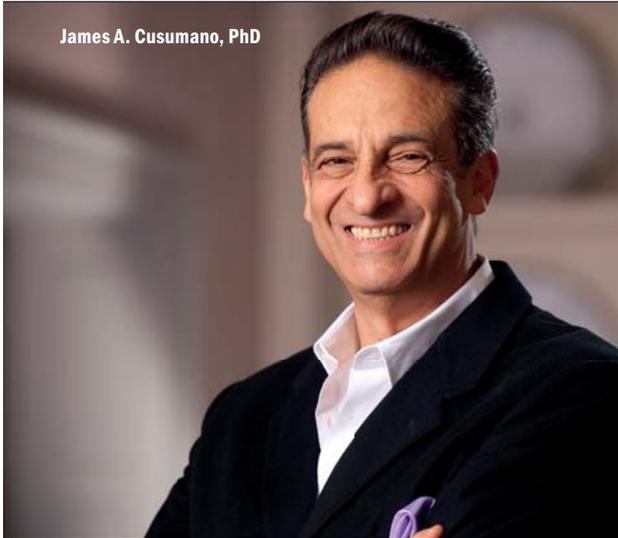


# COSMIC CONSCIOUSNESS –

## A JOURNEY TO WELL-BEING, HAPPINESS, AND SUCCESS PART II: WHERE DO WE COME FROM?<sup>A, B</sup>

James A. Cusumano, PhD



*"We come spinning out of nothingness, scattering stars like dust. Look at these words, 'spinning out of nothingness.' This is within your power."*

*Jalāl ad-Dīn Muhammad Rūmī – Persian Poet (1207-1273)*

### KEY CONCEPTS:

- The real world is not what we perceive it to be with our five senses,
- Everything in the universe – energy, material things, even thoughts – emanate from a “quantum soup” of “nothingness.”
- Everything in the universe is made up primarily of 99.99% empty space.
- Our sensual perception of the real world is generated by a “discontinuity” – points of energetic vibrations wherein a signal vibrates abruptly and instantly from on to off.
- The mystery is not what is in the “on” position of the discontinuity, where energy and information exist, but what is in the “off” position of the discontinuity, the domain of “nothingness.”
- In the “off” position, physicists know that there exist no energy, no information, no space-time, and no objects. There exist only infinite possibilities, an infinite number of probability waves described in quantum physics by the Schrödinger Wave Equation, which represent the immeasurable potential of all that was, all that is, and all that ever will be. This is the “nothingness” from which everything in the universe comes forth – including you.

In Part I of this series, we discussed **Conscious Cosmology**, which follows from quantum physics, and maintains that consciousness is the true ground of existence and reality. **Conscious Cosmology** holds that the consciousness that gives rise to your thoughts is also responsible for all of the intelligent activity of the universe. There is no such thing as an accident. Each of us, through our **Personal Consciousness**, is involved in the creative process of the ground of being, and we are all connected to **Cosmic Consciousness**, which has no beginning or ending in space and time. It is infinite. Both **Personal** and **Cosmic Consciousness** are what quantum physicists

call “non-local,” i.e., they are infinite in space and time; they have been and always will be intimately interlinked. **Cosmic Cosmology** concludes that the only way to understand **True Reality** is through the “eyes” of your consciousness, and not through the “eyes” of your five senses.

Your senses deceive you in a bizarre manner. Your brain which is responsible for your perception of the world has never had any direct experience of the world. How could it? Since birth, it's been locked up inside your skull. Your brain cells only respond to internal biological signals, such as changes in pH, electrolyte concentration, the presence of hormones, and body temperature. All of this biological activity, which is generally created by the reaction of one or more of your five senses to an external stimulus, ultimately turns into a binary code of plus and minus electrical charges across a cell membrane in a neuron. This binary code of charges within a cerebral neuron or brain cell gives rise to your perception and experience of the external world. How does it do this? It is very mysterious and it confounds the most brilliant scientists of our times. Indeed, we do not have a cogent explanation as to how we hear, see, feel, taste and smell.

If you ask authoritative scientists, who work at the forefront of our perception of reality, “What does the real world look like?” you will get a picture similar to that provided by Sir John Carew Eccles, who received the Nobel Prize for his discovery of synaptic neuron firings. In an incisive comment, he concluded, “I want you to know that there are no colors in the real world; there are no textures in the real world; there are no fragrances in the real world; what actually exists out there is some radically ambiguous and ceaselessly flowing quantum soup.” The magic is in our consciousness, because out of that soup of energy, we conjure up in our consciousness our picture of the physical world, in fact, of the entire universe (see **Figure 1**).

For example, take just a moment and think of a beautiful sunset on the ocean; can you see that picture in your brain? Of course, you can. Where is that picture? If I opened your skull and went inside your brain, I would not see a sunset, but just a binary code of plus and minus electrical charges going on and off. How does this electrochemical phenomenon create such a vivid picture in your brain? How does this kind of activity create a sound, a taste, a smell? How does a series of plus-minus charges within your brain create the entire universe within your consciousness?

If you talk with fundamental scientists today, they will tell you that even though the world appears as pictures, sounds, tastes, fragrances, and textures, in reality it's not like that. Then what's it like? The best answer that scientists can provide today is that it is a “discontinuity.” There are many kinds of **discontinuities** in physics and mathematics, but for our purpose, we can consider the following definition. A **discontinuity** is a point at which a signal abruptly and instantly undergoes change, such as when a vibrating signal continuously goes on and then off.

Consider the graph in **Figure 2**. It is a plot of a mathematical function known as a square wave in two dimensions on an X-Y plane or graph. In this case, it can represent the on-off sequence of a light bulb. For values of X equal to 0,  $-\pi$ , and  $+\pi$ , the bulb goes from “off” to “on” or vice versa, depending on which direction we are moving along the X-axis. When the light is on, the value of its intensity is exactly equal to “a.” We say that there are discontinuities at 0,  $-\pi$ , and  $+\pi$  because the bulb goes instantly from “off” to “on” or vice versa, and the value of Y at these points is “a” or “0,” **but nothing in between**, hence the mathematical function representing this process is said to be discontinuous at these points. The signal is vibrating on and off. We have either **something** ( $X = a$ ) or **nothing** ( $X = 0$ ), but nothing in between.

At the most fundamental level, what we call solid matter is made up of molecules, which are made up of atoms. Atoms are made up of subatomic particles such as protons, electrons and neutrons, and these subatomic particles are further made up of various forms of subatomic quarks, all vibrating in and out of an infinite void. Beyond that, modern physicists believe that quarks may further divide into infinitesimal “strings,” the basis for String Theory. And in fact, if you could see the world as it really is, you would see that you and I, and the chair you are sitting on – everything in the universe – are as proportionately void as intergalactic space. And everything that you observe with your five

<sup>A)</sup> **EDITOR'S COMMENT** – This is the second article in a new series based on the author's recent popular book, “**Cosmic Consciousness – A Journey To Well-being, Happiness and Success.**” In this remarkable little book, published in both the Czech and English languages within one volume, and with an introduction by internationally-acclaimed author, Dr. Deepak Chopra, Dr. Cusumano explains in simple terms, the connection between Eastern Philosophical Wisdom, consciousness and quantum physics. He develops specific practices for living a successful and fulfilled life, regardless of your passion of pursuit.

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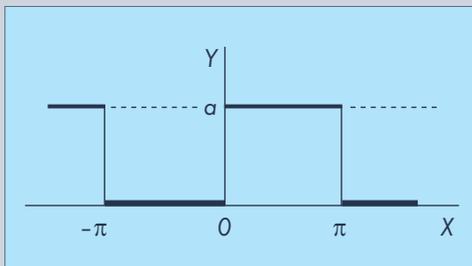
**Figure 1: Infinite Quantum Soup.** Out of the ever-existing infinite “quantum soup,” we conjure up in our consciousness everything we perceive with our five senses in the physical world – in the entire universe.



senses is vibrating on and off at the speed of light, i.e., 186,000 miles per second. Your whole body, which you currently occupy as you read this paragraph and which appears solid to you, is actually trillions of vibrations that are going on and off. It is mostly empty space, 99.99%, and the 0.01% that appears to be material is also mostly empty space. You, me, and other material objects are made mostly out of nothing. The reason we seem so solid, e.g., your feet on the hard floor, is a more complex explanation, but in simple terms, beyond the electrostatic repulsion of the electrons in the floor to those in your feet, the primary reason is that electrons possess something known as “quantum numbers,” and there is a firm rule known as the Pauli Exclusion Principle which says that electrons with the same quantum number cannot occupy the same quantum state.

The mystery is what is this “nothingness” from which we all come – you, me, planets, galaxies, in fact, the entire universe? Is it just a void, or could it be the womb of creation? Is it possible that Nature goes to exactly the same place to create a galaxy of stars, a cluster of nebulae, a rainforest, a human body, or a thought (Figure 3)? What’s a thought? Where does it come from? And after we have had a thought where does it disappear to? These are questions that some

**Figure 2: A Discontinuity is a point at which a signal goes abruptly and instantly on and then off. In this example, the signal has a value equal to both “0” and “a” at points  $-\pi$ , 0, and  $+\pi$ . The signal plotted along the Y-axis goes instantly from one value to the other, depending on which direction one proceeds along the X-axis. There exist no values of the signal (Y) in between this instantaneous change.**



people have asked forever. Some sages, geniuses and psychotics have figured it out. There is a fine line between sages, geniuses and psychotics!

**Figure 3: Womb of Creation.** What is the nothingness from which everything in the universe comes – you, me, planets, the entire universe? Is it just a void, or could it be the womb of all creation? Is it possible that Nature goes to exactly the same place to create a galaxy of stars, a cluster of nebulae, a rainforest, a human body or a thought? Some sages, geniuses, and psychotics have figured it out.



What we call the picture of the world is not the look of it; it’s not what we perceive with our five senses. It is an on-off signal that has been going on and off for all eternity. It is this on-off signal that gives us our experience of the world. We need the on-off signal to have the experience of the world and the universe. Without the off there is no on. Without the on there is no off. That’s what a discontinuity is – something that is vibrating on and off. When you see a light moving around a Christmas tree, there is no light actually traveling around the tree. The effect is created by light bulbs going on and off in a certain sequence, in which we cannot see the off, but only see the on, so our senses perceive and transmit the picture of a moving light within our consciousness. The same effect occurs in the sensory transmission of neon signs. Lights are not moving; bulbs are just going on and off in a prescribed sequence. This again is a discontinuity – a signal vibrating on and off. Another example

is a movie, where you see continuity on the screen, but the movie is actually a series of still frames that are going on and off. If the film is projected at 24 frames per second, then your eyes can only see the on part of the film, not the off, so you see a moving picture, but in actuality, there is no moving picture.

Today, scientists have a good idea as to what’s in the “on” part of the signal. It is energy and information. For example, if I take a picture of you with my cellphone and then e-mail it to somebody in China, what goes from here to there is not a picture, but a vibrating signal of photons, i.e., small quantum packets of light or electromagnetic energy. And then the picture is recreated, first in the receiver’s cellphone or computer, and then in his or her consciousness. So, we are using the concept of the discontinuity today in our technology.

The mystery is not what is in the “on” part of the discontinuity, but what is in the “off” part. If you ask knowledgeable scientists at the forefront of quantum physics research, “What is in the off part of the discontinuity,” they will give you a most amazing and perhaps unfathomable response! “There is no energy, no information, no space-time, and there are no objects.” So then, what’s there? The best answer that quantum scientists can give us is that **there are infinite possibilities.**

The discontinuity is a field of possibility waves – what Nobel laureate, Werner Heisenberg (Heisenberg’s Uncertainty Principle) called the realm of “potentia.” Here there exist only infinite possibilities, an infinite number of probability waves described in quantum physics by the **Schrödinger Wave Equation**, which represent the immeasurable potential of all that was, all that is, and all that ever will be.

This is the “nothingness” from which everything in the universe comes forth – including you. It is from this field of “nothingness” that everything comes forth and is manifested into our universe. Pursuing this concept in some depth leads to an insight that can enable you to manifest into your life that which you truly desire. The details of this almost incomprehensible concept of “nothing to everything” and other aspects of the discontinuity are discussed in forthcoming additions of this series. **Next in this series – “The Discontinuity: Nothing to Everything.”**

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**About the Author:** James A. Cusumano is Chairman and Owner of Chateau Mcely ([www.ChateauMcely.Com](http://www.ChateauMcely.Com)), chosen in 2007 by the European Union as the only “Green” 5-star luxury hotel in Central and Eastern Europe and in 2008 by the World Travel Awards as the Leading Green Hotel in the World. He is a former Research Director for Exxon, and subsequently founded two public companies in Silicon Valley, one in clean power generation, the other in pharmaceuticals manufacture via environmentally-benign, low-cost, catalytic technologies. While he was Chairman and CEO, the latter – Catalytica Pharmaceuticals, Inc. – grew in less than 5 years, to a \$1 billion enterprise with 2,000 employees. He is co-author of “Freedom from Mid-East Oil,” recently released by World Business Academy Press ([www.WorldBusiness.Org](http://www.WorldBusiness.Org)) and the author of “Cosmic Consciousness – A Journey to Well-being, Happiness and Success,” published in English and Czech by Fortuna Libri, 2011.

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