). Here is Shankara's explanation of this idea:

"The universe does not exist apart from the Self (*Atman*). Our perception of it as having an independent existence is false, like our perception of blueness in the sky. How can a superimposed attribute have any existence, apart from its substratum? It is only our delusion which causes this misconception of the

underlying reality. ¹⁴ ...The apparent world is caused by our imagination, in its ignorance. It is not real. It is like seeing the snake in the rope. It is like a passing dream” ¹⁵

Shankara’s theory of ‘superimposition’ asserts that the subjective human ego, or *jiva*, endowed with a Mayic power, projects the entire universe of objects upon Brahman. That means that, since the universe has clearly been around for a while, the universe was initially projected by early man. But we must remember that in Shankara’s time no one even imagined that man had *evolved* over time from more primitive species. Shankara could not have anticipated the eventual development of evolutionary theory, which, if it is correct, puts a serious crimp in the theory of superimposition. Insofar as Shankara knew, man had existed forever, and had always been around to imagine a world. He was ignorant of the fact that prior to around two million years ago there were no humans. And if the world could only be ‘imagined’ by a human being, then the world did not exist prior to the evolution from the lower animal species to the human species. If this were true, the present evidence for the evolutionary history of the universe, from its beginning to the development of *homo sapiens*, including astronomical observations, geological strata, fossils, etc., tells of a world that never existed, since there was no one around at that time to imagine it.

If Shankara’s theory were correct, it would mean that the first humans, as well as all subsequent humans, imagined (or projected) the geological strata that told of a more ancient past, and we imagined a universe where the light from galaxies distant in time told, not of an objective reality, but of a merely imagined past. The history of our universe, according to Shankara, never occurred—except in the minds of the first humans; i.e., all the empirical evidence for the antiquity of the world was simply deceptive and illusory. The obvious question that arises is: ‘If the world, the universe, is much older than man, as it appears to be, how could the world possibly be the product of man’s mind? Can an effect precede its Cause?’

Had Shankara known of the relatively recent origin of man, it would have been necessary to suggest that perhaps the animal and even bacterial life-forms, who seem also to perceive a world of objects, project the world by means of the same Mayic power of imagination, this same mental projection! But what of the compelling astronomical and geographical evidence for the existence of the universe during preceding billions of years prior to the appearance of even the simplest forms of life? How could we possibly justify the belief that the universe only came into existence when

there was a conscious living being to imagine or superimpose it upon Brahman?

In recent years, a similar misconception arose when a group of Jews and Christians banding together under the label “Young Earth Creationism”, professed to believe in a literal interpretation of the Biblical book of *Genesis*, asserting that the universe, earth, and all life was actually created by God between 5700 and 10,000 years ago in six 24-hour days, despite the empirically based evidence that the universe began some 13.7 billion years ago, the earth about 4.5 billion years ago, and intelligent life on earth around 2.5 million years ago. They interpreted the account given in the Bible as literal, believing that it was infallibly and necessarily true. In fact, prior to around 1800 A.D., when the empirical method of science first began to be regarded respectfully, nearly everyone interpreted the Bible literally, like these “Young Earth Creationists”. And a 2011 Gallup survey reports that 30% of U.S. adults still do.

When these ‘Young Earth Creationists’ were confronted with the cosmological and geological evidence for a much more ancient past, they countered that the universe and the earth were created around 6000 years ago with all the false indications of an older cosmological and geological past built into it, even though that past never actually occurred! In other words, the evidence for a more ancient universe and planet earth was divinely fabricated. However, this implied a devious and deceitful Creator God, which ultimately could not be considered as acceptable.

And so, as it turns out, it is not so easy to explain away empirical evidence. We are forced to choose between a speculative metaphysical theory and the evidence of our reason and senses. Is there really a world out there or does it exist only in our consciousness of it? Another way of thinking about this question is to ask: ‘Did the one Divine Mind create this illusory universe around 14 billion years ago, or is it created independently by each of us daily in our own conscious minds?’ This is a question which each of us must answer for ourselves. What do *you* think?

Our current understanding of the nature of the material world leads us to conclude that the forms we perceive through our senses are ultimately mere agglomerations of the electromagnetic charges and emergent forces that constitute the fermions and bosons produced from the original electromagnetic radiation (the ‘Great Radiance’), and that the perceivable

forms produced by the congregation of these insubstantial wave-particles are indeed “illusory”. Shankara, however, could not possibly have understood in his own time that the appearance of physical matter arises from the organization of intangible submicroscopic wave-particles in such a way that they present the appearance of substance and extension.

Shankara knew nothing of such wave-particles. Though he had not imagined them, we have every reason to believe that they nonetheless existed, even then. He *did* know, from his unitive visionary experience, that the Soul (*Atman*) is identical with Brahman and that, in relation to eternal Being, the phenomenal world is illusory; but, without a knowledge of the true nature of matter, and perhaps influenced somewhat by the Buddhist metaphysics popular at the time, he was able to account for the unreality of the world only by assuming that it was an illusion produced by a Mayic ignorance (*avidya*) within the human mind, causing the mind to *imagine* a world exterior to it.

Science And Gnosis

Science and philosophy deal with theories, and we attempt to prove them by logic and experiment; but the mystic is gifted with a visionary experience that comes to him without his knowing how, and it shows to him the true nature of reality. His consciousness is elevated during a rare moment of contemplation whereby his awareness reaches to a noumenal level beyond his normal experience, and at once he is privy to an egoless state in which the transcendent reality becomes evident. In this state, the universe does not cease to exist; the universe continues as before, but he experiences it from a perspective that is free of the duality produced by a limited individual perspective. He becomes aware that his sense of an individual identity is gone, and that his body is not the possession of any individual persona but belongs to the one independent current of existence which is universal, an ocean of conscious energy in which all things and beings exist. He sees his body as a wave on that ocean, as a configuration of energy within a sea of energy, related to the universe as a pebble is to stone; as the mountains and valleys are related to the earth.

He feels that, in being divested of an ego— that is, of an individual identity, he is now seeing himself and the world correctly; the veil of an illusory ego had been lifted, and now he is seeing truly and without the obfuscation of an

erroneous orientation. He experiences himself as a wave on an infinite ocean, or like a golden trinket melted in a vat of gold. For a wave, the subsuming reality is the ocean; for a golden trinket, the subsuming reality is gold; for the individual consciousness, the subsuming reality is the one all-pervading Consciousness-Bliss. No longer separate, his identity is merged into the larger substratum. If he entered this state from a state of prayer, there is no longer a deity, no longer an “I”; for, without the duality of “I” and “Thou”, neither exists. He realizes that his former dualistic relationship with God was a product of the ego-mind’s duality-producing habit. But now, all dualities are vanished. Not only is there no “I” or “Thou”, there is no now or then, for time is also transcended in this eternal state.

Dualities, or opposites, are judgments from a distinct individual reference point, and without that egocentric reference point, dualities do not exist. Without the ego, there is only the timeless universal sea of existence, a vast ocean of conscious energy. Without the ego, where is love and hate? Where are peace and unrest, the heights and the depths of emotion, weeping and laughing? Without an ego, there is no life and death, no night or day, no music or silence, no motion or stillness. These all require a point of identity, and without that illusory perspective, there is only the one universal existence. When what *is* is the one Divine Energy doing everything, where is pride or regret? Furthermore, where is the distinction between body and soul? There is no division in this one conscious energy; it is homogeneous. There is only one. And this one all-pervasive existence is conscious, autonomous, and integrally coordinated.

The idea that we, as individual egos, experience our world subjectively does not exclude the possibility of an objective world; in fact, it seems to me that the world that we experience is most certainly *both* subjective and objective. It is true, as is claimed by the subjectivists, that everything we experience is experienced within our minds, subjectively. But consider: the world that we experience is one that has evolved objectively in time from its primitive beginnings to its present state. In other words, if there hadn’t been a real evolution, from high-frequency light to quanta, to atoms and molecules, to objects and living creatures, and their development through time, then how would the world that we perceive today have otherwise attained to its present form? Is it possible that the relics of the past, such as skeletal remains, etc. have resulted from an historical evolution that takes place entirely in our subjective minds? It seems to me that we have to conclude that the world, the broad universe, though illusory, is an objective

universe that is really out there, and that it is experienced subjectively, in here.

So, to answer the question that is posed in the title, is the world an objective phenomenon? Objective for whom? For all of us egos in the world of duality, the world certainly appears as an objective phenomenon, but to the One who alone exists, to the eternal Consciousness-Bliss, the appearance of the universe is experienced as a subjective illusion. So, no, the world is not an objective phenomenon!¹⁶

We have to distinguish between the false ego, that doesn't really exist, and the real Identity, which is the one Consciousness-Bliss that is revealed as everyone's ultimate Self. Many confusions arise when we speak of the false (ego) as the doer or experiencer. That individual being you refer to as "me" is but a transitory imagination. The divine Consciousness within you is God and is eternal; but the imaginary self you falsely identify with never really existed. That ego is just a false idea that has no factual agency. While it lasts, it is merely an illusion. The ultimate 'I', the undefinable Self that mystical experience shows to be the eternal Reality, is who we really are; and everything in the entire universe undeniably exists within that Self. That being so, the world—*from the vantage point of the One*—is experienced as a subjective illusion. He/It/I is the one and only doer, the only reality; the world-appearance is *within* Him/It/I, and, for Him/It/I, that world-appearance is a *subjective* illusion.

Because the one Consciousness-Bliss has produced along with the world-appearance the illusion of separate individual beings (egos), there is an appearance of multiple experiences occurring to these individual beings both within and without, both subjectively and objectively, but that is in the world of duality, in the projected world of illusion. The one Consciousness-Bliss is beyond the illusion of duality. That world of duality is nothing more than a dream—a subjective dream occurring within the one eternal Consciousness-Bliss, the only true 'I'. That Mind-constructed world comes and goes. It is a transient illusion. The one and only lasting Reality is the eternal Consciousness-Bliss. He alone is. That eternal YOU alone exists. Rejoice!

When this truth was revealed in me, the very first words from my mouth were "O my God, even this body is Thine own!" In that experience, my consciousness was the Consciousness of God, and 'I' was seen to be in the clouds and in the earth; 'I' was realized to be the life-pulse of all creatures, the resounding bells of inner joy and the fiery intensity of song that bursts

from the human heart. Everything—even this being I call ‘I’—is made of God. All was seen to be an endless continuum of divine Being; and I experienced that infinite Consciousness as my own. The universe is arguably an illusion, a sequence of appearances, formed at the subatomic level by electromagnetic impulses and experienced in the subjective mind; but the underlying cause and substance is the divine Consciousness that is God. And That, it is realized, is one’s eternal Identity.

I saw, in my spiritual vision, that it is the restrictive egoic sense, the personal ‘I’, that creates the interior illusion of duality, that invents the mental opposites of love and hatred, peace and unrest, happiness and sorrow, while in truth there is only the one undivided blissful reality. I saw that the Creator breathes forth the vast universe and then withdraws it again in a repetitive cycle of becoming and ending, and that all things move together of one will in an intricately coordinated universe.

And once the larger, subtler, eternal reality is known, the soul, returned to awareness of this world, can scarcely see the phenomenal reality in the same way as before. During the visionary experience of the Eternal, that soul is identical with the Eternal, and blissfully content to remain in that state. However, that state wanes and gives way to the return in consciousness to this temporal and phenomenal reality. This is truly an unwelcome eviction. Having known the bliss of her eternal Self, she is at first greatly shocked and dismayed at finding herself back in this little world of separable images in time and space. But after her initial dismay, she reflects on her current state, and quickly realizes that she is still the eternal Self, and that the world to which she has returned consists solely of the bright Energy breathed forth from her own divinely transcendent Self. She recognizes that now she is in a dream-movie, but it is the dream-movie of God, who is indeed her very Self; and even this body in which she moves about is woven of that Divine fabric.

She realizes that, even in this projected image which God puts forth, she remains enveloped in His blissful Being, and realizes that she could never be anything but safe at home in Him. That is the great gift of Spiritual vision: that now she sees this transient world of images as suffused with ethereal light and splayed with dazzling beauty. Joyful contentment fills the air she breathes, and adoration fills her heart. This is the translation of divine vision into the world of phenomenal awareness. This is the carryover from the transcendent vision to the sensory vision here on earth.

The revelatory unitive experience, sometimes referred to as “mystical experience”, that reveals the Divine nature of the universe, is the same for all who have known it, and yet it is interpreted variously. The unitive experience has the quality of being ultimately real, unmediated, indubitable. And the experience of returning from that unitive vision to the world of duality, to the phenomenal world of space and time, *does* seem like re-entering a mind-projection, a hologram, or a dream scene. In fact, it *is* a mind-based projection. But it is not the projection of one’s *own* mind; it is a projection of the one Divine Mind, who has formed this universe of His own Light.

For everyone who has experienced this revelation, the Divine Self is realized to be the source and essence of the universe; but in the one interpretation, the Self projects an Energy from Itself that forms the perceived universe; and in the other interpretation, the Self projects (or imagines) a non-existent universe within the mind of the perceiver. The one interpretation states that the universe exists in the Mind of God, even when there is no one else to be consciously aware of it; and the other interpretation holds that the universe exists in the mind of the individual soul, and that without a soul to be conscious of it, the universe does not exist. Which view do *you* regard as “true”?

Whether you think that the phenomenal universe is an illusory reality produced by the Divine Mind, or that it is an illusion produced by a Divine power (Maya) within the human mind, the resolution of this dispute is not, and probably never will be, amenable to conclusive and demonstrable proof. However, it *is* amenable to a happy resolution, since the final conclusion remains *the same in either case*; It is this, as expressed by Shankara in the following premise:

*Brahma satyam
Jagat mithya
Jivo brahmaiva naparah*

("Brahman (the one eternal Consciousness-Bliss) is the Reality;
The phenomenal universe is merely an appearance, an illusion;
The soul is truly Brahman, without a doubt.")

NOTES AND REFERENCES:

1. *Bhagavad Gita*, IX.7, 8; *Ibid.*, p.103.
2. *Bhagavad Gita*, VII.5; *Ibid.*, p. 83.
3. *Bhagavad Gita*, IX. 4; *Ibid.*, p. 102.
4. *Bhagavad Gita*, VIII.3; *Ibid.*, p. 92.
5. *Bhagavad Gita*, XIII. 16; *Ibid.*, p.151.
6. *Bhagavad Gita*, II. 20, 17; *Ibid.*, pp. 18, 19.
7. *Bhagavad Gita*, II. 13, 22; *Ibid.*, pp. 17, 20.
8. from the Introduction to Shankara's *Crest-Jewel of Discrimination*, trans. by Swami Prabhavananda & Christopher Isherwood, Hollywood, Calif., Vedanta Press, 1947, 1975; p. 12.
9. Shankara, *Vivekachudamani*, III:16; Swami Prabhavananda and C. Isherwood, *Shankara's Crest-Jewel of Discrimination*, Hollywood, Vedanta Press, 1947; pp. 70-71.
10. Shankara, *Vivekachudamani*, trans. by Swami Prabhavananda and Christopher Isherwood; Hollywood, Vedanta Press, 1947; p. 73. In order to illustrate the process of 'superimposition', Shankara utilizes several examples:
A person might see a piece of rope lying on the ground and think that it is a snake. In such a case, that person is said to 'superimpose' a snake on the rope. Or, one might be walking by a field at night, and imagine that a wooden post is a man standing in the field; in such a case, one is said to have 'superimposed' a man on the post. Another example Shankara offers is that of a person seeing a piece of an oyster shell—what is known as 'mother of pearl'; but he imagines that it is a piece of silver. He is said to have 'superimposed' the silver on the mother of pearl. All of these examples are intended to be analogous to the superimposition by the *jiva* of a world of objects upon what is really Brahman. And, while it's easy to see how one could mistake one form for another, such as mistaking a post for a man, or a rope for a snake, or a piece of shell for silver; Brahman is formless. How, then, could one mistake Brahman for a universe of forms? The analogies do not stand up to scrutiny. Shankara *does* distinguish between a personal illusion (*pratibhasika*) and a universal, or collective, illusion (*vyavaharika*); but, according to Shankara, in both cases, it is the individual *jiva* who is responsible for the creation and maintenance of his own illusory perceptions.
11. Shankaracharya, *Commentaries on The Vedanta Sutras*; Thibaut, G. (trans.), *The Vedanta Sutras of Badarayana*, N.Y., Dover Publications, 1962; Vol. I, p. 51; Vol. II, pp.173-74.
12. Shankara, *Vivekachudamani*, trans. by Swami Prabhavananda and Christopher Isherwood; Hollywood, Vedanta Press, 1947; p. 64.

13. Shankara, *Atma Bodha*, 31.

14. Vivekachudamani, op. cit., p. 71.

15. *Ibid.*, p. 73.

16. In the One, the duality of ‘subjective’ and ‘objective’ does not exist. The One contains everything, and yet It transcends everything. It is only the human ego that sees a division in the world such as ‘subject’ and ‘object’. In the world of duality, perceived by the false ego-identity, this may be a useful distinction, but in the One, there is no such distinction. There is only the One.

Part Two

It is generally understood today that the community of scientists—in particular, quantum physicists—regard the existence of the quantum world as entirely dependent upon its observation by a human observer. It is this understanding and the belief among the populace that this principle can be applied to the non-quantum world as well, that is investigated here:

Everyone knows the old conundrum: “If a tree falls in the forest, does it make a sound if there is no one to hear it?” The question is really about whether or not there is an objective reality that exists independent and regardless of our sense experience of it. This is precisely what Einstein and Neils Bohr argued about: Einstein asserting that there *is* an existent reality independent of its knowability, and Bohr arguing that the only reality is what we are able to know (i.e., observe), and that reality exists only in the consciousness of the knower. And while that argument is far from settled, the consensus of contemporary quantum physicists currently falls solidly on the side of Bohr.

To physicists studying the submicroscopic quantum reality in the early part of the twentieth century, it became apparent that one cannot separate existence (ontology) from knowledge (epistemology), for the only means by which to agree among ourselves as to what exists is our sense experience of it. So, for physicists, existence is integrally tied up with knowing—i.e., observing. Likewise, there is no criterion by which to say: ‘the tree fell’, without someone having experienced it through their senses. From the scientific point of view, sensory knowledge, i.e., the confirmation of sight, hearing, smell, touch, etc., is regarded as the only acceptable criterion of “knowledge”. Knowledge obtained in this way is accepted as *empirical* knowledge. “Empiricism” is defined by Webster’s New World Dictionary

as “(1) relying or based solely on experiment and observation [the empirical method] rather than theory; (2) relying or based on practical experience without reference to scientific principles.” In these sentences the sensory nature of “experiment,” “observation”, and “practical experience” is implied and understood.

However, scientists were unable to *see* subatomic particles such as the electron—even with a microscope. They could not calculate *where* it is because, according to Heisenberg’s Principle of Indeterminacy, it is impossible to determine with accuracy both the position and momentum of an electron, as our means of observation inevitably alters either one or the other. And if it is impossible to know accurately where it is, where it’s heading, and at what speed, then that’s the end of science—or so it seemed in the early part of the twentieth century. This barrier to the determination of the exact whereabouts and activity of subatomic particles seemed to toll the death knoll for scientific investigation into the nature of matter and causality. It appeared to be the end of the story!

But some scientists were not satisfied to let that be the end. Using a mathematical formula devised by Erwin Schroedinger, scientists were able to calculate the *probable* location of an electron, using an algorithm called a ‘wave-function’. With this calculation tool, the location of the electron could be generalized, and eventually accurately determined, but only by assuming, in the process, that the electron, prior to the determination of its actual location, is in a ‘superposed’ state in which it both exists and does not exist at any given point. This is simply the result of the probabilistic formula as it approaches the determination of the one actual location of the electron, or the so-called ‘collapse of the wave-function’. Prior to the collapse of the wave-function, the wave-particle under consideration does not technically *exist*, except as a *possible* (or superposed) state. Only when it is observed by a conscious observer may that wave-particle be said to actually exist.¹

We must understand that the ‘superposed’ state is only a procedural necessity of the calculation formula and does not represent an actual (real) condition. We can either accept that we *cannot* know with certainty the location and momentum of an electron, and give up the search, *or* we can go through Schroedinger’s actuarial formula to determine its *probable* location—which turns out to be amazingly accurate in the end. The formula’s procedure does not actually place the electron in many places at

once but places it *everywhere* only theoretically as a formulaic requirement. Also, we do not, by observing the actual location of the electron *cause* it to be at that location, though the procedure makes it appear that our conscious observation is a causal factor. It is only as a process of eliminating its being everywhere at once that we ‘collapse’ the wave-function and thus ‘cause’ a wave-particle to be where it really is. And since we cannot know what is actually going on with the particle, but only what we predict and observe, what we observe is therefore our only ‘reality’.

It is in this sense that Quantum Physics has effectively replaced our notion of *being* or *existing* with the act of *knowing*. We can no longer discuss what *is*; we can only speak of what we are able to *know*. Now, the first thing we must know about waves and particles and the wave-particle duality is that waves and particles are not complementary realities; they are merely complementary *perspectives*—human *perspectives*—on the one indivisible and immutable Reality. Each is a valid perspective from one or another vantage point. It is only in that sense that they are complements, both perspectives contributing to the total information about—not Reality, but what is *knowable*.

In the early part of the twentieth century, the shift to a probabilistic quantum mechanics was wholly acceptable to physicists like Bohr and Heisenberg; others, like Einstein and Schrödinger, who despite having been so instrumental in the birth of quantum mechanics, were of the old school, and wanted to find another way—one that implied a reality that existed regardless of what was observed or not observed. Nonetheless, in the area of science, a blurring of the line between *being* and *knowing* imperceptibly crept into the thinking of quantum physicists, and subsequently into ours. Because of that blurring, Heisenberg’s ‘principle of uncertainty’, having to do with what we could *know*; in other words, epistemology, is nowadays taken to refer to what is; i.e., an ontological condition. The same is true of Schroedinger’s ‘wave-function’: what had been intended as a tool for *knowing*, became a criterion for *being*. So that, instead of saying that a wave-particle’s condition could not be *known* until it is measured, physicists today commonly declare that a wave-particle does not *exist* until it is measured (observed), since observation is the only recognized criterion for being.

For quite a long time now, the question of whether or not there is a universal reality independent of conscious observation has been seriously asked, not

only by physicists, but by philosophers and metaphysicians as well. Is there really a world out there or does it exist only in our consciousness of it? Empirical science admits only the evidence of the senses, and so we must, if we side with the scientists, grant reality only to what is observable by the senses, or, like the theologians, we must put our faith in the existence of an absolute metaphysical reality that is intangible and undemonstrable.

This begs the question of whether the ‘spiritual’ reality that has been experienced extrasensually by so many mystics and sages is therefore unreal simply because it does not meet the empirical criteria of science. And the answer is ‘No, it is not unreal; it is simply undemonstrable.’ Science operates on the principle that empirical knowledge is the *only* criterion for existence—not because it is necessarily so, but only because scientists have as yet discovered no other criteria for *determining* existence, or the *real*. But you may be sure that existence, or reality, is not limited by our ability to perceive it; it is, in fact, only our *knowledge* that is limited! It is merely our ability to perceive, to *know*, other dimensions of reality, other dimensions of existence, that is limited.

Happily, however, God has made Himself known to a few of us as the formless Reality within us that is eternal and all-pervasive. That Reality is the one conscious Source and substance of everything and lives as the divine Self of everyone. It is not experienced by the senses and is therefore unknowable by *science*; but it is knowable through an interior revelation in consciousness, or *gnosis*, revealed by divine Grace. God grants that revelation, that knowledge, that Grace, to those whom He finds worthy of it. May He grant it to you!

Consciousness And Matter

Humans meet reality on two fronts: the mental front and the physical front—what the ancient Greeks referred to as *Psyche* and *Cosmos*—or what we today might call the subjective and the objective realities. Another way of referring to these two fronts is as the realm of *Consciousness (Mind)*, and the realm of *Matter (Body)*. And so, if we are to give a full picture of our experience of reality, we must give an account of both its mental and its physical aspects. The mental aspect of our reality, or consciousness, is experienced as wavy; the physical, or material aspect of reality is experienced primarily as particulate. But, since Consciousness is the source

and creator of Matter, every distinct particle of Matter also contains Consciousness; and so, Matter is both wavular and particulate, as is the Light from which Matter is made. There is one all-pervasive Consciousness, and the consciousness of every distinct individual is included in and partakes of it.

Consciousness is like an ocean in that it is a continuum that is wavular; in other words, it is capable of producing waves of consciousness in the form of thoughts. We are all familiar with the waves we produce in our consciousness, and we are familiar with the fact that waves, in whatever continuum, are formed of two opposing movements: a crest and a trough—each movement necessitating the other. This became clear to me during a ‘mystical’ experience that occurred when I was in my twenties:

The experience had been initiated by an intense prayer, and initially, while I was still identified with my separate self, I was addressing God as “Thou”; but when God’s grace revealed to me that I was merely a wave on the one ocean of Consciousness, and that He alone was the sole reality, I realized that, now, to speak the word, ‘Thou’, would be to re-establish duality. For I saw that, with the thought of ‘Thou’, I bring into existence at the same time, an ‘I’.² ‘I’ and ‘Thou’ are interdependent; there is no ‘Thou’ without an ‘I’, no ‘I’ without a ‘Thou’. The crest and trough of a single wave are opposing twins, two sides of one coin. It is the same with all such pairs of contraries: “I love and (thereby) create (its opposite) hatred; I am in peace, and am fashioning chaos; standing on the peak, I necessitate the depths.” All opposites occur as the crest and trough of a single wave. It is only in a continuum capable of producing waves that opposites necessitate one another in this manner. Thoughts, created in and of consciousness, are therefore undeniably wavular.

These waves of thought on the ocean of Consciousness produce duality, but Consciousness Itself, like an ocean, has no contrary to Itself, no opposite; It is the one substratum, the boundless and undivided ocean of Consciousness, and has no duality in It. Divine Grace having revealed that ‘I’ and ‘Thou’ are merely the crest and trough of a wave of thought, both were resolved in the one ocean of Consciousness who alone exists absolutely. Then, the false ego-identification simply vanished, leaving only the one all-pervasive Consciousness aware of Itself; and in that expanded awareness, all became clear:

“But now, weeping and laughing are gone;
 Night is become day;
 Music and silence are heard as one;
 My ears are all the universe.”

In that moment beyond time,

“All motion has ceased; everything continues.
 Life and death no longer stand apart (because that One contains everything—living or otherwise).
 No I, no Thou; no now, or then.
 Unless I move, there is no stillness (for stillness cannot be without movement).”

This is the realization of the one eternal ocean of Consciousness; It is *That* which has been called ‘God’, ‘the Absolute’, ‘the Unchanging Ground’, ‘the divine Self’. When it is known, It is known to be the ultimate Reality, the final irrefutable answer to the question, ‘Who am I?’ Anyone who has experienced the divine Self in this way will tell you that the experience at its peak does not last forever; but it is certainly transformative and lasting in its joyous certainty.

What, then, of the material universe that surrounds us and constitutes our bodily form? Theoretically, the universe of Matter is the result of an initiating eruption of high-frequency electromagnetic radiation, or Light, that occurred around fourteen billion years ago from the eternal Consciousness. That Light transformed into wave-particles, collected into atoms, molecules, gases, stars, and entire galaxies spread throughout this vast universe. The one eternal Consciousness, manifesting in this way as multiple forms within Itself, then imparted Its own awareness to these animate forms as Life and Consciousness, and thereafter evolved and multiplied.

Eventually, after the passing of a lengthy stretch of time, the expansion of the universe will cease and then reverse like the alteration of a breath, becoming a universal contraction; and all Matter will implode back to its energy state in the eternal Consciousness from which it originated, and the universal cycle will be repeated once again. That high-frequency Light which transforms into the fabric that we call *Matter* is woven of God’s Intelligence and Light. Scientists prefer to say that Matter is made of *wave-particles*; but, of course, no one has ever seen a wave-particle. In fact, no

such thing actually exists; ‘wave-particle’ is merely a statement of alternate possibilities of experience.

Since the first half of the twentieth century, physicists have regarded both Light and Matter as possessing the contradictory but complementary properties of both waves and of particles. This has become well known as the Wave-Particle Duality (WPD), observable in physics experiments at the Quantum level. Equally well known is Werner Heisenberg’s Principle of Uncertainty (or Indeterminacy), which states the impossibility of simultaneously measuring both the position and momentum of a wave-particle. It now turns out that these two limitations on our ability to know and understand Matter are really one and the same! This astonishing discovery appears in detail in the December 19, 2014 edition of *Nature Communications*. International researchers Patrick Coles, Jędrzej Kaniewski, and Stephanie Wehner made the breakthrough while at the Centre for Quantum Technologies at the National University of Singapore. They found that ‘Wave-Particle Duality’ is simply the quantum ‘Uncertainty Principle’ in disguise. An article describing this new understanding appears also in the PhysOrg Newsletter for December 19, 2014, and is entitled “Quantum Physics Just Got Less Complicated”.³ It states:

The quantum uncertainty principle is the idea that it’s impossible to know two certain sets of information about a quantum particle at once. For example, the more precisely you know the position of an atom, the less precisely you can know its momentum; i.e., the speed with which it’s moving. It’s a limit on the fundamental knowability of nature, not a statement on measurement skill. The new work shows that how much you can learn about the wave versus the particle behavior of a system is constrained in exactly the same way.

What’s really surprising about this discovery is that, for three quarters of a century, the entire scientific community has been widely discussing and utilizing in their experimental researches these two limitations on our ability to know, and yet no one before now even suspected that they were related, let alone that the Wave-Particle Duality was simply another manifestation of the same principle of Indeterminacy. In fact, there was a great deal of speculation over the years by well-respected physicists that the Wave-Particle Duality referred, not to a merely *apparent* duality, but to an *actual* duality in the objective nature of light and material substance.

In the case of the experimental determination of whether an elemental constituent of matter behaves as a particle or a wave, as well as in the case of determining its position or its momentum, the very act of observing that constituent of Matter has the power to alter the experimental result. Whether the outcome of an experiment results in a wave or a particle, and/or whether its position or its momentum is measured, each outcome is wholly dependent upon the experimenter's intent, since in both cases, one kind of experiment will give one result, another kind of experiment will give another result.

In other words: If we perform an experiment that allows us to know the *position* of a wave-particle with some certainty, that experiment precludes the accurate knowledge of its *momentum* (velocity times mass); and if we perform an experiment that allows us to have accurate knowledge of the *momentum* of a wave-particle, that experiment precludes the accurate knowledge of its *position*. Similarly, if we perform an experiment that allows us to know the *particulate* nature of a wave-particle, that experiment precludes our knowing (observing) its *wavular* nature; and conversely, if we perform an experiment that allows us to know the wavular nature of a wave-particle, that experiment precludes our knowing (observing) its particulate nature.

All of these limitations on our ability to know are described by Heisenberg's Principle of Indeterminacy, or Uncertainty. The question is 'what, if anything, does the unification of these two phenomena, previously thought to be separate and uniquely distinct, say about the nature of Matter that was not previously known?' To physicists, this new understanding places both of these limiting phenomena under the common umbrella of one mathematical formula; but that hardly tells us anything *new* about the nature of material reality. Despite all the words and the mathematical formulas, we remain as ignorant concerning the mysterious nature of Matter as we were before this mathematical unification.

All that we really know is that Matter, in its very tiniest forms, appears to us as either waves or particles. If we ask the question, 'Waves or particles of what?', we are back to the original electromagnetic impulses—elusively invisible forces created, governed, and coordinated by a transcendent Intelligence. That Intelligence that projects the Energy by which the material universe is formed is the same Intelligence, the one divine Consciousness, in which our individual consciousness exists. That one conscious Self, that

Lord of the universe, is the ultimate Source of the progression of all causes—both mental and physical. He is the uncaused Cause, existing in Himself alone, remaining unaffected by all this busy world and all our mind-born creativity. And so, all enquiry comes to an end: we, with our material form and our conscious awareness, are projections of the one divine Mind. We consist of Him and live in Him; He is the one reality, our own eternal Self.

The only question remaining is: ‘Can we give up our long-accumulated addiction to dualistic conflict, our addiction to worry and doubt, our addiction to fear and fault-finding, and rest simply in the peace of God, our eternal Self? Can we accept our inability to know all the mysterious details of this material universe, and put all our trust and faith securely in God, knowing that we are upheld in His mercy, guided by His wisdom, enlivened by His breath, and made happy in His joy?’ Is it possible that such knowledge could be enough for us simple mortals? Can we learn to turn our gaze within, to quiet our own minds, purify our hearts, and know God as our own eternal Self? Yes, with His Grace, we can. Praise God.

NOTES:

1. (“Only when it is observed by a conscious observer may that wave-particle be said to actually exist.”) The paradoxical nature of this quantum circumstance is illustrated in the story in which quantum principles are erroneously attributed to the non-quantum circumstance of ‘Schroedinger’s Cat’, in which a cat is encased in a closed box with a bit of radioactive matter that *may* decay and poison the cat in the next few minutes. The paradox is that, after that time has passed, prior to the opening of the box, (if we apply quantum principles) the cat is in a superposed state, neither alive nor dead, until the box is opened, and the cat’s state is witnessed by a conscious observer. But how can a cat be neither alive nor dead? Well, in reality, it can’t, of course. But, in a word-game, in which *being observed* means *being*, it can. For, if we falsely apply quantum principles to this non-quantum circumstance, then we may say that, unless the cat is observed by a human observer, *it does not exist*. In other words, according to quantum logic, it is neither alive nor dead.
2. See the account of my mystical experience in *The Supreme Self*, Fallsburg, N.Y., Atma Books, 1984. Or download the book or the excerpt “My Experience of Enlightenment” on my website at: www.themysticsvision.com.

3. See the article at:

<http://phys.org/news/2014-12-quantum-physics-complicated.html>

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