

## Op-Ed

# The Nature of Ultimate Reality & Recipe of Consciousness for Transformation

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### Abstract

Understanding the nature of ultimate reality is the basis for a better World. Adding thoughts, intentions, and emotions to this understanding, we will have the complete recipe of consciousness for transformation.

**Keywords:** Nature, ultimate reality, recipe, Consciousness, transformation.

*If you wish to understand the Universe, think of energy, frequency and vibrations.*  
Nicola Tesla

Yesterday was the 23<sup>rd</sup> of June 2014 and this body is 71 ½ years old. I had awakened at 4:00 in the morning to add some material to this article which had come to me overnight. I worked on it till 5:30 am and went back to bed still unsure if I would submit the article for publication, and if so, where. In the morning when I finally got up and came downstairs, I was met with a frightening Headline in the local newspaper, 'Iraq may turn into terrorist staging ground, Obama warns'. And the Wall Street Journal carried a column on its Op Ed pages, Race has a biological basis, racism does not. The day brought more bad news this time on NPR; Thirty nine Indian nurses continued to be held hostage in Iraq and more girls were abducted in Nigeria. Then, I made up my mind; I must complete the column and try to get it published!

Lack of understanding and appreciation of the nature of ultimate reality is what creates such problems and more; it landed us in Iraq in the first place and now a trillion dollars later, we find ourselves confronted with an impossible dammed-if-you-do dammed-if-you-don't situation. There is plenty of blame to go around beginning with our individual selves so let us not engage in finger-pointing but rather improve our understanding of the mystery of the universe and the mystery of life and thank the Jewish teenager from Brooklyn now in her early thirties, an eminent physicist turned medical doctor from Oregon now in his early sixties, together with the past and present seers for showing that this is now possible. I remember one of Mahatma Gandhi's quotes, 'Be the change you wish to see in the world'. So this article is all about how this young lady with the help of renowned physicists discovered the ultimate reality, how an eminent physicist turned medical doctor linked it to cosmic (Brahmanic) consciousness

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discovering the nature of ultimate reality, and how all this has profound implications for humanity, which I have uncovered after a scrutiny of four decades.

Journey backwards to one evening in 1995 when UPenn Radiologist Warren Gefter is with his rebellious fifteen-year old daughter Amanda Gefter dining at the House of Hunan in Ardmore, PA just west of Philadelphia, when he asks her a question, ‘*What is nothing*’ (No Thing)? In her path-breaking book, *Trespassing on Einstein’s Lawn* (Bantam Books, 2014), Amanda, now a journalist, concedes she was a class-cutting fifteen year-old, pretty much like any typical teen sometimes cutting classes, sleeping through classes, etc., was taken aback. Our two boys now big wigs in finance would have been taken aback too. The first day our son got his driver’s license and was driving home from high school, he had a wreck. My wife has a sign in our kitchen, ‘*Grandchildren are the reward for not strangling your teenagers*’ and we are blessed with six. Just yesterday our oldest grandson, Rohan, which his parents didn’t know mean Krishna, texted me a message, ‘we miss you too Aajoba’.

Anyway, Amanda responds, may be the absence of everything, why do you ask? Warren says something to the effect, that just might hold the secret to the mystery of the beginning of the universe; beginning of everything. Next, how does nothing become something? Answer, nothing becomes something in the presence of a boundary. Just like the sand on a beach, same everywhere until you the observer build a sandcastle creating the boundary. By her own account, now her interest is kindled and she smiles. The question itself is not something a typical American dad would ask; I have lived here for over fifty years. Warren’s younger days as a Zen Buddhist hippie might have something to do it. It is the type of question young Prince Siddhartha Gautama must have asked, eventually prompting him to leave the comforts of their royal palace in search for answers.

Coming back to the Gefter’s, Amanda asks, so how do we find out? The father responds, well, let’s do a little research. Americans as they are, completely rational minded conclude that this seemed like a physics problem so they decide they needed to converse with world-renowned physicists. The inquiring minds in India would go into meditation in search for the answers to such questions and have actually found them experientially throughout the ages. Both reveal gems of wisdom; the former reveals the best of the best a rational mind can fathom while the latter reveals things you can’t read in any books.

Some years later the Gefter’s find out that there was to be a ‘Science and Ultimate Reality’ Conference at Princeton during March 15-16, 2002 to honor the renowned Princeton physicist John Archibald Wheeler who was approaching his 91st birthday and they decide to crash in. Wheeler had completed his doctorate in Copenhagen under renowned Danish Physicist Niels Bohr and was an associate of Albert Einstein at Princeton. The conference was going to celebrate Wheeler’s drive to address overarching questions in physics, which sometimes bordered on the philosophical; the origin of matter, information, universe, and so on. But how to crash in? At the time Amanda was working for a bridal publication in New York called Manhattan Magazine. Somehow, she manages to get a couple of press passes and they wind up attending the conference eventually getting an opportunity to meet Dr. Wheeler himself. When they do, Warren asks him, “If observers create reality, where do observers come from?” Wheeler,

responds, “I like to say, from Physics, from the universe. The universe is a self-excited circuit”. Warren says, so, it’s all from nothing? And Wheeler nods! Later that day, the Geffer’s visit 212 Mercer, Einstein’s home, and Amanda says to her father, who is he (Wheeler), Yoda? But of course, Yoda (YOga, veDA) has always known the answer.

Before the universe, there was nothing. Something, the universe, came out of nothing at the Big Bang moment. Therefore the universe can also vanish into nothing. And so the profound question, what is ultimately real, i. e. what the ultimate reality is? The Wheeler response strengthened their resolve to uncover the mystery.

Over the ensuing fifteen years or so, Amanda manages to talk to a host of world-renowned physicists, exchanges emails with Stephen Hawking, digs into relativity theory, quantum mechanics, inflationary cosmology, and particle physics, interacting with her father all the while, finally reaching the mind-blowing conclusion, “*The Ultimate Reality is the Nothingness of the Void*”, a condition when the size of the universe was the size of Planck’s length ( $10^{-33}$  cm in diameter) some fifteen billion years ago at the moment of the Big Bang. But as the verse 10.130, Nasadiya Sukta of the most ancient human manuscript, Rig Veda suggests, the seers had already known it (Dr. Bhavsar tells me Nasadiya means *that which neither exists, nor not exists*; Sukta means *hymn*).

How did the Vedic seers know this? What sources would they have consulted to discover it? Perhaps none: just connect to the cosmic consciousness and the answers to all our questions are there to download. If I am fortunate enough to meet Amanda someday, I would tell her, ‘Amanda, you are a blessed soul; with the help of your beloved dad and the eminent physicists, you decoded an important mystery of the universe. What happened in your life may not be just a series of Eureka moments but you may have unknowingly succeeded in connecting to Indra’s Net of Mahayana Buddhism, the abode of cosmic consciousness. There is no such thing as a coincidence. Behind every coincidence, there is a purpose, a message. May you have a long, healthy, and prosperous life for there are more things to download and experientially discover that the nature of the ultimate reality cannot be anything else but cosmic consciousness. Physicists might not be able to help you any more in this journey.

James Kowall has already done that and he credits his discovery to the inspiration and wisdom of self-realized Yogi Nisarga Datta and his classic, *I Am That*. Jim hails from suburban Eugene Oregon and holds a doctorate in theoretical physics from Brown, an MD from Miami and is board-certified in neurology and internal medicine. He is teaching me modern physics and I am most fortunate to have him for a teacher, but I am afraid he has found a not so bright a student in me; I keep asking some pretty dumb questions; how do you collapse two straight lines of different slopes onto a single straight line; how can we crumple up the paper just right so the curved line drawn on the paper matches up with that straight line as Warren had shown Amanda, and where are all the simultaneously live and dead cats. All this so there will not be different versions and perspectives of the ultimate reality.

At least I am a chemical engineer who also has an undergraduate degree in physics, although I have never had a course in modern physics but Amanda had never taken a course in physics,

period. Digging deep into Amanda's work, Jim recognizes that the condition of the void, something called singularity, is reached in a falling frame of reference where all the fundamental gauge (fictitious) forces (gravity, electromagnetism, strong and weak nuclear forces) vanish leaving behind nothing, not a thing; a condition where both relativity theory and quantum mechanics blow up, and it is beyond the reach of equations and scientific theories. He knows too that nothing physical can free fall through something the size of Planck's length. Says Kowall, logician Kurt Gödel's incompleteness theorems prove that *cosmic consciousness that knows about the consistency of the rules, cannot itself emerge from any mechanism obeying a consistent set of rules. Incompleteness is a consequence of the measurement of a finite amount of information. No such finite measurement can ever prove the consistency of the rules, and yet consciousness knows about the consistency of the rules.*' He thus reaches an equally mind-blowing conclusion, *'The nature of ultimate reality cannot be anything else but cosmic (Brahmanic) consciousness'*!

In Amanda's language, *nothing* becomes *something* in the presence of a boundary. Upanishads describe nothing as Nirakar (without form or shape), that which is as unfathomable, limitless, attribute-less, unchanging, and eternal. From *Nirakar* emerges *Sakar*, creation (Amanda's something) when Shiva and Shakti enjoin. *Sakar* is always bound by the three Gunas (Sattva, Rajas, and Tamas) but *Nirakar* is not. In Amanda's language, who creates the boundary? Observers. And where do observers come from? From the nothingness itself. This appears to be circular logic but this is the best we know as of now. Why should the Nothingness suddenly decide to produce Amanda's boundary some 14 billion years ago at the moment of the Big Bang event? Or, why did Shiva decide to enjoin Shakti at moment of creation? The final verses of *Nasadiya Sukta* give us a clue,

*Whence all creation had its origin,  
whether he fashioned it or whether he did not,  
he, who surveys it all from highest heaven, he knows –  
or maybe even he does not know.*

On the other hand if we take the formation (Big Bang), sustenance, and destruction of the universe (Big Crunch) as a cyclical process as the Vedic wisdom (Brahma-Vishnu-Mahesh)/Chinese wisdom (Yin-Yang) also suggest, there is no mystery.

We human beings are *Sakar* each with a unique S, R, T level of consciousness. To experience *Nirakar*, it is necessary to transcend the three Gunas and with the experience comes the knowledge "Who I am" is really consciousness (Self Real I zation). With this discovery, the mystery of the beginning of the universe and life are revealed and the two are connected and what connects them is consciousness (Brahmanic and Atmanic). If they weren't so connected, the mystery of the universe would have been of interest primarily to physicists while the mystery of life would have been in the domain of the Vedas, Upanishads, Yoga, Krishna, Buddha, Mahavir, Patanjali, Tirumular, Dnyāneshwar, Guru Nanak, and others. In the absence of this connection, there wouldn't have been much to experientially discover. Indians have known this for millennia and with the help of Amanda Geffer, James Kowall, and world renowned physicists, science has now shown it.

The net finding is this: *“The ultimate reality is the nothingness of the void, the cosmic consciousness (Brahmanic consciousness), of which we are a microcosm (Atmanic consciousness). We remain connected to the cosmic consciousness forever but due to our limitations (mind, intellect, and ego), this link is weakened leading to a myriad of problems including health & wellness, discord & violence, and even suboptimal performance in all walks of life including business performance.”* But how to go about gaining confidence in this, since it is beyond the reach of scientific theories. Chemical Engineering comes to the rescue.

What we do in chemical engineering when direct measurements are not possible is to identify secondary measurements which strongly correlate with that which is not measurable. Such measurements are called inferential measurements. My very first Ph. D. student, N. G. Patke of the twenty I supervised in my career, worked on an experimental project, inferential computer control of a pilot-scale distillation column. In the present context, our challenge is to show that we can connect to the cosmic consciousness and demonstrate materialization of intentions. This still doesn't prove that cosmic consciousness exists but it does establish a plausible correlational link. As we succeed with more and more such disparate examples, our confidence in the hypothesis rises, but we can never prove the hypothesis with a probability of 1.0. If we could pull it off, that would be making progress.

When it comes to materialization of intentions, the work of the Late Maharishi Mahesh Yogi is significant. In the sixties, Maharishi developed a meditation program called Transcendental Meditation containing a number of Yoga sutras of Patanjali (~500 bce) who lived more or less at the time of The Buddha. One of them relates to becoming light as cotton so one can fly. In the sixties Maharishi demonstrated what he called yogic flying which involved hopping from place to place without spring action. Newton's law of gravity is not being violated here. Larry King interviewed Maharishi on May 12, 2002 on CNN and during the course of the interview, Larry asked, what is transcendental meditation? Maharishi responded,

*Transcendental meditation is a means to do what one wants to do in a better way, in the right way for maximum results. It's a program in which the mind begins to experience its own finer impressions, finer thoughts, and then finally transcend the finest thought to the level called self-referral consciousness, the ultimate reality of life. This is pure intelligence from where the creation emerges, from where the administration of life is maintained, and from where the physical expression of the universe has its basis. Transcendental meditation brings about transcendental consciousness, which is self-referral consciousness, the source of all intelligence.*

Later in the interview, Larry Asked, What is Yogic Flying? Maharishi responded:

*Yogic flying is that level of creative intelligence in the self-referral consciousness that will materialize the intentions. Whatever the intentions, materialize the intentions.*

You couldn't blame Larry for remaining puzzled throughout the interview. In yogic flying, the declared intention is lifting form the ground. In the program of materialization of intentions,

levitation is an observable measurement and so with the help of an associate, Sanjeev Aroskar, B. Tech, IIT Mumbai we set out to prove it. We designed and successfully conducted a six sigma program in Pune to investigate the concept of materialization of intentions. The overall intention is health & wellness, prosperity, sound personal relationships, and success in all aspects of life. Since these outcomes could take months or years to materialize, we decided to include in the program the yogic flying sutra. The program succeeded in good measure. Seven out of eight achieved yogic flying. I took the video of the final session in which the participants achieved yogic flying. But this was hardly a random sample; the members had been meditating for years. In a random sample of aspirants, defects would be far higher and that is problematic for science for it expects every experiment aimed at substantiating a scientific theory to be repeatable and reproducible. My older sister told me a few years ago that as a teenager in early fifties she had seen my mother in a stationary levitated state, some six to nine inches from ground. When asked, why she didn't tell me this earlier, she responded, 'would you have believed me'? Of course I would not have. Her two children told me recently that they too had seen their grandmother in that state. All three are well-educated.

Maharishi had many famous followers: renowned theoretical physicist and 2000 presidential candidate John Hagelin, film maker David Lynch, the Beatles, Merv Griffin, Harvard Professor and Medtronic CEO Bill George, comedian Jerry Seinfeld, as well as a host of celebrities, scientists, and doctors. Maharishi is longer with us but another yogi, Baba Shivanand Ji is attracting tens of thousands to his meditation program based on a different set of sutras called Durga Saptashati in which he too teaches aspirants how to materialize intentions: Says he,

*We are a being of energy; energy is vibrations, and vibration is a unit of light  
Learn to vibrate at the cosmic frequency and you too can become a being of cosmic  
light (Jyotirmaya) and when you do, all your desires will be fulfilled.*

It is gratifying Baba Ji speaks the language of modern physics, six sigma, and medical sciences. With this confirmation, the framework for individual, organizational, national, and global transformation is complete. What an amazing breakthrough.

Lastly, some will inevitably ask Indians as clever as you appear to be, how come the present-day India suffers from so many problems; corruption (It is said some Indians are hoarding over a trillion dollars in Swiss bank accounts), gang rapes, utter disregard for the environment, etc., etc. And oh, how can I forget caste discrimination, one of the most urgent challenges facing the Indian society. In the four-fold caste system derived from a degenerated interpretation of Sri Krishna's brilliant three-fold S, R, T Varna system (inspiration for the theory of rise and decline of cultures I developed in the early nineties), there is not even a hint that the Varnas can be inherited. The theory of rise and decline answers the question, 'The rise of the Tamasic component induces decline but eventually the cycle turns and the Sattvic component is restored and the society rises again'. No society is immune to the phenomena of rise and decline. In India's case the cycle has turned after more than two thousand years in decline, and the 21<sup>st</sup> century will prove it. The Middle East is currently in a state of decline in the midst of a high Tamasic component. The scientific framework alluded to here makes it possible to delay inevitable decline, hasten rise, and change the direction for societies currently in decline.

If you are an Indian-American, consider yourself very fortunate for you carry the spec of ancestry of the sapta Rishis (seven sages) and possess the same capacity to uncover the ultimate reality as millions before you have throughout the ages. If you are an American, consider yourself very fortunate too as two of your own, one Christian, one Jewish, have discovered the meaning and nature of ultimate reality while much of present-day elite in India remain in slumber. Combine the two and you will have the best of the best; rational and intuitive; scientific and spiritual. And that will transform the 21<sup>st</sup> century.

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