

Guest Editorial

Quest for a Better & More Peaceful World

Pradeep B. Deshpande*

Professor Emeritus of Chemical Engineering, University of Louisville,
& Six Sigma and Advanced Controls, Louisville, KY 40241

Abstract

In the last several years, the author and his associates have published quite a few papers that deal with a scientific framework for a better and a more peaceful world. In 2015, he also published two books, one on sigma for a better world, and the other on the nature of ultimate reality with James Kowall. He has since continued his quest for a better and more peaceful world. In this focus issue of JCER granted by the editors, the author presents his recent works. The need for a scientific framework for a better and more peaceful world appears to have increased in the last few years. We hope that the readers will find the ideas and results presented in this focus issue to be stimulating and beneficial.

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The need for a scientific framework for a better and more peaceful world appears to have increased in the last few years. In an exchange between the author and James Kowall, the following ideas became clear:

1. Science is the appropriate branch of knowledge to use when the fundamentals of the system under scrutiny are well understood.
2. Six sigma is the appropriate methodology to use when the fundamentals of the system are not well understood, as is often the case with complex processes, in which case a systemic methodology like six sigma must be used for problem-solving based on input-output data.
3. When measurement systems are unavailable or when there are uncertainty issues with the measurements, then, steps 1 and 2 will cease to be useful. Then, direct perception, as with meditation, or another way of increasing our focus of attention, is the only route to new discoveries.
4. Discoveries made through direct perception must meet the rigor of logical consistency.

So, how can we transform the world towards a better and more peaceful world under the current circumstances? By a “better” world, is meant a world where the defects in products and services are at their lowest possible levels. This enhances customer satisfaction, boosts economies, and generally leads to a more satisfying and pleasant world. Unfortunately, the efforts to achieve the least possible defect levels are hampered by an inadequate level of internal excellence which is also a root cause of why the world is not more peaceful. Thus, the scientific framework and practices of internal excellence is not only the pathway to a better world, but also to a more peaceful world. The claims of a better and a more peaceful world are auditable. They can be demonstrated in about six months with a smaller subset of world transformation, either involving an individual or an organization.

*Correspondence author: Prof. Pradeep B. Deshpande, Six Sigma & Advanced Controls, Inc., 7013 Creekton Drive, Louisville, KY 40241, <http://www.sixsigmaquality.com> E-mail: pradeep@sixsigmaquality.com

In a July 2016 interview with Arjun Walia of Collective Evolution, the author explored and explain his views on the true nature of what we perceive as ultimate reality and how it can transform our world:

- **For the benefit of our readers, how is the ultimate reality defined?**

To borrow a line of reasoning from Amanda Gefter's path-breaking book, "*Trespassing on Einstein's Lawn*", the ultimate reality is that which persists even after everything physical in the universe has vanished. It is that which is always there even before the beginning of time, uniform, same everywhere, and does not vary from observer to observer and perspective to perspective.

- **So, what is the ultimate reality?**

After an effort spanning a decade or more for her book which included interactions with some of the best known physicists of our time including Stephen Hawking, Gefter concluded, '*Ultimately, nothing is real*', that is, the ultimate reality is the nothingness of the void when the universe was about the size of Planck's length (10^{-33} cm in diameter) at the moment of the Big Bang.

- **What is the nature of the ultimate reality?**

Renowned theoretical physicist the late John Archibald Wheeler told Gefter at the Science and Ultimate Reality Conference in 2002 in Princeton that the universe was a self-excited circuit. Inspired by the work of Adi Shankara and Nisarga Datta, Jim Kowall, a triple-board certified physician with a doctorate in theoretical physics used certain concepts from theoretical physics and logic concluding that the nature of ultimate reality cannot be anything else but consciousness which he termed undifferentiated consciousness.

- **So, which perspective is a better representation?**

From Prof. Wheeler's perspective, something, the universe, came out of nothing as the universe was a self-excited circuit. If this view is adopted, then the mystery of the beginning of the universe and the mystery of life are wholly independent but if Jim's perspective is taken as a hypothesis for scrutiny, then there are some exciting possibilities. In particular, the hypothesis leads to a scientific framework for world transformation and peace that is detailed in the book. On the side, reflect on the ancient Indian saying, *Purusha (metaphor of Shiva) is a potentiality but it needs Prakrati (metaphor of Adi Shakti) for creation.*

- **Is it possible to prove Dr. Kowall's hypothesis, undifferentiated consciousness created the universe?**

To examine the hypothesis, we must conduct scientific experiments and show that everything remains connected to everything else just as it was at the moment of the Big bang when the universe was about the size of Planck's length. Western scientists have successfully conducted such experiments in at least as far as the connectedness of human beings is concerned. These experiments were made possible in part by the discovery of the DNA which allowed scientists to locate living DNA remotely and examine if there was something within us that had an effect on the remotely located DNA. That 'something' turned out to be emotions!

- **Could you give our readers an example of these experiments?**

On YouTube, there is a video clip of an experiment with 32 Metronomes that are in a sense connected although not physically linked. The readers will see that within minutes the metronomes synchronize indicating that they are sharing some form of energy. There are also experiments which show that the heart rates of a group of subjects meditating or engaged in prayer synchronize to a great extent in short order. These experiments imply that our differentiated consciousness may well be a microcosm of the undifferentiated consciousness.

- **OK, so where does this take us?**

If in fact our differentiated consciousness is a microcosm of the undifferentiated consciousness of the void and since the latter created the universe, then, we too must possess a capacity to create. This is consistent with the ancient Indian proverbs, *Aham Brahmasmi* (I am a creator) or *So Hum* (I am that). Using this line of reasoning, if we can demonstrate this capacity to create physical reality from nonphysical phenomenon (consciousness, intention, emotions, vibrations), then the hypothesis that the undifferentiated consciousness created the universe strengthens but it would be exceedingly difficult, may be even impossible, to prove it with an absolute certainty.

- **What do I need to understand before setting out to prove that I am a creator?**

First, we need to understand the fundamentals of yoga, meaning to connect, and not the bone-bending physical exercises that have come to be known as yoga in the West. It is heartening that there is now an UN International Yoga Day, June 21st that came into being at the behest of Indian Prime Minister Narendra Modi in 2014 with the support of over 175 nations. Now, if everyone understood the real meaning of yoga and how to practice it, then surely the world will become more peaceful.

Second, to connect to the undifferentiated consciousness requires two things: (i) positive emotions, (ii) a process with which to connect. We humans possess two types of emotions: Positive emotions (unconditional love, kindness, empathy, compassion) and negative emotions (anger, hatred, hostility, resentment, fear, sorrow, frustration, despair, etc.). Individuals who are endowed with abundant positive emotions may be thought of as having a high level of internal excellence. Such individuals suffer only minor, short-term disturbances in their internal conditions when highly taxing external conditions occur.

- **Where do our emotional traits come from?**

Just as we inherit genetic traits from our ancestors, we may also inherit some negative psychoemotional traits (e. g., depression, hypertension, etc.). We compound our problems by our own actions from adolescence to the current age. Success in connecting to the undifferentiated consciousness requires that these negative psychoemotional traits must be wiped clean and replaced with abundant positive emotions.

- **Are our emotions related to our base nature?**

The two are strongly correlated. Just as we have two types of emotions, the 6 ½ billion of us also have three components of the mindset: (1) S: Truthfulness, honesty, steadfastness, equanimity,

(2) **R**: Attachment, ego, ambition, greed, desire to live, and (3) **T**: Lying, cheating, inflicting injury in words or deed, and sleep. In this scheme of things, every human being has a certain minimum amount of S, R, and T required for life. A little reflection will reveal that the S component is positively and strongly correlated to positive emotions while the R and T components are strongly and positively correlated with negative emotions. Just as positive and negative emotions lead to a scale of internal excellence, so do the S, R, T components. On either scale, the pursuit of connecting to the undifferentiated consciousness is equivalent to a desire to rise of the scale of internal excellence.

- **So, it sounds fairly straightforward, track our emotions diligently, harness positive emotions and avoid negative emotions, and I can connect.**

That is partially correct. A simple thirty-day experiment will convince anyone that the conscious approach falls short of expectations. We also need a process whose side-effect is a rise in positive emotions at the expense of negative emotions and such a process is meditation. Meditation has the power to connect an individual's consciousness to the undifferentiated consciousness.

- **What sort of additional evidence can you offer that meditation can materialize intentions?**

At my request, Sanjeev Aroskar, a friend and an Electronics & Computers graduate of the well-known Indian Institute Technology, Mumbai, gathered a group of six meditators in Pune a few years ago and demonstrated that it was possible to lift from the ground from a crossed-legged sitting position. The meditation practice included an explicit intention to lift from the ground. The evidence was recorded on my iPhone camera. The experiment is further detailed in the book. That said, the intention most worthy of materialization is a rise in the level of internal excellence.

- **Can internal excellence be measured?**

Yes, but only inferentially. Any scientific inquiry must have measurable outcomes or else it becomes just another interesting philosophy. Prof. Konstantin Korotkov, Professor of Biophysics, Mechanics, and Computers at St. Petersburg Federal University in Russia developed a scientific device based on the gas discharge visualization (GDV) principle over fifteen years ago. The device involves a painless, noninvasive, and almost instantaneous measurement to estimate the physiological and psychoemotional state of the subject at a high confidence level. The GDV device was approved by the Russian Health Ministry for use as a routine medical diagnostic device in Russian hospitals and doctor's offices. I have published extensive data on myself showing that meditation enhances positive psychoemotional traits and thus, internal excellence which I can experientially attest to.

- **What are the benefits of connecting to the undifferentiated consciousness with meditation?**

Even partial success leads to a myriad of benefits: Health & wellness, creativity, and innovativeness, exemplary performance in all walks of life including business and academic performance, better leadership decisions, and less discord and violence. There are a large number individuals throughout the history of India and elsewhere who bear testimony to the truthfulness of this assertion. In recent years, prestigious science publications such as Nature, Science, Pro. Nat. Sci. Acad.-US all have carried full-length articles on the benefits of meditation. A quick

Google search will produce a long list of Nobel laureates, famous CEOs, and scientists who are regular meditators and who credit some of their successes to meditation.

- **How do we extend the benefits of meditation to the larger segment of society?**

Here, we have to take advantage of the Maharishi effect, named after the late Maharishi Mahesh Yogi. Maharishi continues to have thousands of followers who include the likes of Jerry Seinfeld, George Stephanopoulos, Peter Lynch, renowned quantum physicist and three-time presidential nominee, John Hagelin, among many others. The Maharishi effect says that a relatively small number of meditators can bring about peace in a much larger segment of the society. Following this principle, Dr. Hagelin and associates conducted experiments in Washington, DC in the eighties demonstrating that 4,000 meditators were sufficient to bring down the crime rate of the entire DC metropolitan area. The experiment was successfully repeated in the Middle East.

- **Does this mean eternal global peace is possible?**

Not quite, and the reason is this. The S, R, T components of societies undergo transformation over time due to reasons that we cannot quite comprehend. As the average S component of nation rises, that society rises but the S component cannot continue to rise indefinitely and when it reaches its peak, the T component gains prominence and the society begins to decline. The T component cannot rise indefinitely either and when it reaches its peak, the S component gains dominance and the society begins to rise again. As a consequence of this transformation of the S, R, T components, societies sustain repeated rise and decline. This has been true for thousands of years and will remain true for the foreseeable future. Since our specie did not evolve into humans at the same time, there are societies in the various stages of rise and decline present on the scene at any given time. Consequently, global peace ad infinitum is not possible. However, by adopting the scientific framework under discussion here, emerging nations can rise faster, nations in decline can change direction, and developed nations can keep their inevitable, eventual decline at bay longer and that will make the world more peaceful. This is the best possible scenario.

- **Fascinating, so this is what you mean by transforming the world?**

Actually, only partly so. From my perspective, world transformation has two parts to it: To make the world better and to make the world more peaceful. The ultimate reality book presents a scientific and auditable framework for internal excellence while the author's companion book, Six Sigma for Karma Capitalism, SAC 2015 (also available on amazon) presents the wherewithal for a better world. What we have talked about so far is for a more peaceful world. The term 'better' refers to a scenario where all processes and transactions worldwide produce the least possible defects for the best possible performance and this requires a framework and an auditable methodology for external excellence. There are several quality initiatives available but my favorite is the national award-winning six sigma co-created at Motorola by Bill Smith and Mikel J. Harry in the late seventies.

- **So, quality initiatives are sufficient for the best possible performance across the world in terms of defects?**

This is a very interesting question. Several years ago, I made a shocking discovery: In the absence of an adequate level of internal excellence, the best quality initiatives do not produce the

best possible performance in terms of defects. Add internal excellence to the mix and the performance can be further improved. So, to make the world better and more peaceful, both components of excellence, external and internal are required.

- **It appears, businesses of all types need to have both components of excellence in place?**

In my view, all companies in whatever line of business, manufacturing or service, need to embrace both components of excellence. The framework is amenable to an audit and therefore within a short span of four to six months, companies will be able to demonstrate for themselves the many benefits of the framework. Actually, the proof of concept is already on hand. Some of the references cited at the end of this interview lists several CEOs talking about the benefits of meditation for themselves and their companies.

- **Meditation has been around for thousands of years. What is the necessity of a scientific framework?**

It appears that humanity has become increasingly rational minded perhaps stung by Aristotle's false claim of our Earth-centric existence in vogue till the time of Copernicus in the fifteenth century. The widespread acceptance and adoption of the ideas discussed here is possible only with a scientific framework.

- **Sounds like we need to teach all this stuff in colleges and universities?**

I wholly agree. Today's students are tomorrow's leaders and it is absolutely essential to introduce these ideas in colleges so they do not graduate tunneled-visioned. I have done so in my six sigma class of the MBA program of the University of Kentucky at TEI/Piraeus in Athens, Greece I have been teaching for ten years and the student are loving it.

- **Does meditation have a religious connotation?**

Meditation is for everyone, of all faiths and also for those who profess no faith. Every human being has the same gift of capacity to learn but the desire to learn and openness of mind are choices and these are the biggest obstacles to progress.

- **Does God exist according to the scientific framework?**

Scientific inquiry cannot go beyond the notion of undifferentiated consciousness. However, many will marvel at the same evidence and conclude that God must exist while many will say, not so fast. The precious lessons I have drawn from the scientific framework are: (1) The purpose of all scriptures of all faiths is identical: To prod humanity to rise on the scale of internal excellence, (2) All incarnations, Son of God, Prophets have devoted their entire lifetimes in the pursuit of a single goal: To persuade humanity to rise on the scale of internal excellence.

- **What are your thoughts on violence in the name of religion?**

Let me start with the Hindu religion. Discrimination on the basis of caste has been a persistent problem for thousands of years although there is no mention in the Geeta that Varna distinctions can be inherited. In the epic Mahabharata, there is an episode which shows Sage Bhishma lying

on a bed of arrows commenting to Karna, *If I had not called you Shudra and not prevented you from participating in the sports arena, may be this Great War could have been avoided.* He further goes on to say, *in the Vedic times, Varna was determined by qualities, when this changed to the heredity-based caste system, no one knows.*

Next, to Christians and inquisitions and crusades. Bible has not changed but there is no more violence in the name of Christianity. Finally, the current problem with terrorism. Islam is no more responsible for terrorism than Bible for inquisitions and crusades or the Geeta for caste discrimination. The root cause of violence in the name of religion is high R and T components.

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Biographical Sketch of Authors



Pradeep B. Deshpande is Professor Emeritus and a Former Chair of the Chemical Engineering Department at the University of Louisville. He is also President and CEO, Six Sigma and Advanced Controls, Inc. (SAC), and a Visiting Professor of Management, Gatton College of Business and Economics, University of Kentucky. He served on the ChE faculty at the University of Louisville for thirty three years (1975 – 2008) during which he supervised twenty doctoral and 40 Master's scholars. He is an author or co-author of more than 100 papers and eight books including the most recent *Six Sigma for Karma Capitalism, 2015 (amazon)*, and *The Nature of Ultimate Reality and How It Can Transform Our World: Evidence from Modern Physics; Wisdom of YODA, 2015 (amazon)*, the latter coauthored with Dr. James P. Kowall, MD, PhD (Theoretical Physics) Post retirement, he has continued his research into the pursuit of perfection in human endeavors and consulting in advanced process control and six sigma. He is a recipient of several awards including Donald P. Eckman Award in Process Control Education given by International Society of Automation and is a Fellow and life Member of ISA. He has presented lectures on his scientific framework for world transformation and peace in several countries to highly appreciative audiences and has included the science of internal excellence in his six sigma course of the MBA program of the University of Kentucky at TEI/Piraeus in Athens, Greece he has been teaching for ten years, and the students love it. Recently, SAC and Indian Statistical Institute which comes under the purview of the Ministry of Statistics and Program Implementation, Government of India to take the program of external and internal excellence forward to Indian organizations in the public and private sectors.



Dr. James Paul Kowall obtained his PhD in Theoretical Physics at Brown University in 1980. He then served as a postdoctoral fellow at the University of California, Berkeley for two years before enrolling in the University of Miami medical school graduating in 1984. He completed his residency in neurology at Stanford University during 1985-88 and served as a postdoctoral fellow there for a year. Jim is also board-certified in internal medicine and sleep disorders medicine. Subsequently, he was in private practice in Coos Bay Oregon until his retirement in 2008. Jim has published extensively on a modern physics perspective of the nature of ultimate reality.