

Wisdom of Bhagvad Geeta and Individual, Organizational, National, and Global Transformation are Intricately Linked

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In the eighties, a dear friend and colleague, the late Prof. Phoebus M. Christopher and I would go out for lunch several times a week. Somehow, the conversation would invariably turn to rise and decline of cultures. I would argue that all cultures, no matter how great, eventually decline only to rise again. It appears that the notion of repeated rise and decline of cultures was deeply ingrained in my genes. I would say to him, look at Greece which produced giants of the likes of Plato, Aristotle, Socrates, Archimedes, Homer, and many others and look at where Greece is today. Being of Greek ancestry with a philosophical bent of mind, Phoebus would say, I concur, but as scientists, we have to corroborate this theory with data. We would then spend many lunch periods talking about how and where to get the data. One day, we decided, we would look at the Encyclopedia Britannica and jot down the names of individuals from a given culture listed in the reputed Western reference to see if it reveals the trend of rise and decline of that culture. In the early nineties, I would go to India in the summer breaks with my family, and one spring, Phoebus said to me, I will jot

down the names of Greeks listed in the Encyclopedia Britannica. I nodded in grateful appreciation, but in my mind I was telling myself nothing was going to come out of it; after all there were twenty-three volumes of the Encyclopedia. I returned to Louisville in the Middle of August. One day soon thereafter, I heard a knock on my office door and Phoebus walked in and tossed a bar graph on my table. To my shock, I saw a clear indication of the rise and decline of Greece nearly two thousand years ago (see Figure 1).

Upon seeing this, we knew we had something here. I requested our graduate students, Bharat Sanghvi and

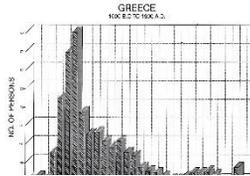


Figure 1. Rise & Decline of Greece

Sandeep Dronawat if they could repeat the exercise for Great Britain, Germany, and the United States, and I am grateful

that they agreed. Sure enough, all three nations showed the same trends. I then self-published the article, “On the Cyclical Nature of Excellence” (Reflections, 1993). During those days, a well-known historian by the name of Dr. Donald W. Swain was the President of the University of Louisville. Upon reading the article, he remarked, Your work is unique, but beware, historians will raise severe objections to it as you are drawing broad conclusions based on a single data source, no how reputable, but it is fascinating, good luck with it. University of Minnesota Professor, Rutherford Aris, Fellow of the National Academy of Engineering, and Purdue University Distinguished Professor, Theodore J. Williams, too made similar comments. But, I was convinced we had something very significant here.

Prior to joining the University of Louisville in 1975 we were in the city of San Francisco, California, where I worked for Bechtel, Inc. The bay area experiences rainfall during December to May and June to November is basically a dry season. The bay area is surrounded by beautiful rolling hills which become golden brown during dry seasons. Come December, patches of green would

appear and in a month or so, all the hills would turn lush green and the history would repeat itself in the dry seasons. Turning back to the cyclical nature of excellence, I was already seeing how successful Indians were becoming in the United States having come to the US in 1962 and these were the patches of green. Based on this preliminary evidence, I surmised, that the rise of India was imminent. I then self-published a paper, On the Scriptural Nature of Varna, Is India Rising? (Reflections, 1996).

In those days, I was attempting to help establish what I had called “The Puneville project” to link Louisville to Pune as Sister Cities. In this connection, I had made arrangements to invite Br. B. R. Sabade, Secretary General of the Mahratta Chamber of Commerce and Industries, Pune, to Louisville. The Secretary General reciprocated the gesture by inviting me to make a presentation, “Is India Rising?” in Pune. I made the presentation and at the end, a couple of dhoti-kurta clad men. I seem to recall they were from the BJP, remarked, “You are not telling us anything new, all this is in the Bhagvad

Geeta” and I was dumfounded; I didn’t know what the heck Geeta was about other than the fact that it was revered by the likes of Mahatma Gandhi and J. Robert Oppenheimer, father of the atomic bomb. The conversation did perk my interest though. I got hold the Commentary on the Bhagvad Geeta by a Tamilian, Swami Chidbhavananda, which remained my bedside reading for several years. At bedtime, I would read several pages and that would give me a good night sleep. I would find a clue here and a hint there, but no clear answers.

The soon-to-be presented scientific wisdom is all there in the Geeta but for an uninitiated reader like me who only knows Sanskrit because its connection to Marathi, it was exceedingly difficult to grasp. In hindsight, this is partly because the material is not presented in a proper chronological order. It is like you are trying to teach someone relativity theory and a course in basic physics comes much later. Of course, it is possible that Shri Krishna presented the material this way for a reason; He wanted us to struggle with it and eventually figure it out. This I have done and coauthored a book, “The Nature of Ultimate Reality and How It Can Transform Our World: Evidence from Modern Physics: Wisdom of YODA” (amazon, 1995). My coauthor is a Christian American friend, Dr. James P. Kowall, who is a physician (Neurology,

Internal Medicine) but he additionally holds a doctorate in Theoretical Physics. He is in his sixties and he retired from private practice several years ago to search for the Ultimate Reality. On the side, YODA is the frail, wise old man of the Star Wars fame. It is heartening to see that Hollywood has figured out where the wisdom of humanity is: YOga and veDA. There are eighteen chapters in the Bhagvad Geeta and coincidentally, our book too has eighteen chapters. Hopefully, we have presented the material in proper chronological order to help the uninitiated, from the Big Bang, to how we got here, what challenges the humanity is facing, and how to address them.

The Bhagavad Geeta is all about individual transformation. For some reason, Krishna only dealt with individual transformation and went only to the extent of pointing out why societies decline but didn’t discuss societal transformation. For this topic, we have to revert to the work of the Maharishi Mahesh Yogi which is eventually linked to the wisdom of Adi Shankara and perhaps to more ancient sages. Incidentally, the honor of deciphering the meaning of ultimate reality in the scientific sense goes to a Jewish American journalist, Amanda Gefter and the honor of deciphering the nature of ultimate reality goes to Jim Kowall who was inspired by the work of

Adi Shankara and the late Nisarga Datta, author of “I am that”. Our sages termed the ultimate reality as potentiality (Shunya, Purusha, Shiva) but for the potentiality to manifest into reality, the universe, desire, frequency, and vibrations, energy (Prakriti, Adya Shakti) are required.

Now on to the scientific wisdom of the Bhagvad Geeta. Recall that Shri Krishna was trying to console his favorite friend and disciple, Arjuna to rise and fight. Let us focus on Arjuna’s internal war and not on the external war, Mahabharata. To understand this topic, we have to grasp the notion of internal excellence.

All seven-and-a-half billion human inhabitants of the Planet Earth have three components of the mindset: **S** (Truthfulness, honesty, steadfastness, and equanimity), **R** (Attachment, bravery, ego, ambition, greed, and desire to live), and **T** (Lying, cheating, causing injury in words or deed, and sleep). The definition of the three components is such that perfection (all **S**) or pure evil (all **T**) is precluded. The level of internal excellence has nothing to do race or caste, religion, gender, or national origin. The three components of the mindset are correlated to the two human emotions: Positive emotions: Unconditional love, kindness, empathy, and compassion, and Negative emotions: anger, hatred, hostility, resentment, frustration, jealousy,

sorrow, and the like. (Our older daughter-in-law is Jewish, younger daughter-in-law a Catholic, and we are Brahmins. The photonic energy field of our daughters-in-law is even better than that of our children!)

A little reflection will reveal that positive emotions strongly and positively correlate to the **S** component, while negative emotions strongly and positively correlate to excessive values of **R** and **T** components. This is fortunate because internal excellence cannot be readily measured, but the two human emotions can. The two scales of excellence are shown in Figure 2. For information about the measurement devices, Google, MIT researcher Dina Katabi’s EQ Radio, developed with funding from NSF and US Airforce and Professor Konstantin Korotkov’s Gas Discharge Visualization (GDV) device. The GDV technology (GDVUSA.org) is registered with the FDA.

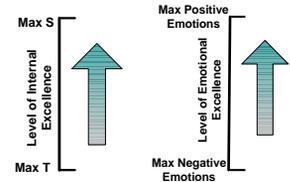


Figure 2. Scales of excellence

All cultures, no matter how great, eventually decline. As the average **S** component of a society rises, the society rises but the **S** component cannot rise indefinitely and so when it reaches its peak, the **T** component takes

over and the society begins to decline. The **T** component cannot rise indefinitely either and when it reaches its peak, the **S** component takes over and the society begins to rise again. This has been true for thousands of years and it will continue to be so for the foreseeable future.

Shri Krishna was trying to urge Arjuna, and through Arjuna, humanity, to rise on the scales of excellence. In Arabic, this struggle goes by the oft-misinterpreted name, *Jihad*. All incarnations of every faith have spent their lifetimes to prod humanity to rise on the scales of excellence. Actually, we are all trying to rise but in ignorance, we are either searching for the wrong thing or we are going about it the wrong way.

With the measurement device to estimate emotional excellence on hand, we need a process with which to raise our internal/emotional excellence. Meditation is such a process. Trying to comprehend the fundamentals of how ancient sages came up with meditation for the rational mind is a futile exercise, because meditation is not a product of the rational mind. It is a product of the intuitive mind. Albert Einstein reportedly said once, "*Intuition is a scared gift and the rational mind is a faithful servant. We have created a society that worships the servant and has forgotten the gift.*" Instead, we should be content with auditing the benefits of meditation. I have tons of before-and-after meditation data on myself for several years that corroborate the benefits of meditation

that I know and experientially feel. There is a considerable body of literature on meditation in reputed journals and media publications as well.

The scientific framework for internal excellence is the pathway to keep the decline of developed nations such as the United States, at bay longer, accelerate the rise of emerging nations, such as India, and change the direction of nations currently in decline, such as Greece, and that will make the world more peaceful. This is the best humanity can do. Eternal global peace is not in the plan of nature.

For material wellbeing, the scientific framework for internal excellence must be enjoined with a scientific framework for external excellence. The latter is required for minimizing the defect levels in products and services. Without both components of excellence, India cannot emerge as a developed nation. I made a critical discovery several years ago that in the absence of an adequate level of internal excellence, the best of the best external excellence programs, including six sigma, cannot deliver satisfactory performance. Combine the two and the performance will zoom. The two components together constitute the scientific framework for individual, organizational, national, and global transformation toward a better and more peaceful world.

APPENDIX A. WHEN TO USE SCIENCE

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. Take care, discoveries made through direct perception must meet the rigor of logical consistency.

APPENDIX B. SOME USEFUL FUNDAMENTALS

1. All scientific theories are provisional in that as more and more data arrives that conforms to the predictions of the theory, our confidence in the theory rises, but if a single data point materializes that contradicts the theory, then, that theory must be abandoned in favor of a new or modified theory (Stephen Hawking in *A Brief History of Time*).
2. A problem cannot be solved from the same level of consciousness that created it (Attributed to Albert Einstein).
3. Every level of consciousness has an understanding of reality that is valid

at that level of perception (David R. Hawkins).

4. In the absence of measurements, a scientific theory is but a conjecture.
5. Science demands that the results of experiments are repeatable and reproducible regardless who conducts the experiments, where, and when and that is the way it should be. Six sigma recognizes that all outcomes exhibit a certain amount of variation due to causes that are unknown and uncontrollable. Thus, zero defects ad infinitum is not in the plan of nature.
6. Everyone has the capacity to change; the ability to change can be taught or learned, but the desire to change is a choice. We can only take the horses to the pond, we cannot make them drink.
7. Progress requires a change of perspective from how much we know to how little we know.
8. Mysticism is science not yet discovered, but take care, mysticism and superstition are close cousins and so, always validate observations with six sigma principles.
9. No one invents anything. All the data, information, and facts are already there in the domain of the unmanifest waiting to be downloaded by connecting to the source.
10. Be an inquirer, not a skeptic.
11. Trust but verify, regardless of the source.
12. As people progress in raising their levels of internal excellence, they will

make different choices and that will bring them closer.

13. Ancient Indian wisdom is both profound and unparalleled but let that not raise your R component.

14. We should remain steadfastly committed to relying on data alone for decision-making at all times except when we sit for meditation. Then, send your rational mind on a well-deserved vacation or else it will become your worst enemy.

TO THE RSS. I humbly request RSS to consider the following material. Last week, RSS Chief, Shri Mohan Bhagwat spoke about “inclusive Hindutva”. RSS may well subscribe to, or maybe they have always subscribed to the notion of *Vasudeva Kutumba* but it should be obvious, there is considerable apprehension about its perceived intentions. The organization could make concerted efforts with both words and deed to alleviate this anxiety on the part of those who are apprehensive.

My family has a deep connection to the Congress Party that goes back to 1915s. My late father who was posthumously given the honor of the title, Freedom Fighter, tirelessly fought in the nonviolent freedom struggle for many decades beginning in the 1915s to the great sacrifice of his family and none of us regret it. We were told that he and the late Prime Minister, Hon. Shri P. V. Narasimha Rao, would spend hours and hours discussing strategies to win

independence late into the night when a mutual friend would tell them, it was getting awfully late, let’s go to bed and continue the discussion in the morning. He even spent a year in jail. I had a close encounter with death twice in a span of one year around 1947-48, the first time at the hands of Razakars who were rumored to be coming to our hometown Bidar to assassinate our family along with some other families in town. We had to flee town. The second time was on the day when Mahatma Gandhi was assassinated. I was in my aunt’s town called Rethe in Maharashtra. Their maid servant came by to tell my uncle that their home was going to be bunt down that night (we are Brahmins as was the assassin). Again, we fled in the middle of the night for the town called Karad. Sure enough, the house was burnt down. Internal excellence has a deep meaning to me.

In 1988, I was invited by the Government of India as a member of an NRI delegation from the US for meetings with the Officials and Hon. Prime Minister the late Shri Rajiv Gandhi. My recommendations on how to make Industries globally competitive with computer-based advanced control and optimization were accepted and implemented. In 2002, I met with Hon. Shri Narasimha Rao at his residence in Delhi and explained to him the criticality

of six sigma for India and he concurred, but unfortunately nothing much could be done as he had already retired and he said he never discussed business with the Hon. Prime Minister the late Shri Atal Behari Vajpayee. The opportunity this time is far bigger, nothing short of national and global transformation.

As a ten-year old, I would go the RSS sessions wearing Khaki shorts and a white shirt walking out of our home, with my father watching. He never objected to my going to these sessions. He must have realized these sessions weren’t causing any harm, just instilling a sense of discipline and the importance of service.

Once you have understood the concepts discussed here, please see the Hon. Prime Minister Narendra Modi’s convocation speech at AIIMS a few years ago and undoubtedly you are aware he was able to convince The United Nations to introduce International Yoga Day. Now, we have an opportunity and perhaps the responsibility to explain to the world, the what, why, and how of yoga with science.

(<https://youtu.be/hW-eqrHqTM0>)

Humanity is facing a myriad of problems: Global warming, renewal energy, desalination, etc. These are the real problems worth spending time on and not on the endless debate on Hindutva.

In closing, this article is written from the heart with the best of intentions but if something here is perceived to be offensive, I extend my sincerest apologies.

Further Reading

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- Biographical Sketch of the Author.**
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- Pradeep B. Deshpande, now aged 75, 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 has also taught at Indian Institute of Technology, Kanpur, Indian Institute of Technology, Madras, University of Bombay Department of Chemical Technology, Howard University, and Drexel University and spent a year on a National science Foundation supported sabbatical at the National Chemical Laboratory in Pune. He is an author or co-author of more than 100 papers and eight books. 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 is listed in the Who's Who in the World and serves on the Boards of Advisors of two peer-reviewed journals: *Journal of Consciousness Exploration and Research* and *Scientific God Journal*. Both journals have published focus issues on Deshpande's work.