Article

How to Achieve Enlightenment Scientifically

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Abstract

A chemical engineer's perspective on the science of enlightenment is presented. Rational but open-minded scientists have been relentlessly pursuing evidence which would support the wisdom of our enlightened ancestors. Western scientists have done an awful lot of wonderful work in recent decades that is chipping away at the mystery surrounding the phenomenon of enlightenment. The resulting ideas and concepts cut across all boundaries of religion, race, caste, cultures and nationality. The framework is made possible by ancient Eastern wisdom and the work of Western scientists. The concepts are not only for individual transformation but also for world transformation and as a subset, national transformation. While there appears to be a theoretical limit on national or world transformation and therefore the extent to which global peace can be achieved, the framework in this paper is capable of making a real difference for humanity.

Keywords: Enlightenment, six sigma, Brahma Uncertainty Principle, scientific investigation.

Mysticism is science not yet understood but watch out mysticism and superstition are close cousins and therefore take care to validate all observations with six sigma principles while not forgetting the Brahma Uncertainty Principle (1).

INTRODUCTION

Arguably for the first time in human history a complete science for enlightenment appears to be at hand. It is appropriate for aspiring individuals of all races, religions, castes, cultures, and nations. It is a framework for internal and external transformation having two components: (I). A pathway for the excellence of the external with six sigma (2) which teaches how to do all that we do, from the time we wake up to the time we go to bed including all that we do at work, in the best possible manner, and (II). A pathway for the excellence of the internal which has the capacity to take us towards enlightenment.

To begin, think of the universe as consisting of two domains depicted in Figure 1: *The domain of the unmanifest* (The domain of pure consciousness) and the *domain of the manifest* accessible to the five senses. Of course, this is a hypothesis requiring confirmation. All data, information, and facts from the Big Bang to present are taken to be in the domain of the unmanifest while the domain of the manifest contains all there is in the manifest world in the form of a finitely infinite

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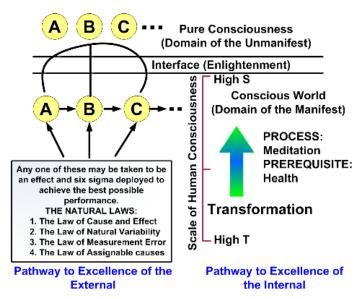
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chain of causes and effects. The two are separated by a boundary that represents the level of enlightenment, the upper limit of human consciousness.

To begin the journey, it is necessary to know how we go here (3). History of the universe begins with the Big Bang and progresses in time when living systems evolve into human beings. Once in the human state, the author's theory of rise and decline takes charge. His three natural laws explain that there are three components of human mindset namely, *Sattvic*, *Rajasic*, and *Tamasic*. These three components undergo transformation over time leading to rise and decline of societies.

Pathway to Pure Consciousness at a Glance



Together they represent the upper limit of human excellence

Figure 1. Pathway to Enlightenment: Excellence of the External and Internal

During the time of rise, the S component predominates while in the state of decline, the T component assumes preeminence. The theory posits that the phenomenon of rise and decline is cyclical. Abundant data are available that support the theory. It is on the basis of this theory that the author correctly predicted the rise of China and India in the early nineties and the Arab Spring in 2008. Note that the theory governs societies and nations generally and places no limit on the prospects for an individual in any society at whatever state of rise or decline to transform themselves to the fullest extent possible.

The three components of the mindset lead to a scale of human consciousness the top-end of which is enlightenment (highest S). Incarnations such as Sri Krishna, Moses, Buddha, Jesus, and others are at the top, just beyond, while the wicked ones such as Hitler are at the bottom (highest T), and the rest of us somewhere in between on this scale. Progress towards enlightenment for an individual means to rise on this scale of consciousness which in turn necessitates an increase in the S component and control of and a reduction in R and T components.

It is clear that if we are to make progress, a reliable measure of the level of consciousness (LOC) is required. It is striking that a well-known American Psychiatrist, David R. Hawkins MD, who wrote the book *Orthomolecular Psychiatry* (4) with The Late Dr. Linus Pauling (Nobel Prize winner in Chemistry and Peace), has developed just such a measurement system (5). This measurement system can not only measure the level of consciousness, but it can also discern *truth* from *falsehood*. Therefore it may be used to download data, information, and facts from the unmanifest to the manifest world. We have explained that the ability to discern truth from falsehood additionally depends on the level of consciousness of the experimenter and the subject if any, leading to the Brahma Uncertainty Principle (1).

Our level of consciousness is integral to who are and if we are to make progress in raising it, we must find something within us that impact it. The DNA being a fundamental building block of human systems, the equivalent search is for that something within us which has an impact on our DNA and if it turns out that very same thing is strongly correlated with LOC, then our problem is solved and the science of enlightenment is at hand. In another striking example, Gregg Braden, a New York Times best-selling author, has compiled the results of several scientific experiments conducted in Europe and the United States that shed light on this topic (6). These experiments were conducted by well-known scientists at reputable institutions which show how human DNA impacts the basic building block of the stuff the world is made of and how human emotion has a direct impact on our DNA. There is ample evidence showing that positive emotions have a positive impact on our DNA and negative emotions have a negative impact. The positive emotions are compassion, empathy, love, kindness, forgiveness, etc, while the negative emotions are hatred, greed, anger, envy, hostility, etc. It is obvious that life-supporting positive emotions are strongly correlated with the S component and therefore they also raise the level of consciousness. If you will reflect on the individuals who you perceive to have a very high level of consciousness, you will find that they all have these positive emotions in abundance. Guru Mahan Maharishi Paranjothiyar, self-realized yogi whose work is cited in the following paragraphs, is one such soul. With this understanding, a scientific methodology for raising LOC is at hand and substantial progress towards a science of enlightenment is made!

On the basis of these experiments, Braden suggests that the universe is holographic in nature implying that it accommodates multiple realities. Borrowing from an ancient Buddhist Sutra, he terms the holographic universe as Indra's net. The Sutra says, "The net which appeared in the distant past stretches to infinity in all directions. There are infinite numbers of jewels throughout the net with each having the power to create a change in the entire net. Each of the jewels is reflected in this one jewel that also reflects all jewels" That is, a change in any portion of the net is instantly reflected everywhere else on the net; there is no need for the change to travel at the speed of light or faster. A field of invisible energy, unmeasurable with instrumentation but whose effects can be observed and felt connects everything to everything else in the net. Our DNA gives access to this field and the positive emotions are the key to tapping into that field. Thus, attempts at enlightenment, i. e., to rise to the top end of the level of consciousness, and connecting to the net are equivalent pursuits. Even temporary success in connecting to the net is reported to have brought miraculous benefits. Dr. James Kowall, MD, a practicing physician who also holds a Ph. D. in theoretical physics has written an excellent article titled What is Reality in a Holographic World? in a recent issue of Scientific God Journal (7). It is interesting that the

scientific work of these eminent Americans is inspired by ancient Indian wisdom; they each cite the work of Nisargadatta Maharaj! There is nothing in this paper that conflicts with that wisdom, I am that! (So Aum Hum – Soham).

While positive emotions are essential for tapping into the net, i. e., for enlightenment, they are a necessary but not a sufficient condition for success. The sufficiency condition requires a process. To understand this idea, note that we all require food, water, and oxygen to sustain life. We also know that no matter what we eat whether protein, carbohydrates, starches, etc., it all gets eventually converted into energy which the body utilizes for sustenance. What yogis have accomplished is to bypass the need for food and drink and directly access the energy for their sustenance through long years of practice which includes meditation.

There is an additional concept important of comprehension. At the Big Bang, there was only energy when the conversion from energy into mass began according to Einstein's famous equation, $E = Mc^2$. That process continues to date. Physicists tell us the forces of gravity pull objects in the universe closer while the energy draws them apart. At the present time, the energy is winning, i. e., the universe is expanding. Now, we know that 90% of the known universe has no mass in it, just energy. It is clear the universe has abundant energy, if we could only find a way to access it, that would be fantastic. Yogis have shown that it is possible to access the energy of the cosmos.

While there is abundant energy in the universe and some enlightened ones such the Buddha have shown that it can be received by meditating even under a tree, ancient yogis and perhaps ancient Egyptians as well discovered that it is possible to receive a more concentrated dose of it in a properly constructed structure for the benefit of not so evolved aspirants. A pyramid is one such structure. A pyramid which goes by the name *Pranavalaya* at Trimurthi Hills, Tamil Nadu, India, shown in Figure 2 is constructed to receive the maximum amount of energy at its apex which is made of brass. The next challenge is for the aspirant to receive the maximum amount of energy which is arriving at the apex of the structure. This is done with Kundalini meditation (8). When the mind becomes still, the top of the skull receives the maximum amount of energy from the apex and the meditator realizes all its benefits.



Figure 2. Pranavalaya at Trimurthi Hills

(This photograph was snapped on an overcast day which for some inexplicable reason also captured a beam of light flowing into the Apex of the building)

By way of corroboration, Guru Mahan Maharishi Paranjothiyar, whom we fondly refer to as Guruji, has been undertaking a three-week meditation since 1994 annually in a 6x6x8 ft cell under the floor of Pranavalaya during which he neither eats nor drinks. Medical examination reveals that he does not lose weight and his vital signs are stable. Medical professionals would readily concur that the only way this is possible is that he has succeeded in accessing the abundant energy from the cosmos.

The above approach, meditation, is the first of two approaches whose side-effect is a rise in LOC. The second is a conscious approach, which involves judiciously watching over one's actions literally on a daily basis and permitting only those that promote the *S* component while meticulously shunning those that raise the *R* and *T* components. This the author does routinely on a daily basis.

Now, examine what yogis and saints urge followers to do while engaging in the practice of Pranayam, meditation, prayer, chanting, etc. In the language of us scientists, what they are doing is urging followers to raise their S component, reduce their R and T components and with the power of positive emotions, attempt to connect to the net. It should not come as a surprise why only a minority of participants in these programs succeed in connecting to the net albeit temporarily deriving tremendous benefits; High S Component characteristics and positive emotions cannot be manufactured or faked; they must be integral to the individual, part and parcel of the individual's DNA. Connecting to the Indra's net is no trivial task but whoever succeeds will be able to provide a testimony to its prowess!

Here are two additional examples. In his book **Power vs. Force** (9), Dr. Hawkins conveys the following experience as he came out of meditation.

The miraculous happened, beyond ordinary comprehension. Many chronic maladies from which I had suffered for years spontaneously normalized and I no longer needed my lifetime bifocals. Occasionally, I would feel an exquisitely blissful energy, an infinite love suddenly begin to radiate from my heart.

And the self-realized yogi Sadhguru Jaggi Vasudev (www.ishafoundation.org) narrates this:

On a certain day, in a field hockey game, I fractured my left ankle and I went and sat down. I was in excruciating pain and had a very severe bout of asthma; this pain and this inability to breathe together were quite something. At that moment, it occurred to me that if the maker of this body is inside, why is it that I cannot mend it from inside? I sat down with a certain resolve; if this is true, I must be able to allow it to mend itself. Otherwise, I must be completely on the wrong track. I sat down with my eyes closed for a little more than an hour. When I came out, my asthma left me, never to come back again, and above all, my fractured leg was perfectly okay in a little more than an hour's time.

To continue, reflect on the assertion of another yogi, Swami Ramdev, "Practicing Pranayam in the Shibirs (his training camps) will bring nine times the benefit of doing them alone at home". The Late Dr. Lewis Thomas, MD Harvard University and President of Memorial Sloan Kettering Cancer Center in New York wrote in **The Lives of a Cell** (10) that termites with some 50,000

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neurons in their heads are hardly able to do anything individually much less think. However, in a colony of tens of thousands of termites, thinking begins and they wind up building colonies containing columns and beautiful symmetrical arches. The Late Maharishi Mahesh Yogi used to say that a relatively small group of meditators have a positive effect on a much larger number of people in the surroundings. All of these experiences and experiments are consistent with the presence of an invisible field of energy and the Indra's net. The efficacy of Pranayam, meditation, prayer, and chanting, etc., appears to improve when done in a large group of practitioners and further increase in the presence of an individual with a high level of consciousness. Scientists are encouraged to investigate this hypothesis.

There are some in India who are attempting to awaken the nation to the need for cleaner Government. The following ideas might be relevant in this context. Dr. Hawkins calibrates the current-day United States at 455 on an arbitrary scale of 1 to 1,000 (the top end of human consciousness) and the current-day India at 350. In the qualitative sense these values are entirely consistent with the author's theory of rise and decline and the three components of the mindset. The theory would suggest that India would have a far higher LOC in fifty years hence and it is hoped that the LOC of the United States would not have declined much by then. The author has lived in the US by now for fifty years and he has had the hunch, and the work of the Americans cited here adds to that feeling, that the United States too has the same capacity to rise to the fullest extent possible as ancient India did in its previous cycle. While the theory of rise and decline does not present an opportunity to stop decline from occurring, it does not preclude hastening the rise of India or delaying decline of the United States by doing the right things. Six sigma which aims at achieving the highest levels of customer satisfaction in all external activities from wakeup time to bedtime including all that one does at work, and Yoga whose goals are internal progress towards enlightenment are two of the right things. Together they represent the upper limit of human excellence. They are the framework for both nations to embrace for overall progress. While six sigma requires us to rely on data alone in everything we do, when comes to the quest for internal excellence, readers are cautioned that logical thinking and excessive analysis just might be an impediment. In this context, Christopher Logue's poem might be instructive.

Come to the Edge. We might fall.
Come to the edge. It's too tall.
COME TO THE EDGE. And they came.
And he pushed, and they flew.

While the pursuit of the excellence of the external and internal are essential for all round progress, the ongoing efforts aimed at social awakening may be in need for some scrutiny. This is because their entire focus is on the *effects*. As an advanced control and optimization professional, the writer has spent a lifetime developing control algorithms and strategies which deliver the best possible performance of the *effects* in manufacturing operations by judiciously adjusting the *causes*. However in the case of social awakening, it may be prudent to work on the causes rather than focusing on just the effects. This is because the effects are reflective of the causes. If the causes themselves were under control, the effects naturally will be in the regulated state. The causes of course are the 1 billion people of India. The average level of consciousness of the population will rise over time in coming decades independent of any human intervention but it is quite possible that the ideas in this paper if embraced and diligently pursued would hasten the rise. Maharishi Mahesh Yogi used to say that if the square root of 1% of the population were to

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meditate, that would be sufficient to raise the level of consciousness of the entire population which works out to be about 3,000 in the case of India.

The incarnations cited above all say, *Take refuge in me, or come to me*, or something similar. Marcus Borg, the author of **Jesus and Buddha the Parallel Sayings** (11) recognizing that Buddha lived some five hundred years before Christ, found the sayings of the two as eerie. Clearly, there is no physical way to go them but in the light of this article, you would see what they appear to be urging humanity is to connect to the net.

The Hawkins method of discerning truth from falsehood ostensibly has a very large number of applications in diverse fields, including commerce. For example, Thomas Edison is reported to have experimented with a large number of materials before zeroing on Tungsten as the material from which to make the filament of an incandescent light bulb. With the Hawking's method, the search could have been completed in less than an hour! Based on 4,000 samples, Dr. Hawkins reports that he is able to discern truth from falsehoods 97% of the time. In the recent article, *The Brahma Uncertainty Principle(1)* we suggested that the accuracy with a random individual will be far lower. Our tests to date indicate that the likelihood of getting the correct answers depends on how high the level of consciousness of the experimenter (and the subject if any) is. Furthermore, those who are able to get the correct answers have little interest in exploiting the method for material benefits. Scientists are welcome to test this hypothesis.

Finally, a plea. Yoga and the ideas in this article are intended for the wellbeing of everyone; practitioners, their loved ones, their nation, and humanity. Shun things because they are not life-supporting, not because of which nation or company produced them. Humanity faces a number of serious challenges and it will take the collective consciousness of a large number of people in many nations to tackle them. We live in a global village and becoming insular is not a sound choice for any nation. Let us not forget, anything done in one part of the net is instantly reflected everywhere else in the net. May this article make your pursuit of the connection to the net be a bit easier. Peace.

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