Yoga’s Approach to Sustainable Evolution of the Human Being and Societies

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Most of the world perceives Yoga as physical exercises done at yoga studios and health clubs with very little awareness that Yoga is one of the six philosophies associated with Hindu tradition. The depth of Yoga’s understanding evolved over the millenniums in two ways. First it spawned a deeper understanding of the relationship between the individual body, physiology, mind and spirit and its relationship with health. Second, the philosophical understanding of the world and the cosmic order had clear prescriptions for optimal societies.

Based on the first, we seek to address cures for the current unsustainable healthcare system for the USA and the world, where healthcare share of the economy continues to grow, while people live longer but not healthier. A key component of this is establishing the universal paradigm of the healing pathways, what we call the Unified System of Medicine, with clear understanding of how different medicine systems of the world work through these common pathways. Such understanding should eliminate the several deficiencies of the current model and evolve a sustainable model.

Based on the second, we seek to address the source of conflicts and upheaval all over the world – Tunisia, Egypt, Libya, Syria, Israel-Palestine, Greece, European Union, USA, India, etc. The implications of the Yoga Sutras are explained in terms of Kundalini and Varna (understood as types and not caste) Sankara. Appropriate fiscal policies and regulation in a free market system are suggested to prevent conflicts and unsustainable economic policies.

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1. Introduction – Perception of Yoga and Real Yoga, and its Applications

Today, most people of the world think of Yoga as the bending and stretching exercises at a yoga studio or health club. It is viewed as a sophisticated physical exercise regimen for health, based on ancient Indian teachings. The perception of yoga as the physical postures is further affirmed among the general population by an outlandish 2010 publication of the Oxford University Press [1] that even thinks of it as of European origin since the author’s vision is limited to transformations in the physical approaches influenced by the West. Much fewer discerning practitioners understand that there is something spiritual about yoga and think of breathing and meditation as additional practices. This often gets confused with Tibetan Buddhist practices and some will claim that yoga is non-theistic. People who have grown up with Vivekananda’s exposition of the four yoga approaches – Bhakti, Karma, Jnyaana (Jnana) and Raaja (Raja) – often get confused with the popular understanding of yoga [2,3,4]. There is very little awareness of the root document of yoga called the Yoga Sutras, authored by Patanjali. And even where there is some awareness of it, it has become victimized in two ways: (i) inconsistencies in chronology created by Radhakrishnan and the Oxford school [5, 6] that makes some believe the Yoga Sutras came after Buddhism [7,8,9] even while acknowledging that the Yoga Sutras predate Vedaanta (Vedanta) of the Brahma Sutras; (ii) the battle among schools of Vedaanta and the complete confusion in the minds of common people of the difference between the Vedas and Vedaanta of the Brahma Sutras. It is the view of this author that once the blinders of the Oxford view of Radhakrishnan and others are removed, and history is examined taking into account new technology for historical dating developed in the last two or three decades, there will be unanimous conclusion that Vyaasa (Vyasa) and Patanjali predated Buddha. Also an objective, spiritual view of the Yoga Sutras will suggest that it contains the sum substance of the universal philosophy and guide to living as described by the Vedas, the Upanishads in particular, and Bhagavad Gita. And unlike the Brahmanas and Samhitas of the Vedas, and the prescriptions of the Kalpa Sutras, there are no religious prescriptions in the Yoga Sutras, although any ritual of any religion can be examined through the principles of Yoga. Thus the Yoga Sutras clearly form the sub-stratum or essential thinking of the wisdom of Eastern philosophies, while also having the breadth to accommodate other philosophies and see the spiritual core of rituals of any religion of the world.

The beauty of the Yoga Sutras lies in 195 or 196 sutras (two versions with one version having an additional sutra that adds no incremental value to the content) written as an essay or report format, that can probably be printed on 6 pages as opposed to the more extensive Brahma Sutras of Vyaasa (555 sutras) or the 700 versus of the Bhagavad Gita or volumes of the 108 or the 10 major Upanishads. The only difficulty is the correct understanding of the 195 (or 196) sutras. It requires the experience of an advanced yogi combined with understanding of modern physics, life sciences and computing technology. No academic scholar with bookish or language knowledge can even dare to approach the Yoga Sutras and write on it without risking historical miscommunication to posterity.

The Yoga Sutras as a personal guide shows the path of direct communion with the Ultimate Reality, Ishvara or God – this communion is called Samaadhi (Samadhi). Through this communion comes the understanding of the purpose of one’s life and the occurrences of experiences in one’s life, the meaning
and purpose of all of creation, and the path to liberation. The deep understanding at the individual level reveals the parameters of individual health and its correlation to one’s purpose of living. The deep understanding of all of creation reveals the parameters of social health and its correlation to the larger cosmic flow. In the Indian language both are the result of Dharma or the Cosmic flow – first at the individual level, Sva-Dharma, and second at the worldly level called Prakriti-Dharma, and both of these guided by the eternal flow of Shaashvata-Dharma.

The obvious impact at the individual level is a deeper understanding of individual health which provides answers for the unsustainable healthcare model that has emerged in the USA and in many parts of the world. Discerning researchers and policy makers in health have noted that over a century while many types of diseases have been eliminated (examples are major epidemic diseases like small pox and plague), new types of diseases have manifested -- lot more of a mental and immunity disorder related -- to the degree no claim can be made that health of the human population overall has improved over the centuries. Longevity may have increased, but not necessarily health. [10, 11, 12] This is manifest in healthcare’s share of GNP since longevity does not bring better health, but worse health and bigger health-care costs. No amount of funding seems to deliver a healthy population. This is the unsustainable healthcare model. The first problem is the incomplete understanding of human life and health in the modern medical approach, and the second problem is that of individual motivations and social structure that drive up cost very rapidly. **Yoga’s understanding of human life and ill-health has the potential for comprehensive understanding of life and human health to address the first problem.**

It is our expectation that it will identify the healing pathways much beyond current understanding and unfold a Unified System of Medicine where the place of modern medicine and traditional systems of medicine will be better understood. We expect it will be possible to scientifically establish that the key to health is not drugs, but rather lifestyle management with regular habits as proposed by Yoga and Ayurveda. The second problem needs to be addressed by a different social order that optimizes motivations differently in the business of medicine, which is the second application discussed separately later. Addressing these two problems should evolve a sustainable healthcare model.

At the societal level crime and corruption has not decreased with increased prosperity from 1961 to today, especially if we understand the limitations of classification of crimes for statistical purposes and emergence of white collar and cyber crimes which are not reported with violent crimes, and understand the blip of violent crimes over the two decades of 70’s and 80’s in the United States as attributable to the drug pandemic. [13, 14, 15] **Yoga implications have recommendations for optimal social order as well.** The recommendations of modern business schools and prescriptions for effective administration, while effective in some ways, have not prevented the AIG and Wall Street phenomenon we saw in 2007-8 – every employee meeting goals and qualifying for bonus, but the company making a loss and seeking taxpayer assistance. The corruption, in both autocratic and democratic forms of governments, has not been resolved. Ethics appear to be at the nadir of human existence. The democratically elected rulers in the United States through ‘horse-trading’ approaches to governance have misallocated resources and let bad policies allow public debt to accumulate to a degree that it threatens global economies and future prosperity. The blind spot in all of these is addressed appropriately by yoga.
In the name of progress, the world’s approach to reductionism and specialization has lost sense of the ‘whole’. Ancient systems began with God and creation, but demagoguery ensured a path of conflict with reason and science. The advancement of science has reached a point where it is time to connect back spiritualism with reason, and yoga has the tools to make it happen.

The understanding of yoga is so deep that consciously or unconsciously it has been adopted by many religious/spiritual practices and philosophies. In particular, it is easy to see how the philosophy of yoga forms the sub-stratum of Indian culture, and once we take a deep review of historical developments one can see its manifestation in all the Dhaarmic (Dharmic) traditions. While some will argue that this manifestation is the development of Vedic thinking, which is no doubt correct, the suggestion in the next section is that Yoga predates Vyaasa’s Vedaanta and represents the summary evolutionary thinking of the previous four major philosophies of Saankhya (Sankhya), Nyaaya (Nyaya), Vaisheshika and Mimaamsa (Mimamsa), and all of these predate Buddhism and Jainism.

2. Placing the Yoga Sutras in the Right Context - Origins

Exact dating of ancient Indian literature is somewhat less important than the sequential chronology to place any document. This is because the Oxford view of Radhakrishnan and others, which has been the dominant view over the last century and keeps getting quoted all the time, has primarily relied on linguistics and early twentieth century archaeology based on the English view of civilization on earth, and dates the Vedas between 500 BCE and 1500 BCE and the Mahaabhaarata (Mahabharatha) as mythical. However the more current view based on many more data points that include findings with technologies related to thermo-luminescence testing [16] of inorganic, baked archaeological artifacts like pottery and carbon dating [17, 18, 19] of organic/fossilized archaeological artifacts in the ‘sunken Dwaraka’ of the Gulf of Khabmat [20], historical climate patterns detected from polar ice core drilling [21, 22], seabeckton deposit [23] (and dendrochronology [24] dating of trees if applicable), genetic mutation studies of the Y-chromosome worldwide to suggest migration patterns that populated India [25], remote sensing technology of satellites [26] to detect many geographic patterns including dried river beds like the lost river Sarasvati [27, 28], decoding of seals excavated in the Indus Valley archaeological sites [29], accurate mapping of astronomical observances noted in ancient texts [30], pushes back the dates to at least 3,000 BCE to 14,000 BCE. [20, 31] The findings suggest the civilization referred in the Mahaabhaarata existed during this period.

Scholarly studies of Radhakrishnan and the Oxford school, largely based on linguistics, the nature of writings, flow of thoughts and references, and knowing known data points like the birth of Buddha, etc. have concluded the Vedas to have originated between 500 to 1500 BCE and the Yoga Sutras in the second century CE, and since they accept that among the six philosophies Yoga was the fifth, they place the Vedaanta philosophy of the Brahma Sutras of Vyaasa soon after that, and Sankara in the 8th century, Raamaanuja (Ramanuja) in the 11 century, and so on. Since Buddha was known to have been born around 563 BCE, the obvious conclusion is that Yoga and Vedaanta came after Buddhism, and some Western scholars have even tried to find the influence of Buddhism in the philosophy of Yoga.
There has been a gross lack of awareness that before the arrival of printing presses when every copy was created one copy at a time by hand-copying, and the Indian culture of freedom of thought lay less premium on authenticity of copy (except perhaps for the Vedic texts) and such copies were more like the notes of the copier for his/her use and those to whom s/he planned to disseminate. This is handsomely recorded in the experience of Swami Kuvalyananda of Kaivalyadhama Yoga Institute when he was working with yoga documents in the 1950s. In the case of the Goraksha Shataka, Shataka meaning the one with 100, he could not find a single copy with 100 verses among the five sources from which he received a copy, and in no two versions had the same number of verses, and the total number of verses in these versions ranged from 140 to 212. They concluded the veracity of the point just noted, and the yoga scholars with their understanding of yoga conducted careful surgery to cull out the most meaningful yoga verses from these documents. Thus they culled out the 100 verses of the Goraksha Shataka that appeared right to them as the original, but they were hesitant to share with others, since they could never be 100% certain they did it right. Fortuitously a few years later a copy was found at the India Office in London that had exactly 100 verses and when it was examined they found that their surgery had been perfect. The same phenomenon of ‘note-taking’ appears differently in other texts where texts from different times are cross-referred in some scripts, essentially perplexing any attempt to establish chronology. Unlike the Western view of religious authority and sense of blasphemy, and Western academic sense of bibliography/referencing, India has been much more liberal and free-wheeling. Indian texts from before the printing era are more often nothing more than personal notes of those who created them. Use of linguistics as the primary basis of chronology is a fatal mistake of Radhakrishnan and those who follow the Oxford legacy.

Belief-based thinking of the general population has focused so intensely on the Vedas, the general texts of Vyaasa (especially the Mahaabhaarata/Bhagavad Gita and the Puraanams, the Bhagavata Puraanam in particular), and the later interpretation of Acharyas like Shankara and Raamaanuja, that there has been a loss of common understanding on their chronology, their place with the six major traditional philosophies, and any kind of rational historical thinking. Vedas as Apourushaya is thought as of ‘non-human’ origin instead of ‘anonymous authorship’ even if with Divine communion. Vedas as Anaadi is thought of as ‘with no origin’ instead of ‘unknown origin’. And few people realize that Vedas only mean ‘knowledge’ and it represented the effort of Vyaasa to organize all knowledge of the times.

Between the Oxford thinking of academia and the faith-based thinking of the general population, there has been major damage to historical and rational understanding of the rich Indian tradition of Indian texts and spirituality. It is time to correct this.

Of the six major philosophies in ancient Indian tradition, oldest are Saankhya, Nyaaya, Vaisheshika, Mimaamsa and Yoga in chronological order. The hymns and various sections of the Vedas may be even older coming before the written language, but they did not exist as the composite Vedas until after the writing of the five above mentioned philosophies. Vyaasa was the last in line among the authors of the six major philosophies. After compiling, in a written and organized form, the Vedas that existed in fragments among families in different parts of India, he expressed in the Brahma Sutras his Vedaanta philosophy. It is highly likely that his royal patrons, his blood relatives, of the kingdom of Hastinaapur
must have provided the resources for him to engage in such a massive venture during those times. Vyaasa’s Brahma Sutras considered to point to the Upanishads of the Vedas has come to be known as the Vedaanta philosophy, literally meaning the final sum substance of the Vedas.

**Consequently, most non-academic people disregard the earlier philosophies and somehow view the Vedanta associated with the Vedas as older and more sacred than the other five earlier philosophies.** Of course, it does not help, that for many of them, one can never be certain whether the documents are original and more often the content is gleaned from the commentary of others. *There is very little acknowledgement of the commentary of Vyaasa on the Yoga Sutras,* and when people become aware of it, instead of questioning their presumed chronology, it has been more convenient to question whether it was the same Vyaasa. This is rather unfortunate, since reading the Yoga Sutras commentary of Vyaasa brings enormous consistency with the philosophy of Bhagavad Gita and the Brahma Sutras, but inconsistency with the commentary of Shankara and Raamaanuja on the Brahma Sutras, if taken separately. The last sutra of the Yoga Sutras address two types of liberation, that Vyaasa in his commentary elaborates, that essentially validates Shankara’s Advaita and Raamaanuja’s Vishistha-advaita as equally valid and shows the deeper understanding that is lacking in both Shankara and Raamaanuja. It seems very likely that in the battle between the religious secularism of Advaita and the religious Vaishnavism of Vishistha-Advaita, the Yoga Sutras were inconvenient to support either, and therefore instead of using it as a foundation document, it would appear it was more convenient to write-it off as an afterthought.

Correcting this misdirection of history and taking the Yoga Sutras entirely in itself gives the spiritual underpinnings of every religion or philosophy on earth, and it is easy to see how each philosophy or religious view is a subset of Yoga Sutras’ understanding. Of course, the Dharma traditions with the concept of the law of karma and rebirth are much easier to be viewed as a subset, while the non-Dharma religious philosophies can be seen as part of the different types of experiences or states described in the Yoga Sutras.

**In chronological order, Yoga being the fifth after Saankhya, Nyaaya, Vaisheshika and Mimaamsa, represents the evolutionary clarity in thinking from non-theism of Saankhya to monotheism of Yoga.** [An of course Buddhist influence and the messing of those who came later and tried to integrate Saankhya and Yoga did not do any service to Yoga.] Vyaasa, with his deep spiritual understanding, turned out to be the brilliant yogi and statesman, who with his association with the royal family of Hastinapur and with possible access to its treasury, helped to integrate the philosophy of scholars to the practices of the common people by compiling and deifying the Vedas, writing his commentary, and placing the practices of the times in context.

**3. A Summary of the Yoga Sutras & Related Concepts of Yoga**

The Yoga Sutras as written is in essay format, with the first chapter or section, Samaadhi Paada, constituting the introductory overview. In the first 20 sutras, Patanjali states that restraining or quietening (Nirodha) the activation (Vritti) of our internal programmed system (Citta or Chitta or consciousness) is what Yoga is all about. He states that when the programmed system is not quiet, we
identify with the activation. Only when the programmed system is quiet one can know our true nature. He explores the five causes of activation of the programmed system and in sutras 17 through 20 describes high states of awareness one attains in Samaadhi. In sutras 23 to 29, Patanjali describes God or Ishvara. Sutras 30 to 51 is the last part of the first chapter/section. It is a different kind of introductory overview showing the progression for an individual from a disturbed or diseased state of existence to one pointed awareness that leads to intuitive knowledge or wisdom (Prajnya) and finally to the highest state of Nirbeeja Samaadhi. This is just the introductory overview and most people make the mistake of stopping here.

Chapters or sections 2 and 3 are the body of the text with 55 and 56 sutras respectively. Here the importance of purification, the nature of impurities and the process of cleansing are discussed, that are needed to attain a one-pointed frame of mind leading to Samaadhi. In this context, the step by step guide of the 8-fold, Ashtanga Yoga is described leading all the way to liberation (Moksha). While no Asanas or specific exercises are described, the principles are all discussed. In chapter/section 3, it is clear there is evidence of understanding of the Chakra and Naadi system (discussed in other yoga literature), although it is not specifically discussed.

Chapter or section 4 with 34 sutras is the conclusive overview, where the individual human being in the context of all of creation is explored, the process of rebirth, the nature of all creation, and the final liberation in one of two ways: (i) being in one’s own true state in communion with God all the time (Kshana Prati Yogi); Or (ii) the entity becoming dissolved with the energy flow of nature. It is clear to see that the first is the Vishishtha-Advaita Moksha as a Nitya Suri, while the second is the Advaita Moksha. The crowning statement of the highest wisdom of the Yoga Sutras is the 31st sutra of this chapter that essentially states that with infinite wisdom one comes to the conclusion that what is to be known is very little. And what is that very little? It can be reasonably deduced that each being is just an actor in God’s Cosmic game, and doing our part as programmed without judging anything is all that is expected of us and that is the path to Moksha – and that is also the teaching of the Bhagavad Gita. And that can be done with or without that infinite knowledge gained through that Yoga communion.

The Yoga sutras provide enough principles of practice to device one’s own yoga practice for one who is discerning. And that reveals the rest through the infinite wisdom of intuitive awareness.

However for those who are not there, the reductionist approach for teaching has provided such documents like the Vasistha Samhita, Yajnyavalkya Smriti, Goraksha Shataka, Svara Yoga, Shiva Samhita, Gheranda Samhita and the Hatha Yoga Pradipika. These documents tilt from the more philosophical to the more reductionist pieces of work tending towards Hatha Yoga. In addition to these are the works from Tantra. The Bhakti Yoga literature of Puraanas and Naarada Bhakti Sutras are equally part of the yoga literature. And from the philosophical side Bhagavad Gita is a conversational engagement between Krishna and Arjuna discussing the teachings of Yoga. These documents explore the details that Patanjali expects will naturally unfold in the awareness of the yogi without having to state them. And these documents can also be confusing, as it happens, when one says too many words and elaborate examples.
4. Yoga’s View of Human Health System

Health is considered the natural state of existence for most people. Ill-health for most people result from violation of the cosmic order – violation of Sva Dharma or Prakriti Dharma. This is referred in Ayurveda by such terms as Prajnya Aparaadha or violation of the intuitive intellect (conscience) or Mano-Bahu-Srota or lot of flows in the mind (worrying). There can be cases, which are not very common, where certain episodes of ill-health may be part of the cosmic plan that was not caused by the individual.

The descent from the cosmic to nature to the individual psyche and then the physique has been described in many ways: the Panchamaya of the Bhriguvalli of the Taittriya Upanishad, the glandular/endocrine system of the chakras in Hatha yoga, etc. However, without a comprehensive integration into the modern understanding of the human being, such concepts are not as helpful.

The summary view of yoga about the human being’s health system in modern terms can be described as follows in five levels:

- First is the Musculo-Skeletal system. This can be thought as the hardware of the body like the hardware of a computer, but there is a difference – it is organic. The innate programming of the genetic expression and immunity working through the physiology can make changes in the musculo-skeletal system. The Yoga Sutras explain this in the fourth chapter/section. The field of Ayurveda and Chinese medicine understand this and work to open up the healing pathways that repair any damage to the musculo-skeletal system. In Ayurveda this is associated with medicated massages, and in yoga the concept of Marma points is well discussed by many including Vasistha in the Vasistha Samhita, and it could also be addressed with Aasanas. In Chinese medicine it is associated with stimulation of acupuncture points in many ways – pins, moxibustion, etc. – and uses herbs too sometimes.

- Second is the Physiological System. This is the biochemistry and cell-biology of the body that makes the different organs function. Of course, they are dependent on the genetic expression and immunity, but modern medicine and herbal medicines of traditional systems like Ayurveda can intervene to provide relief in any biochemical imbalance. In Chinese Medicine the understanding of the meridians of each organ and stimulation points work with acupuncture. In the Yoga system, use of mantras/vibrations can change the physiology caused by sub-optimal genetic expression. This is the realm of Pratyahaara.

- Third is the Genetic Program system. We understand today that these programs are not written on stone as previously thought, but may change because of epigenetic factors that cause some genes to turn on or off causing a different genetic expression manifested as the bio-chemistry and cell metamorphosis of the physiological system. This is the system of Ida, Pingala and the Sushuma Naadis of the yoga system. While genetic expression correction with mantras can provide relief, the cure is through positive thinking – the power of thought, Dhaarana.
Fourth is the Energy System to power the computing system of the previous three levels. Traditional systems like Yoga understand how to open up the energy channels and move more energy. This is the key role of Praanayaama (Pranayama), supported by alignment of Aasana to increase the efficiency of Praanaayaama.

Fifth is the Immune System. In a computer paradigm, this is the anti-virus and program updates we have for our computers, which in connection over the internet downloads them automatically or by our prompt. In our human system, we do this through our ‘wireless modem’ which gets activated in sleep, when the CPU’s spare capacity opens up when the other systems go to sleep. This is why the Yoga Sutras call sleep as activation on the programmed system (Chitta Vritti). And biological research has validated that sleep is related to immunity strength. [32-38] Another way to accomplish the same is through the communion in deep meditation.

These five levels of manifestation in the human system are closely related to Ashthaanga Yoga and the Panchamaya system used in Vedaantic philosophy and Ayurveda.

In Ashthaanga Yoga, the first two, Yama (restraint from discriminative thinking – being a thinking person) and Niyama (having regularity – being a disciplined person) are considered mental and attitudinal preparation for yoga practice. In the remaining Angas or parts of the Ashthaanga, Aasana corresponds to the musculo-skeletal system, Pratyaahaara to the physiological system, Dhaarana to the genetic system, Praanaayaama to the energy system, and Dhyaana and/or Samaadhi serve the purpose of Immunity, which is also served by sleep.

This understanding of five areas of exercises for yoga has evolved the Life in Yoga 5-3-1 Approach, where the 3 refers to three methods of exercising, and the 1 to the one-pointed focus that transcends into being a pure observer, which is essential to make any exercise into yoga.

In the Panchamaya system the correspondence is not exactly one-on-one. The musculo-skeletal system is associated with Annamaya. The physiological system is associated with a combination of Annamaya, Praanamaya and Manomaya. The genetic system is associated with Vijnyaanamaya and Manomaya. The energy system is primarily associated with Praanamaya. The immune system is associated with Aanandamaya and Vijnyaanamaya.

5. Measuring Yoga’s View of Human Health

While modern medicine has evolved a system of examining bio-chemical balance and cell biology in the body – in effect viewing the body as a mechanical system – ancient systems have approached the human system as a cosmically connected being. This approach in Ayurveda has resulted in the ‘Naadi Parikshan’ or examination of the Naadi, which is essentially an intuitive process of asking questions mentally and asking for answers from the system using the code language of throbs. This is often referred to as ‘pulse reading’ of Ayurveda, which hides the fact that it is an intuitive process. In effect the Naadi Parikshan is a subset of a larger class of intuitive techniques called Prashna Shastra. The Chinese system has evolved something similar that has resulted in the acupuncture system.
Modern medicine’s loss of medical intuition has resulted in endless wallowing beginning from the musculo-skeletal system through the physiological system for about two centuries, and only in the last two or three decades modern medicine has started scratching the surface of the genetic, immunity and energy systems. Since modern medical intervention is largely designed to work at the musculo-skeletal and physiological levels the net impact is to prolong life while not necessarily being able to give good health by curing the problem. Today a majority of physicians still regard the traditional systems as ‘voodoo’ medicine at worst and at best as possibly supplemental and don’t take it seriously enough to consider it as mainstream possibilities. There is an urgent need today to bring measurability to the traditional systems where the pathways of healing are identified rather than simply having a drug test type statistical validation with test and control groups showing significant differences. Once we accomplish this we will unveil the Unified System of Medicine that identifies the common pathways of healing and explain how each system of medicine works at different levels. This will increase the global understanding of the body, the meaning of health and the purpose of life.

Three advances bring us closer to finding the Unified System of Medicine: EAV, acupuncture and primo-vascular system.

EAV [39, 40, 41] - Dr. Reinhard Voll, a German physician who actively researched acupuncture from 1940 to about 1980 developed an exosomatic electro-dermal response apparatus, now popularly called EAV or Electro-acupuncture according to Voll, to measure conductivity of the acupuncture points and establish benchmarks for what the readings meant related to each organ. The instrument essentially conducts 1.5 volts of electricity into the body when the subject holds a conductor/electrode, and the examiner probing the conductivity at different points in the body with a probe is able to read the conductivity of each meridian channel associated with each organ. Dr. Voll established that the universal standard for health was 50 (i.e. 50% conductivity) for points on the fingers and toes that correspond to each of 21 organ systems he identified – actually 9 more than the traditional Chinese system of 12. If the number far exceeded 50 for an organ system, it would suggest inflammation – a problem that needs correction – leading to hyper conductivity. If the number fell far below 50 it would indicate gradual mortification of the organ, and unless revived would lead to a non-functioning organ. The shape of the conductivity curve over a few seconds also has implication for nature of the problem, which is a much deeper discussion that is avoided here.

The big problem with EAV relates to high degree of operator expertise. Not only must the point be right at the level of a fraction of a millimeter, but also the orientation of the probe for measurement makes a difference in accurate reading. However the characteristics of a correct reading are so distinctive that ensuring correct reading is not a problem. Even an experienced operator may take two or three attempts at a single point before getting the correct reading.

The readings in other parts of the body aside from the fingers and toes have different normal standards. Reading of 50 is not normal like for the fingers and toes. The inability to explain higher readings as standard in other parts of the body beyond the fingers and toes raises questions on how to explain this.
The high need for operator expertise to get accurate reading, and the inability to explain different standards in other parts of the body beyond the fingers and toes, have ensured skepticism towards EAV by the few people associated with modern medicine research who may have tried it in the past.

**Acupuncture** [42] has today become an accepted form of treatment qualifying for reimbursement for health insurance. This resulted from establishing actual brain-stimulation of parts of the brain that relate to each organ by stimulation of the acupuncture points corresponding to the organ. [43] Modern medicine concluded that the nervous system must be the pathways for such stimulation impacting the organs. While the traditional acupuncturists in the Orient were happy to receive recognition of acupuncture by western medicine, they have been quietly skeptical of the nervous system theory.

**Primo-vascular System** [44, 45] is a new term introduced by Kwang Soh of Seoul National University where he has done research on rats and rabbits to discover tiny tubules of 20 microns that have no color and adhere to any tissue. The thought is that these act as the fibre-optic cables of the human body to convey information and direct energy. This was first proposed by a North Korean, BongHan Kim in 1964, but nobody else at that time could replicate and find the tubules. North Korea being a closed country, it was likely kept as a secret, but most serious researchers concluded that it was not a reliable claim. In the last decade Kwang Soh in South Korea through trials with various dyes has found success in identifying and photographing these ducts. These ducts are called Bonghan ducts or channels (in honor of BongHan Kim) and are also referred as the primo-vascular system. For Oriental acupuncturists and yogis this is the meridian system or Naadi system.

**Our Contribution to Extend this Research**

We believe that the 50 universal standard of Voll for the fingers and toes refer to the musculo-skeletal and physiological systems. We have separately identified the three remaining systems:

- **Aatma Naadi for the Immune System and Intuitive ability** – For Immunity or relaxation level we measure below the nose and the normal range measured when a person is relaxed has been established between 80 and 95 (percent conductivity) from readings of a few hundred subjects. When it is below 80, it is symptomatic of habituated stress in the system and is common for those who are hypertensive or suffer from auto-immune diseases. For Intuitive ability, the sacrum has been identified as a point, but because of the private nature of the location, too few readings have been possible at this time to determine the standard.

- **Praana Naadi for the Energy System** is most conveniently measured at the C7 vertebra of the spinal column. The normal range has been identified from well over 100 samples as 75 to 90. Below 75 is a sign of weakness and we have established in many cases that pain conditions in the body can be overcome by increasing this number over 75 with breathing exercises.

- **Ida-Pingala-Sushuma Naadis (Main Chakra System) for Genetic Expression** – we have identified points for each chakra along the meeting points of the Ida/Pingala with the Sushumna at the sides of the throat, armpits, the lowest rib on the sides of the chest, the hip bone (iliac crest) on the two sides and between the anus and the genitals. Readings on about 15 cases on the higher
chakras suggest a normal range of 70 to 85. Problems have been detected when it is below 70 or when the two sides are not equal, and use of mantras have restored the numbers giving relief at the same time. Much larger sampling is needed to establish even preliminary standards.

**Next Steps** needed are to establish correlation between these numbers especially when they are abnormal with biochemical and genetic markers:

- Known hormones that are related to specify abnormalities;
- Known genetic abnormalities traced through telomeres and epigenetic examination.

It is likely that in the next decade such work will be possible and this should unveil the Unified System of Medicine. Such a system will take into account the power of intention of another person too and how it can affect another – like Reiki healing and such other healing.

Verification of the Bongham channels (primo-vascular system) and objective measurability of flows in the channels is a key bridge between conventional medicine and traditional systems which use a concept of ‘blockages in the Naadis’ or ‘inadequate flows in specific Naadis’ to explain abnormalities.

### 6. Implications for a sustainable Healthcare

Such understanding should enable us to move away from treatments that are expensive, with temporary relief and questionable in productivity:

- Highly intrusive and expensive testing replaced by Naadi Pariksha and such intuitive practices or electro-dermal reading of EAV;
- Intrusive remedial procedures related to orthopedic surgeries for knee and hip replacement with less intrusive methods;
- Reversal of cancer without toxic and intrusive therapies practiced today, whose value is questionable in late stage detection – while they prolong life a few years, the quality of health is questionable.
- Bring a spiritual understanding in treatment that moves away the business culture of disease management and unnecessary testing to service culture of health management and intuitive medicine. [This is also related to the next section on appropriate policies for the right kind of motivation for balance in society.]

- **Developing a deeper understanding of the epidemiology of diseases (which is stress that suppress immunity potential) and bring a lifestyle management approach to health.**

**Lifestyle Management Approach to health is the crux of yogic healing.** Yoga’s general approach is to increase immunity and increase energy in the human system, and as long as one has regular habits and is living in peace with one’s conscience – no mental conflicts – nature will take care of the healing.
Sometimes as necessary, the power of positive thinking can be added. Alignment of the musculo-skeletal system is important for energy flow and being in tune with one’s inner senses is important to conduct one’s life in sync with one’s conscience – in what we eat, what we do and what we think.

7. Understanding the Chakra System and Kundalini relative to Varna

It is often observed that in the field of medicine, physiology books are relatively thin and the literature is concise relative to areas of mental health, which tend to be voluminous. This is reflective of precise understanding versus partial understanding or ‘beating around the bush’. Unfortunately much has been written on Chakras, Kundalini and Varna, far too much by many people in the last millennium, much of which are not precise, comprehensive or accurate. There is an element of truth in all writings, but the inability to separate the ‘wheat’ from the ‘chaff’ results in total confusion.

Chakra literally means wheel or circular disk and can be thought of as points of genetic expression – where genetic programming and the power to mobilize them come together. Most popularly it refers to seven chakras along the Sushumna Naadi (central channel) where each Chakra is associated with certain physiological functionality and attitudinal/mental disposition.

Kundalini, coming from the root word of Kundala referring to the encircled core, is actually the expression of the ‘inner circle’ within. From a yoga perspective we say that is where the focus of our energy expression (i.e. thought) resides in whatever we do.

Varna literally means ‘looks’ or how the external world perceives, in most cases referring to an individual. Traditionally this has been divided into Shudra or Kshudra, Vyshya, Kshatriya and Brahma (Brahmin) with their ‘looks’ being unthinking/aimless, self-centered, society-centered and existence-centered. This is referred in the Bhagavad Gita, as well as the Yajnyavaalkya Smriti, in terms of nature (and not biological parents). [It is important to note that the Varna of a person cannot be thought of as static over the lifetime. Misunderstanding and social decadence did create a caste system which is not part of the spiritual tradition of yoga or other Hindu philosophies.]

The seven chakras in attitudinal/nature sphere are said to represent the following:

- Mooladhaara – Root Chakra – Unthinking, aimless, mere survival, basic instincts
- Svaadisthana – Sacral Chakra – Self-centered, seeking to promote self interest
- Manipura – Navel Chakra – Group-centered, seeking to promote cause of one’s group
- Anaahata – Heart Chakra – Humanitarian-centered, seeking to promote cause of all humanity
- Vishuddhi – Throat Chakra – Wonderment of Existence, seeking answers to questions
- Aajnya – Head Chakra – Having Answers of Existence, whether true or not, but acceptable
- Sahasraara – Crown Chakra – Residing in Dispassion and Futility of existence
The eighth chakra, popularly called the spiritual heart, referred to occasionally in special literature like the Aruna Prashna of the Brihadaaranyaka (referring to the 8th sun), Narayana Sookta of Yajur Samhita (refers to the spot in the mid chest where the lowermost ribs meet as the abode of the Supreme within each person) and referred in yoga literature as the Hrth (or hidden or enclosed) spot, which we recognize as being on the Aatma Naadi (not in the Sushumna). This eighth chakra we refer to as the Aatma Chakra and consider it the seat of acceptance of things as they are and being bound to duty with dispassion. [This, we believe is also the state of San-Nyaasa or being in the state of complete awareness, but we hesitate to use this term since there is a common perception of saffron robes and giving up involvement with anything worldly that has been an inheritance from Buddhist tradition from the time of Shankara, and such a view is not the intent of the state in the eighth chakra.]

When one’s preponderance of thoughts stay in a single chakra that is the reflective outlook, Varna, of the person:

- Kshudra or Shudra – One is a Kshudra or ‘small’ when one is unthinking in ones essential nature, with thoughts primarily in the Moolaadhaara;
- Vyshya is one who seeks to bring resources to one’s Vasha (control) exhibiting self-centered behavior in most of one’s thinking seated in the Svaadhisthaana – such a person always thinks “what’s in there for me” in every action;
- Kshatriya refers to one whose thoughts are largely focused on the Kshatra or domain. When the domain refers to one’s community or workplace or some identified group, that is a lower level Kshatriya whose thoughts are resident primarily in the Manipooraka, while those thinking of all of humanity as the domain, their thoughts stay in the Anaahata;
- Braahmana referring to one who is concerned with the Brahma or creation, work at four levels: first in wonderment with questions in the Vishuddhi, with fixed views of existence in the Aajnyaa,., with sense of futility and dispassion towards existence in the Sahasraara, and with a sense of duty and dispassion with attitude of acceptance of everything as it is, in the Aatma Chakra.

Wherever one’s thoughts predominantly reside, that is where the Kundalini resides, and that defines their nature or outlook or Varna. While there are four types of Braahmanas, two types of Kshatriyas, and one each of Vyshya and Kshudra, mixed natures are also possible.

8. Nature of Existence, Varna Dharma and Varna Sankara

In the Bhagavad Gita (4:13, 18:41-44), Krishna states that He created the four Varnas with different natures attributed to them. For anything creative to unfold there needs to be opposing forces. In creation, it is the negatively and positively charged particles that make everything happen through vibration. In a drama it is the hero and villain that create the plot for an interesting story. Without opposing forces there is no creation as illustrated in the first story in the Durga Saptashati (Devi Maahaatmyam or Chandi Paath) from the Maarkandeya Puraana.
Society requires all four types of people at any point in time for creative social dynamics. The Vyshyas and the Kshatriyas are the real opposing forces while the Kshudras and Brahmanas are more neutral or supportive forces, one without awareness and the other with awareness of cosmic flow.

The unthinking Kshudras are socially the order takers of the society. They just do what they are told and their focus is on bare survival. They are an essential support to society, to serve laborious tasks that require very little analytical thinking or decision making. Because of their unthinking nature they can engage in activities that may not be good for them or the society, and therefore require detailed instruction. They can also be easily manipulated by others and therefore require protection.

The Vyshyas, being self-centered have much entrepreneurial spirit and try to exploit all opportunities while pursuing self-serving activities. While the most frequent victims will be the unthinking Kshudras, it could be anyone, and society as a whole. [To guard against this, the rulers make and enforce rules and regulations.] In traditional societies they were the businessman.

The Kshatriyas seeking welfare of society enforce well-meaning regulations to bring fairness and orderliness and avoid unwanted behavior in society. In traditional societies they were the rulers and administrators. However an overzealous Kshatriya can cause damage by constraining entrepreneurship of Vyshyas or inadequate supervision of the Shudras or by being oblivious to societal changes that the Brahma seeks to understand and advice the ruler.

The Braahmanas, considering all of existence beyond the temporal world, give guidance to the other types for a larger purpose and wider view than the temporal world. Thus in traditional societies, they were the priests, teachers, academic researchers, and councilors to the rulers and advisors to the general population.

For optimal functioning of societies, resources and power of enforcement must be used judiciously. All the four types of people add value, but without one of them society is unable to progress. Misuse of resources or power of enforcement can result in lower welfare for the society and can generate unsustainable dynamics. And one requirement to avoid misuse is for the four types of people to be allocated to the right kind of roles in society, so that productivity and social welfare is maximized. When that does not happen, it is called Varna Sankara or mixing up of nature to social roles, which leads to conflicts.

When self-centered Vyshyas become rulers and enforcers, they use their position for personal profit and not solely for the welfare of the society. This leads to corruption in society and social welfare is compromised. Such a situation is not sustainable. Changes take place in time, peacefully or in bloody revolutions. There are enough historical examples to note how this has happened in the past and continues to happen today. When a Kshudra, an unthinking person (like a retarded king having inherited the position from his father), is placed in a position of decisive responsibility there will be a lack of carefully analyzed decisions and their decisions can be victimized by self-centered people who can influence them.
Besides the imbalance created in society by Varna Sankara, a different type of imbalance is created when the four types are not properly respected in their respective roles. When a humanitarian Kshatriya becomes overzealous in making rules and enforcing, they can become oblivious to societal changes, suppress entrepreneurship and economic growth, and not take adequate advice from the Brahma. *The roles of mutual respect and authority are important for the four groups to work together. This is a second requirement for societal sustainability and maximum welfare.*

**A third element is the controllership of resources.** One would never want a self-centered or unthinking person to have too much resources, since it can be misused to corrupt and damage the society.

Thus for an optimal society, the following four are the requirements:

- Allocation of roles in society according to ones predominant nature;
- Respect for all roles in society;
- Ensure minimal economic resource control among self-centered and unthinking people;
- Ensure systemic mobility to change roles in society when one changes ones nature.

**9. Lesson of the Ideal Ancient System**

In the ancient Indian order, schooling was the filtering process that determined one’s Varna and role in society, and it involved only abilities and nature without any fee barrier. Those with thinking ability (by nature Vyshya, Kshatriya and Brahma) went to residential schools (Gurukuls), which were run by an existence-centered Brahma and supported by the ruler, the Kshatriya. Since all knowledge was considered part of the spiritual continuum, the ceremonial initiation with a sacred thread and meditative practices marked the beginning of schooling. Those who were aimless and without much thinking ability and never sought to learn were the Kshudras, who were not invested with the sacred thread.

Coming out of the school, one went into ones occupation suited to ones nature. This created the first requirement for an optimal society with matching of the right kind of occupation to ones nature in a pre-industrial society. In this pre-industrial village economy all businesses were small scale (artisans and craftsman), and the only two bigger entities were perhaps the schools and the ruling administration (government) – the administration probably being the biggest employer.

The second element important for balance in society is mutual respect for their roles in society. The highest level Braahmanas (only by nature, no caste) with awareness in the Aatma Chakra were respected as the guides for society, based on their awareness of existence and wisdom. However the reins of decision making and execution were left to the Kshatriyas (only by nature of being society-centered, no caste implied). Typically the Kshatriyas would not do anything against the advice of Braahmanas and held their wisdom in high regard. Braahmanas, in their independence of thought, could question the king and could ensure fairness in all levels of the society. However, the Brahma
understanding the cosmic flow with the attitude of acceptance, would not be highly intrusive in administrative policies.

The third point relates to the key economic resource, land, during pre-industrial times. It was controlled by the king and largely shared among the humanitarian Kshatriyas and existence-centered Brahmans. This ensured that self-centered people will not control vast amounts of resources and use it for self-centered purposes that exploited and corrupted the society.

The fourth requirement for an organized and satisfied society is mobility to other roles when ones Varna changes over the lifetime. While this was not unknown – Vishvamitra was an example – it is difficult to sense how things were in the far remote past 7,000 to 10,000 years ago. Perhaps longevity was short enough to not make it a serious issue.

The decadence of spiritual understanding created the caste system in India and the nobility in Europe with a dominant ‘church’, i.e. institutional religion, in the pre-industrial feudal era. This essentially ensured passing the baton to the next blood generation in the family. While by no means perfectly fair in a spiritual or worldly sense, the significant influence of conditioning kept some level of order in society, but only briefly since Varna Sankara had begun. No doubt there were a small number of caste Kshatriyas and Brahmans who were really Vyshyas who used their inherited resources for personal gains rather than spiritual or societal benefits. With further spiritual decadence bringing larger numbers of Vyshya-natured people among the caste Kshatriyas and unwanted religious controls from the caste Brahmans of Vyshya and Kshatriya nature, fissures developed between ‘institutional religion (church)’ and state.

In the post-industrial Europe the shifting of economic power from landowners to business owners, the emergence of religious pluralism, and the idea of basic freedom resulted in the eventual separation of ‘church’ and ‘state’, and moved power to the people through elected form of government. In the next step, those who knew how to manipulate the system, understanding that getting elected was all about publicity and image, which can be bought with adequate money and swagger took partial control of the process. When resources were controlled by these same people, most of whom are self-centered Vyshyas, it moved more resources and power eventually to business owners and politicians. The nexus of business and politicians in funding political campaigns, and money used to buy media and image making – i.e. marketing of politicians and businesses – is part of the modern corrupt system.

Worse still is that since people vote and not those who fund, politicians seeking to get elected have polarized the moneyed, self-interested groups against the common people. Midway policies of pleasing both quarters have resulted in short-term thinking on policies.

The lesson of the ancient Indian understanding, clarified through the experience of Yoga is relevant even today. However in the post-industrial, wireless internet age, the approach needs to be different but would serve the same intent.

10. The Changes in the Post Industrial Era and the Wrong Assumption of the Modern System
The essential assumption of the free market system proposed by Adam Smith is that everyone is a Vyshaya (self-centered), and the essential assumption of a socialistic command economy system is that everyone should be either a humanitarian (Kshatriya) or a Kshudra (following orders). This has ensured a price for everything in the free market system and free provision of some resources in a command economy system. Both have proven themselves to be wrong.

While the world today can boast a higher material standard of living, ethics appear to be seriously compromised in most parts of the world, leading to a sense of injustice and lack of trust in governments and the economic system. Following are symptoms of this:

- **MONEY NEXUS** - Money and funders of money governing election outcomes in democratic societies. In the economic level, business and commerce, the same rules.
- **MARKETING & IMAGE MAKING** - Role of marketing in image making and ‘brain-washing’ the public through media in elections that help candidates win, and forever indebted to big donors. In the commercial level, products are sold the same way – even stuff that may not be good for the population.
- **CORRUPTION** at various levels of society – influence peddling for personal benefits whether pecuniary or otherwise.
- **SERIOUS ECONOMIC INEQUITY** - Rich getting richer because of niche opportunities and information hidden from others even if legal and unethical, and sometimes from corrupt enrichment.
- **SOCIAL FAILURE** - Politicians doling out favors to voter groups to get votes, but overall trading off the interest of the society or average citizen. This has resulted in poor economic policy of increasing national debt since the rich don’t want to pay higher taxes and the poor want more social programs – rich getting their returns for campaign contributions and the poor for their votes.
- **LOSS OF ENVIRONMENTAL BALANCE** - Irresponsible use of natural resources and pollution of the environment has been rampant.

Further, global linkages, speculation and freer flow of trade and capital, have increased the risks of every country, relative to the economic and political behavior of other countries. Smaller countries may have higher exposure.

In the United States:

- The national debt exceeds the Gross National Product and government budgets have constantly been working on deficits increasing the debt, even while questionable expenditures and mindless reduction of taxes have continued.
- Disparity of income has grown and unemployment has reached record levels.
- A significant part of the national debt is being held by foreign countries, the largest holder of American debt being China.
- The financial system of the United States barely escaped collapse with government intervention in 2007-8 when most employees of companies involved were meeting their goals, and getting
their bonuses and people at the higher levels were earning millions of dollars, but the company was making a loss.

- Public outrage created the Tea Party movement in America in 2009 and the Occupy Wall Street movement in 2011. There was a movement to throw out bargaining power of Unions in the public sector in 2010 in Republican states as every level of government faced fiscal problems, and in 2011 the public responded to oppose it.
- The Tea Party caucus in the Congress held hostage the extension of debt limits to a degree that it damaged the credit rating of the United States.
- It is highly likely soon we will see big increases in federal taxes to address the national debt and unsustainable long term deficit after the 2012 elections.

At the international level:

- The government of Iceland went bankrupt in 2008.
- Ireland, Greece and Spain had serious financial issues coming to the verge of bankruptcy causing enormous concern for the European Union in 2009, and in 2011 Greece is back to tottering again with Italy following it.
- The dictators of Tunisia, Egypt and Libya have been thrown out in 2011, while Syria is in serious turmoil, and the unrest of Bahrain and Yemen remain under the surface.
- Pakistan, essentially a military state, with a constitutional democracy, is economically bankrupt while it continues to foster terrorism, amass more and more nuclear arms, while exporting the technology to dictatorial regimes.
- China is approaching an economic disaster in another two decades as a result of the one-child policy, where the enormity of the aging population and the need for public support will create a stress in the system.

**11. Bringing Ancient Wisdom to the Modern System**

In today’s world the spiritual understanding of natures of people need to be readdressed with modifications to the free market system, taking into account the changes that need to take place, to deliver an optimal society.

Following are the areas we need to address:

a) Education, as the stepping stone for opportunity must be free and available to all.

b) Rewards system that promotes rather than hinders the allocation in societal roles according to ones nature.

c) Regulation of system entities that create market imperfections (as they are called in economics) like media and advertising, monopolies, those that create externalities (like pollution) that can manipulate and sub-optimize the social welfare.
d) Regulation of Political funding is necessary to make sure individuals or small groups cannot control the policies of government through corrupting influence of money.

e) Control of Resources in lines with the intent of the ancient system but through taxation policy.

f) Institutional vehicle to promote mobility in social roles when one’s nature changes. Since education and outlook change over a lifespan, there has to be room for mobility to more suited occupations.

Many of these dynamics began years ago and have progressed in the world to some degree, perhaps because of the realization created by organized labor and Black history in the United States of the potential of Vyshya interests to exploit others. But without clarity of the underpinnings of the social model sought, and consistency of direction, complete social transformation will not be possible.

There is common agreement that there must be equal opportunity in education for social justice. However, unless something is done, because of fiscal problems these funding for equal opportunity will wane. In the area of rewards system Vyshya Dharma (monetary incentive for meeting goals) is the rule of the day and everyone knows it is not perfect, but don’t know how to deal with it, since it is built on the flawed assumption of Adam Smith. Campaign finance reform is always talked about and they have found no way, or don’t have the will, to escape the clutches of big money of Wall Street – really Vyshya interests – and inevitably society has evolved to provide another lesser evil – lower level Kshatriya interest – to counter that effect in the form of organized labor. There have been attempts at mobility with a few corporate fellowships, but it has been mixed sometime with the ‘revolving door’ approach of Kshatriya roles motivated by Vyshya interests between government roles and lobbyists. There is no formal institutional approach at this time. Further, generally people are not aware of the ancient wisdom of the Varnas to address problems with great precision. So let us review the prescription of this Varna based optimization.

a) Education - Having equal opportunity in education is considered the minimum equalizer for social justice in popular understanding. Public school education in the western world has come a long way, particularly in some parts of the United States, primarily funded by the local government, and available to all without fees. More needs to be done in all parts of society in every region to achieve that goal. However in higher education it has been more discriminative. Besides uniform merit-based screening which is fair, financial impediments are not necessarily fair. Further the western free-market concept of investment and returns and debt-servicing, and implicitly promoting the Adam Smith idea that everyone in society is essentially a Vyshya in nature, allows for borrowing for education and different level of fees for different types of education, with medical schools, business schools and law schools charging much higher, since their future earnings are considered to have higher potential. While for creativity in society, each person’s inherent nature needs to be promoted, seeking to make everyone a Vyshya does enormous damage to the society. It builds enormous stress in the system that manifests as suicide, drug-addiction, juvenile obesity, depression and other mental disorders for young people in society.
In every level of education – that is access to any knowledge of societal value – there can be no financial barriers or motivation. This is essential to avoid Varna Sankara.

Further since education and exposure is probably the key ingredients that change one’s Varna from unthinking and self-centered to society-centered and existence-centered, continuing education lifelong must be free as well. Alzheimer’s disease and such diseases that atrophy the brain are known to be retarded by mindful activities by learning new things.

b) Rewards system cannot be purely financial viewing everyone as a Vyshya. In fact, it hurts in some roles. In the modern post industrial age, the economies of scale and specialization ensures that the most efficient entities will be large corporations in most spheres of the economy. It is necessary to realize that for optimal performance in a team co-operation is more important than individual performance. Co-operation is not promoted solely by individual financial rewards, as is the mistaken thinking of Adam Smith’s free market view that has been the basis of all Business school principles. Co-operation happens at best only with empathy, followed by clear communication and articulation of group goals and individual roles and limitations, and that can only come from care for the group and company as a whole. Team leaders and those who are higher-up in the hierarchy of management need to be Kshatriyas in nature rather than Vyshyas for effectiveness. Rewarding higher management financially based on specific financial performance indicators leads to perverse incentives. Instead of doing what is good for the firm and team, there is greater focus on short-term window-dressing to claim their bonuses. This is what we witnessed in the 2007-8 Wall Street bail out when all the managers were meeting their goals and making their bonuses while the company was taking losses and needed taxpayer bailout. Business school gurus called this misaligned incentives, and they have not yet understood that the Adam Smith assumption that every person is a Vyshya is fundamentally flawed. In fact such incentives can make even society-centered Kshatriyas into Vyshyas over time, since that is what is rewarded. Where the management is not of Kshatriya nature and the highest management either a mix of Kshatriya and Brahmana or guided by a Brahmana, there will always be dissatisfaction and high turnover in corporate work environments, and worse still the financial reward system in upper management will ensure that more Vyshyas reach higher and such people will foster moral turpitude -- violate ethics and kill humanity for their financial gains. One can clearly see the roots of insider trading in Wall Street, the promotion of drugs by drug companies sometimes massaging or hiding inconvenient findings from trials to promote their financial interests, and the entire history of Philip Morris and the unethical effort of the cigarette and tobacco industry.

In many ways, large corporations and governments operate in a similar structure and need to have similar incentive structure. Both must have the primary common goal of providing service to the society, one operated for-profit (for fair returns to investors), while the other being non-profit, and that should be secondary rather than primary.

Rewards system should be such that except for self-employed and those in entry-level positions in organizations, there can be no contractual or systemic financial incentives. But yes, higher levels can have higher salaries indicative of their respectful position in the organization and society. In the global economy we live in, humanitarians (from among the society-centered) and dutiful, detached people
among the existence-centered) must be promoted to positions of highest leadership in nations, international organizations and large corporations.

**Incentive-based payments at higher level is the source of corruption and sub-optimal organization dynamics, leading to placement of the wrong kind of people in positions of key control.**

c) **Regulation of system entities** like media and advertising, concentration of ownership that lead to monopolistic potential, externalities (like pollution as a by-product of some business activity) that promote public interest are already recognized. Such imperfections through current laws must be enforced. But correcting the reward system noted in the previous paragraph will go a long way to bring better ethics and management in these areas. It will improve the functioning of various government departments like the FAA, FDA, FCC, DOJ, DOE, etc.

d) **Regulation of Political funding or Campaign finance reform** has been discussed for many years and the greatest barrier is the political will and the confusion of the Supreme Court in not having such a Varna optimizing model to evaluate ‘freedom of speech’ versus ‘misuse or misleading speech’. While there is great understanding among marketers that advertising and communication can make anyone do anything, to the extent it is often said that even a lie can be perceived as the truth as long as you keep repeating the lie and its volume of publicity overwhelms any rebuttal, practically there is no way to avoid this unless control of resources are changed. This is touched in the next point, but from a campaign finance perspective, efforts to go towards increased public funding of elections, limiting levels of donation by individuals, and allowing only voters (not businesses and non-voting entities) to fund elections, will be good. However it will work only if it is in conjunction with tax policies to remove control of vast resources noted in the next section.

e) **Control of Resources through Taxation Policy** is required to prevent Vyshyas from corrupting the free market and political system. Taxation is a touchy subject. The great outpouring of creative and entrepreneurial talents of Vyshyas has been attributed to low taxation, increase of disposable income and standardized and uniform business environment. In fact, the reality is that it has also fuelled unethical and self-centered behavior that has done damage and corrupted the political system. There is a happy medium. We need the creativity but not the damages. The way to do it is to eliminate all corporate/business income taxes and only have highly progressive individual/personal taxes.

Thus when businesses don’t distribute their profits, but rather reinvest to grow they pay no taxes. But if they distribute it to shareholders, the shareholders will pay tax on it. Thus we don’t penalize growth. But there must be outright ban on political influencing with their money, and there must be sufficient parameters to prevent or penalize spending on questionable activities that are often termed ‘market development’ euphemistically.

For individual taxes, wealth is the bigger resource than income that can corrupt the system. Keeping a 50 to 60% marginal income tax rate above the income level of the bottom 75%, and a 1% wealth tax on levels above the net worth of the bottom 25%, and a high rate of estate taxes, like in Scandinavian countries, ensures that younger people with more self-centered and creative energy, but low wealth pay
lower taxes, while the older people with accumulated wealth may pay a marginal tax rate as high as 90% because of the wealth tax effect. Further by not taxing corporate/business profits reinvestment of untaxed money is good for self-centered creativity.

f) Institutional Vehicle to Promote Mobility as people change in nature is extremely important for best use of people resources and for maximum welfare of the society. Several vehicles for networking and transition have already been created like different professional associations and chambers of commerce, but none of them serve the purpose of integration of educational institutions, businesses and government to the degree needed. Educational institutions need to serve the role in cooperative research and teaching capacity to bring together mobility of suitable people between businesses, government and academia.

People in corporate and government roles must be encouraged to teach courses as adjunct faculty as part of normal activity, and as part of that interaction there must be faculty and university administration meetings to develop networking and facilitate future mobility. Corporations and government need to be more active in getting resources of educational institutions – intern students and faculty – involved in corporate and government work. While none of this is new, there is not a systemic and adequate focus on this at this time since the full value is not recognized in the absence of a socio-economic model like Varna Dharma. That needs to change.

In addition, the government must create a placement bureau to transition those who wish to move into public service roles from the private sector.

Summary mapping of the Ancient System to the Current World - The four points of the ancient system, - Educational allocation of occupation through Varna Dharma, - Mutual Respect of Varnas, - Control of Resources and - Mobility as Varnas change are captured in the proposal noted above with - Education, - Rewards System that avoids financial rewards for higher level management, - Regulation of market imperfections (coming from industrialization), - Regulation of Political Funding (coming from democratic systems), - Taxation Policy to Control Resources, - Institutional Vehicle to promote mobility when Varna changes.

In the proposed system,

- Education and Rewards System serve the first intent of the ancient system – Educational allocation through Varna Dharma.

- All the six elements help to equalize people and bring mutual respect of Varnas, the second intent of the ancient system.
Control of resources to prevent corruption of the system, the third intent of ancient system is met with taxation policy and political funding regulation.

The last item addresses Mobility, the intent of the ancient system.

The following economic approach is a summary of the above:

- **EQUAL OPPORTUNITY & MOBILITY TO FIT CHANGING NATURE.**
  - *Education* at all levels must be free to all.
  - *Roundtable of Education Institutions, Government and Corporations* to encourage cross-participation in education, research and private projects.
  - *Government Bureau for Placement* will be desirable to place people in both private and public sector. There must be provision for people to enter the service professions (from possibly higher paying private sector jobs) as they advance in age and seek to give back to society.

- **REDISTRIBUTING CONTROL OF RESOURCES** to ensure concentration of resources by the self-centered does not create undue ability to influence.
  - *Highly progressive taxation* will ensure that self-centered people are not allowed to corner sufficient resources to influence the political process. Different countries have adopted different models. Between federal, state and local income taxes, and wealth and estate taxes, 75 to 90% of income above a certain number would need to be taken away.

- **TAXATION THAT PROMOTES GROWTH** – Growth comes from investment. There should be no income tax on non-individual entities like businesses. Organizations that reinvest in growth of their business have no taxation. Only the distributed profits to owners get taxed through individual taxation.

- **CONTROL ON INCENTIVE BASED PAYMENT AND COMPENSATION LEVELS** so that incentives are not related to personal profit, and compensation does not determine motivation.
  - *No incentive based payments* in any job other than entry-level jobs should be considered. Incentive based payments promote self-centered behavior, and therefore the Vyshya spirit is good only to get better individual productivity when the individual’s behavior will not affect others. In a corporate or government hierarchy, self-centered behavior of supervising managers is bad for subordinates and the organization. It makes bad managers.
  - *Public service professions should have government mandated salary scales that keep the pay scale low*. These would include educational institutions, health-care, legal profession, media companies, public transportation and all aspects of the banking system, in addition to all levels of government. This will ensure that people who seek to put their own effort for own gains don’t enter the service occupations. There is a mistaken concept that money is an incentive for everyone. It is not the case. It is an incentive only for the self-centered. For the society-centered the impact on the society is the reward, and appropriate marketing and media image will attract the right, society-centered, people to the jobs.

- **CAMPAIGN FINANCE AND MEDIA PUBLICITY REFORM** to ensure that election winning does not distort public interest.
  - *Campaign contributions* for elections as it is today should be banned. All campaigns should be
publicly funded. To avoid too many unqualified candidates that drain public resources, the test of candidacy should be a minimum number of petitioning supporters for a candidate that would range from about 0.25% to 1% of the voters. A good way to ensure that could be a $1 support from each individual supporter – effective campaign contribution limit – while ensuring that non-individuals like corporations and other associations are unable to buy influence through campaign funds. Of course all advertising by non-competing political candidates must be banned so that ‘Swift Boat’ type of advertising by interest groups don’t damage a specific candidate (like John Kerry in 2004) and indirectly support another.

- **Concentration of media ownership** should be avoided and the government and private media should compete – this is already recognized by the FCC. PBS type educational programming should communicate how media propaganda moulds the thinking of many into whatever way the marketers choose.

- CONTINUING CURRENT POLICIES OF REGULATION on market imperfections like anti-trust, environment, etc.

Such an economic approach will ensure that the spiritual and existence-centered type of people and society-centered people gravitate towards professions of service importance while self-centered go towards the non-service industries. And even within non-service industries, tax rates and lack of incentive based payments at higher levels will ensure that people of self-centered nature don’t rise up too fast and damage the ethical perspectives in private organizations.

It is very important to note that both private and public service jobs must have reasonable parity in after-tax compensations, although a 10% to 30% lower level in the public service sector should be treated as acceptable. There cannot be more than 30% difference. Otherwise it can create a potential for corruption of public officials. By ensuring a high enough level of taxation at higher income levels, this can be ensured.

12. **Conclusive Overview**

The power of Yoga to optimize anything in the world is not surprising. This is essentially because it provides the framework to link existence with purpose in anything that happens in the worldly sphere. This was the intent in ancient times when everything was seen as descended from God, but demagoguery made it inconsistent with science and reason, and it became important to prevent such beliefs from limiting progress of society. Yoga is pure philosophy with principles that are secular.

Science is developed by conception and research to validate or invalidate that conception. Yoga and its ancient wisdom provide the structure. Science has come a long way, and all it needs to do is to take the framework of Yoga to answer all questions of existence and anything of relevance to humanity.

Two illustrative examples are given here – application to healthcare and optimal social organization. However the application is in every sphere of existence.

Its importance lies in providing sustainable solutions and avoidance of conflicts.
In healthcare, the right model of human understanding through a Unified System of Medicine will change the world of medicine in the years to come. Optimal social organization will bring back medicine as a humanitarian service instead of a profit seeking business that the approach of Disease management and Insurance system has created (bringing Vyshya behavior among a significant proportion of healthcare providers). **The forces of combining a Unified System of Medicine with an optimized social organization can be expected to deliver a sustainable healthcare model in the years to come.**

The big upheavals in society and across the world noted in this document have been illustrative of the need for a better model that avoids conflicts and provides a sustainable society. The fundamental flaw in the assumptions of the free market model (every one is a Vyshya, self-centered) and the command economy model (everyone must be a Kshatriya or a Kshudra) have been pointed out. The world has been working with the realization that the free market model is flawed in its implications and has therefore built corrections to adjust it through regulations and policies suggested by creative economists. And everyone realizes that the outcome with all adjustments is far from perfect. It is our expectation that a complete revamping of the assumptions of the free market model is necessary on the basis of four types of people and Varna Dharma to evolve into a more perfect society that is sustainable and without conflicts.

The degree of corruption of society and sub-optimal motivations is hardly captured in the major upheavals that have been referenced earlier. Following are a few examples of how discriminatory sub-optimal policies are part of everyday life.

- **Frequent user programs of airlines, car-rentals and hotels** ensures that many people who travel on business whose expenses are reimbursable, typically select their preferred provider based on the programs they are enrolled in, and they don’t worry that they pay a slightly higher price paid by their organization (and not out of their pocket) than the lowest available for the sake of the free mileage points. This is gross sub-optimal behavior because someone else is paying for it. The only fair way to correct this is for all such programs to issue a 1099-MISC at the end of every year where the fair value of the use of free mileage points are converted into income for the recipients. The programs will say this is added burden of an intrusive government, but everyone knows that if they are taking on enough burden to keep a database of all such transactions, recording them and sending periodical statements to their patrons, including a 1099-MISC and reporting it is hardly much more work. This is essential to correct the economic distortions of these programs justified as a marketing tool.

- **Rewards Credit cards** are discriminative practices that increase the cost for all in society, and works against the lower income people in society. By offering 1% to 2% cash back and charging that and the processing cost to merchants, those who qualify for these cards who are typically higher income people, actually pay less to the merchants, while poorer people pay more. The principles of free market enterprise suggest that price should reflect cost of service. The entire credit card system that provides a free payment mechanism and exploits those who leave a balance with high interest rates and exploits merchants who pay higher fees for Rewards cards
is a complete market distortion. There is a need to require an annual 1099-MISC for such rewards.

- **Physician Practice behavior** by their own admission claim they cannot spend more than 5 to 10 minutes per patient – otherwise they cannot make a living. This was stated by Dr. Michael Donnelly, Associate Professor of Medicine at Georgetown University, in the course of lecturing on Learning Clinical Skills on October 24, 2011, when questioned on the extent of clinical examination he was suggesting and the time he spends with patients. The price of this is stress for physicians, lesser quality of attention to patients, and practice of disease management rather than health management which requires lifestyle counseling.

- **Eating habits** that prefers fast food and processed food instead of healthy home-cooked food. This is reflected in the way families live with stress and distorted priorities that don’t contribute to healthy living. People rush to work upon waking up instead of living well-balanced lives, and lives for most people is built around work as number one priority. Perhaps a different balance is needed.

The message is that sub-optimality in people behavior, from a flawed societal model that promotes wrong values, is pervasive across society. The Yoga model with the Varna Dharma principle is required to change this. People’s nature will be what they are. But economic policy based on assuming everyone is self-centered creates more self-centered and ‘short-term thinking’ behavior (or instant gratification) that damages society.

**In-conclusion, the ancient spiritual model is still applicable in this world and correct application of it can remove the problems that we face today gradually over a period of time. The principle of the four kinds of people being in appropriate roles in society as in ancient times in India is the key to keep a peaceful and happy society. However we need an economic system that self-selects people of each outlook to the right kind of occupations during their lifecycle. There also needs to be provision for mobility to the higher outlooks which appear to be the natural progression of life.**

To really make it happen, the wisdom of yoga for individual health needs to be the selling story to convert people to good lifestyle management. In due course the social and political change will come with changes in economic policy.
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