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Moksha – A Critique

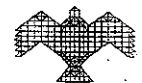
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Abstract

The Purusharthas are the chosen value elements of the Vedas and these are four in number. In order of importance, they are economic stability – Artha; love, sex and entertainment – Kama; the order of the universe, be it moral, judicial or societal – Dharma; and finally – Moksha, which means ultimate salvation. It has now also come to mean perfection in all things.

Moksha and Mukti are twin words that respectively refer to individual salvation and perfection during life, and after death. A reference to salvation of the many, leading to a perfect society, including good governance, is in the epic Sanskrit poem Ramayana. In modern times, largely homogenous Scandinavia is referred to as an existing Utopia. That, however, may not be the ideal model for

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multiracial societies where differences are unavoidable or even essential for smooth and efficient governance.

Religion and the concept of God have indeed helped to unite society but have also proved to be a weapon to disrupt society, in the hands of fundamentalists and terrorists. Over long periods of history, religion has become a source of glorification of military might. Fundamental differences in religion are difficult to reconcile because of cultural and historic associations. It is not clear that an anthropomorphic god, whether real or created by man, is sufficient to lead us to Moksha. Oriental definitions of Dharma may create a more liberal atmosphere without one's belief in the divine being altered.

The new discoveries of science have to be taken into account in the revised definition of Moksha. Recent studies on quantum entanglement may throw new light on the unification of humanity. It is an old saying of the Vedanta that all minds are entangled. We now know that quantum entanglement is not only a microscopic phenomenon but that it can be created physically in large molecules. This is where modern science can help in the creation of Moksha of the many.

The subject allotted to me for the seminar was “Utopia – a critique”. I requested that it should be changed to *Moksha* as it would give me greater freedom to include thinking in India on Utopia over the centuries. The dictionary meaning of Utopia is that it is an “imaginary place with perfect social and political order, an ideally perfect place or state of things”. *Moksha* in Sanskrit means “deliverance, emancipation or salvation”. It has now evolved to mean “attainment of bliss, imperishable, immeasurable.” It essentially refers to individuals.

In more recent times, *Moksha* is being interpreted to mean perfection¹, and hence an idealized state, where everything is perfect and unalloyed. While the Utopian state has a collective connotation and is difficult to attain, it is believed that *Moksha* is attainable through *Yoga*, meditation and *Tapas* – this last word meaning prescribed austerities – all of which are prerequisites to achieving Utopian conditions. The companion word to *Moksha* is *Mukti*, meaning deliverance after death, and this word should not be confused with the former.

The philosopher Shankara (8th century) insists that *Moksha* is possible even during one's lifetime and this state is referred to as *Jivanmukti*. He further elaborates that this is something that can be achieved by some one who has renounced the world and devotes his entire life to social amelioration. Another meaning of *Jivanmukti* given by Sasadhara (10th cent.) is that it is "the absolute termination of suffering". If liberation is the termination of suffering, which occurs in the locus of suffering, no suffering should occur after the termination².

In the earlier literature of *Vedic* times, four values from amongst many are referred to as having special and permanent importance in the course of one's life. They are called *purusharthas*. In order of increasing importance they are: *Artha*, meaning material comforts and economics; *Kama*, meaning entertainment, sex, enjoyment; the third, the most difficult to describe, is called *Dharma*, which refers to order, societal, judicial or moral. It is the stage one has to master before the last stage is reached, which is *Moksha*.

In the old literature there are references to periods when some sort of Utopian conditions had come into existence in India e.g. the governance of Rama in the great Sanskrit epic *Ramayana*. There are, alas, flaws towards the end of the epic that show that a true Utopian state had not quite been reached. The epic concludes with a situation where the hero Rama, only to set an example of a proper life to his fellow citizens, sends his wife Sita, on the basis

of mere gossip, unjustly to exile. However Mahatma Gandhi often used to refer to the rule of Rama as an example of a Utopian state and his interpretation was symbolic. "Rama fights a moral battle against his antonym Ravana, a demon. As it happens Ravana was an urbane Brahmin with enormous technical knowledge and martial skills and had a clear sense of power, achievement and real politik. Rama fought Ravana not only because of his hubris or a result of ordained fate, but on account of what he thought were modern demands of pure politics and progress".³

Is Utopia possible at all? The Scandinavian countries are often referred to as having reached statistically near-Utopian conditions. These countries are small in geographical size with comparatively small populations. But as the size of the country increases, however rich it be, it has not been possible to achieve total elimination of poverty and suffering. If and when it becomes possible to eliminate total economic disparity, there is still doubt as to whether it satisfies all the conditions that define a Utopian state.

Even accepting that such a stage can be reached, the fact remains that we are all not similar in thoughts and actions. Thoughts and actions require coherence – but at the same time freedom to entertain diversity of thought, by itself, is an integral part of Utopia. The very need of freedom leads to an inconsistency, in that tensions are bound to arise making perfection impossible. It is also

possible that the very tensions of life are the necessary motivations for evolving into a higher state of existence.

The importance of *Kama* is obvious to any society – sex as its important component is best described in the beautiful sculptures of the temples of Khajuraho. There is also the question of suffering – as to whether it is a necessary and inevitable part of *Kama*. Modern psychoanalysts would put the need for suffering as a part of *Kama*, but perhaps only as a deviation. It is difficult to find evolutionary logic to the way some of the males of larger animals destroy their young for the sake of sex. There is an aberration somewhere.

The third of the *purusharthas*, *Dharma*, has several meanings and confuses many. It could mean religion, rule of law, charity, duty, observance, to mention only a few aspects of its meanings. This *purushastra* is supposed to take care of all inconsistencies and the fact that it has a very wide range of meanings gives it power to face inconsistencies.

Taking a deeper look at inconsistencies generally, the great divide among religions, even at the very foundations, suggest that Utopian Unity through religious forces by themselves is not feasible. One of the important aspects of religion is the idea of Divinity. The Mediterranean religions require the acceptance of a Divinity, as a person who is father-like, anthropomorphic, all-powerful and located in Heaven. Their value systems are strictly controlled in all matters of interpretation through a Holy Book. The Asian

religions have a large literature with a very wide variety of definitions of Divinity.

To consider a place like Heaven as reality, there must be somebody who resides in it. He must from all points of view be perfect. A view could be taken that primitive thought suggests the need of some sort of a leader of a group having noble qualities, who is just, compassionate, and yet all-powerful, to be able to inflict punishment and maintain order. All societies, even modern democratic ones, require somebody like this, and this is what has been called God. Starting from such primitive notions, some religions have taken an anthropomorphic view that man is made in the image of God. Others, taking into account the philosophical consciousness of man, have introduced an abstractness about the concept of God – the *Brahman* of the Vedas, for example. The creation hymns of the *Rig Veda* clearly express these ideas which eventually lead to a kind of agnosticism. The Buddha does not stress on the need of a God, and early Buddhism considers that for a proper life, the “eightfold path” is just as important and sufficient. The Buddha describes self-flagellation as an unnecessary element in religion, whereas other religions hold that suffering is an important step towards *Moksha*. While the Buddha stresses the importance of logic, particularly cause and effect, later Buddhist scholars have questioned logic in an almost Godelian sense (See Appendix I).

The following Sanskrit sloka from the Parivrajaka Upanishad of Narada (500 B.C.) has this beautiful verse:

“*nāham vāsāmi vaikunthe na yogi hrdaye ravau \\
madbhaktyā yatra gāyanti tatra tishthami, Nārada.*”

"I dwell not in Vaikuntha (heaven), nor in the hearts of Yogins, nor in the Sun, (but) where my bhaktas (devotees) sing, there be I, Narada!"

It is an excellent source of inspiration to musicians.

The Venn diagrams, given in appendix II, roughly summarize the influence of the Divine on our consciousness and the interaction of our consciousness in the study of the behavior of inanimate matter. The differences are neither trivial nor have they lost significance in time. By themselves, they have universality, but as it happens they have often been used to divide peoples, thus becoming sources of terror and cruelty.

In India, Mahatma Gandhi, under the inspiration of the Indian religions, had managed to get a violent tribe of people along the Indo-Afghan border to support Khan Abdul Gaffar Khan, a leader of this group, to eschew violence. Gaffar Khan had become Gandhi's staunchest disciple. The same people, recently misinterpreting their religion, have become terrorists as *Talibanites*. To find another Gandhi or Gaffar Khan, who was also called the Frontier Gandhi, is not an easy possibility, for it requires great *Sadhana* (exercising of consciousness) to do what

they did. It was an approach to Utopia on a highly personalized scale. It was an attempt to widen individual *Moksha* to a collective mode.

It is now well established that life is associated with the DNA molecule. How this molecule found its way to the earth is a big puzzle as the probability of it occurring by natural processes on the earth, because of the complexity of the molecule, seems statistically exceedingly remote. It could have been produced in a collision between the earth and an asteroid of great size. There is sufficient evidence to believe that such a collision, having the right chemical conditions, could have taken place. Again, later, another collision seems to have taken place some 60 million years ago, which destroyed much of the life on the earth, notably the dinosaurs. Life on earth however seems to have progressed all over again and the evolution of human life seems to have started just some 16 million years ago⁴. The fact that living species have disappeared in the past and the process can repeat itself suggests that the same thing can happen to the human species, unless some sort of biological intervention can take place through science. Recent advances in biology seem to suggest that the biological cell can be manipulated to create a species of humans by cloning and genetic transformation, and in principle, one can fill a State with suitable human material to build up a working Utopia. A "prepared" world of this sort can never succeed and should never be allowed to come into existence.

A biological evolution of unknown origin has brought us into existence and the sociology of this evolutionary process is something that we just cannot ignore. Social experiments like Fascism, Communism and much of religion have failed, because they were built on the loss of individual freedom. It is only the democratic system that keeps coming back as the best possible system, but it is not necessarily the ideal solution. Democracy as practiced at present is nowhere near a Utopian solution. Even in the US, ballot boxes have not unequivocally given reliable results. In many countries, ballot results have been influenced by racial and economic considerations, especially in the choice of candidates. Class and racial discrimination may be a part of evolution. In India the caste system exists, though colour plays a lesser role and discrimination continues on the basis of lineage and wealth though this has decreased in recent years. The existence of distinct types in population groups is attributed by some people to be a pre- to post-industrial phenomena. Change over the years has not been characterized by progress towards some sort of Utopia – it has been in the nature of accommodation rather than a radical change for the better. The grouping of people has become an inevitable part of social security. If it gets crystallized it may become part of an evolutionary process, which we may never be able to get rid of.

Finally, going back to the *purusharthas*, Utopia as *Moksha* can come about primarily by *Artha*, the elimination of economic disparity, and by a joyful atmosphere as evinced

by *Kama*. It is when we come to the basic issue of *Dharma* that we are unable to prescribe a roadway to Utopia – i.e., *Dharma* as a step towards *Moksha* remains undefined. The *Moksha* for the individual is defined, but collective *Moksha* has yet no overall *Dharmic* path. That it has to provide a solution to the divisions of the world because of religion, ethnicity, security and education is difficult. The last of these, education, seems to be the only direct possible way by which consciousness can be disciplined without loss of free thought. The new science must indicate a new approach to building the mind of the young. The entire *Bhagavad Gita* is devoted to the problem of *Dharma*, but ultimately the Utopia it suggests is on the basis of the earlier meaning of *Moksha* as that of individual salvation. The other holy books suggest compassion, nonviolence, divine love and kindness to all living beings, but the roadways are not clear as they have been distorted by a history of genocide, mass murder, violence and greed. At the moment, even military solutions are being suggested. But that is no way to *Moksha*.

The philosophy of quantum mechanics will probably take an important part in the new formulation of *Dharma*, for we now know that Quantum Entanglement is a physical fact and can also be extended to larger than microscopic systems (Appendix III). It seems that we are all tied up by this mysterious connection and it may become another way of communicating with one another, leading to a collective *Moksha*, where both *Chit* and *Achit* are fully integrated. Such a possibility, though remote, exists.

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2. Toshihiro Wada. *Liberation in early Navya-Nyaya. The Way to liberation*, Indological Studies in Japan Vol 1. April 2000.
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APPENDIX I

If all possible 'causes' are listed on the X axis, in some number order up to infinity, and on the Y axis are listed all 'effects' in a similar manner, we get a matrix as shown below. If for each effect we denote all the *causes* for the required *effect* by 1's, and for those not required by 0's, we get a matrix of 1's and 0's as follows:

CAUSES EFFECTS	1	2	3	4	5	6	----	To infinity
1	1							
2		0						
3			0					
4				1				
5					0			
6						1		
To infinity								

Here, the only numbers we are interested in are the numbers along the diagonal. The others are not shown in the blank spaces. The diagonal numbers 100101..... could also in principle, represent an *effect* since the diagonal has 1's at the required *causes*. If we look for an *effect* that corresponds to these numbers, they will be found somewhere in the enumeration. The set of numbers different from all those in the diagonal, however, will never

be found among the effects. By forming a number by putting a 0 where there was a 1 in the diagonal numbers, and a 1 where there was a 0, the resultant number 011010..... will never be found among the set of x's because all the diagonal numbers have been different. If this number happens to represent a noticeable *effect*, it *cannot* be due to *any* of the infinite *causes* that have been enumerated above. We can therefore conclude by this analysis, that there are many *effects* without *causes* and vice versa.

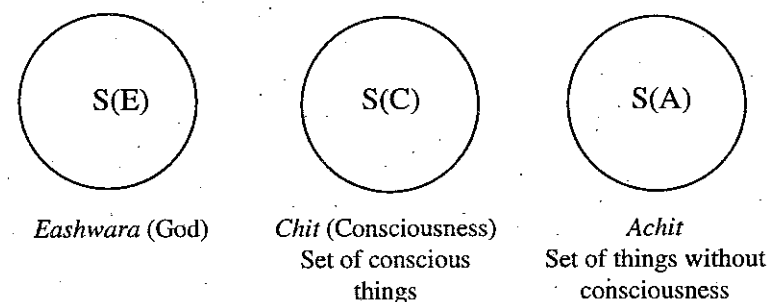
APPENDIX II

The following Venn diagrams roughly summarize the approach taken by various religions in dealing with the nature of possible interaction between a divine influence on consciousness, human consciousness, and inanimate matter.

According to the Philosopher Ramanuja (12th Century) we divide the Universe into 3 Sets. Divine influence is represented by S(E). Here E represents Eashwara meaning God. Things which have consciousness (*Chit*) by S(C) and things which have no consciousness (*Achit*) by S(A).

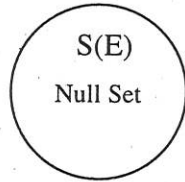
UNIVERSAL CLASSIFICATION

(Ramanuja 12th century)

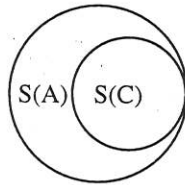


The intersection between the 3 sets determines the influence of one on the other in various religious systems.

1. MATERIALISTIC AND CHARVAKA SYSTEMS



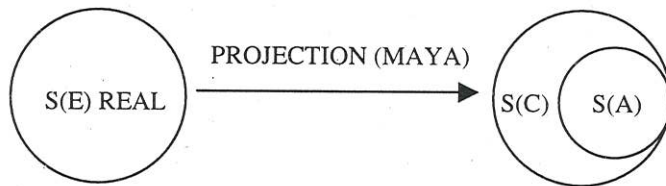
S(E) is a null set, no divine
Interaction possible



S(C) is embedded in S(A)
Consciousness is produced
by inanimate matter

2. ADVAITA (VEDANTA AND SHANKARA)

8th Century



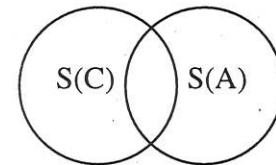
S (E) is supreme, symmetric
unchangeable, remote,
and real Brahman.

achit is embedded in
chit, consciousness is basic
to defined objects

It permits *Avatars*, (the possibility of human beings becoming temporarily Divine), and the worship of an *Ishtadevata* (choosing any object representing the God set S(E)) for worship that appeals to the person concerned i.e. within S(E) there can be many demigods including women and animals and hence you have mythology and mythological gods.) All this is possible as the Brahman is real – however, to the savant the world we see is merely a projection of the real Brahman

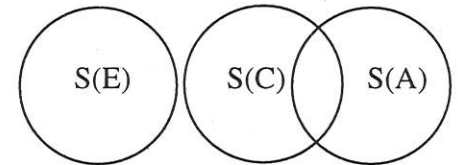
Ramanuja, however, feels that while the Supreme Brahman is unchangeable and remote, it allows for response to affection and human feelings and hence the effectiveness of *Bhakthi* (Devotion).

3. BUDDHIST CONCEPTS (500 BC)



EARLY PERIOD
No God, No soul,
only causal laws exist

Nirvana as the end of life



MIDDLE PERIOD
Divinity of Buddha
Nirvana as *Brahman*

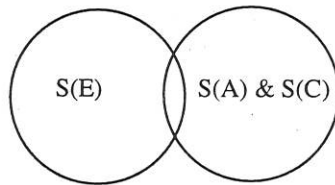
Reincarnation

4. JAINA CONCEPTS (500 BC)

Jaina concepts are close to Buddhist thought, with no reference to an Absolute, Divine authority. They believe that divinity only confuses issues. To them, *Dharma* and *Ahimsa* are more important. The most advanced concept of Jaina thought is in their logic called *Syadvada*. It is different from Aristotelian logic but is close to quantum theory. It asserts that existence and non-existence of physical entities can both be present at the same time, as is assumed in quantum theory due to the dual nature of matter. The importance of the statement is that such logical

systems can be invented for philosophical needs outside science.

5. JUDAIC AND MEDITERRANIAN CONCEPTS



God is the Father and is the creator of every thing in the universe. Man is made in the image of God. He is described as the idealized Leader, compassionate, loving and just – in dealing with sins he can punish according to the nature of the sin.

6. SCIENTIFIC POSITION (17th Century)



On the basis of the fact, we humans exist, Cartesian philosophy considers that a separation exists between the *Chit* and *Achit* sets. However, Quantum Mechanics insists that there cannot be a break between the observer and the observed.

APPENDIX III

(New Scientist Archive (London) 9 February, 2002)

Entangling particles is easy when you know how

The dream of teleporting atoms and molecules-and maybe even larger objects-has become a real possibility for the first time. The advance is thanks to physicists who have suggested a method that in theory could be used to "entangle" absolutely any kind of particle.

Quantum entanglement is the bizarre property that allows two particles to behave as one, no matter how far apart they are. If you measure the state of one particle, you instantly determine the state of the other. This could one day allow us to teleport objects by transferring their properties instantly from one place to another. Until now, physicists have only been able to entangle photons, electrons and atoms, using different methods in each case. For instance, atoms are entangled by forcing them to interact inside an optical trap, while photons are made to interact with a crystal.

"These schemes are very specific," says Sougato Bose of the University of Oxford. But Bose and Dipankar Home, of the Bose Institute in Calcutta, have now demonstrated a single mechanism that could be used to entangle any particles, even atoms or large molecules.

To see how it works, consider the angular momentum or "spin" of an electron. To entangle the spins of two

electrons, you first need to make sure they're identical in all respects but their spin. Then you shoot the electrons simultaneously into a beam splitter. This device "splits" each electron into a quantum state called a superposition, which gives it an equal probability of travelling down either of two paths. Only when you try to detect the electron do you know which path it took. If you split two electrons simultaneously, both paths could have one electron each (which will happen half of the time) or either path could have both.

Bose and Home show mathematically that whenever one electron is detected in each path, they will be entangled. While a similar effect has been demonstrated before for photons, the photons used were already entangled in another way, even before they reached the beam splitter. "One of the advances we have made is that these two particles could be from completely independent sources," says Bose.

The technique should work for any objects-atoms, molecules and who knows what else-as long as you can split the beam into a quantum superposition. Anton Zeilinger, a quantum physicist at the University of Vienna in Austria, has already shown that this quantum state is possible with buckyballs – football-shaped molecules of C_{60} . Although entangling such large objects is beyond our technical abilities at the moment, this is the first technique that might one day make it possible.

Any scheme that expands the range of particles that can be entangled is important, says Zeilinger. Entangling massive particles would mean they could then be used for quantum cryptography, computing and even teleportation. "It would be fascinating," he says. "The possibility that you can teleport not just quantum states of photons, but also of more massive particles, that in itself is an interesting goal."

Dr Raja Ramanna, Member of Parliament in the Rajya Sabha, is Chairman of the Governing Council of the Indian Institute of Science and the Council of Management of the Jawaharlal Nehru Centre for Advanced Scientific Research, and Member, Atomic Energy Commission.

He is the founder-director of the National Institute of Advanced Studies (1987-1997). He has served as the Chairman of the Atomic Energy Commission, Director of the Bhabha Atomic Research Centre, Minister of State for Defence, and Scientific Advisor to the Defence Minister.

Apart from his work in atomic energy, he is an accomplished musician (he has written a book on The Structure of Music in Raga and Western Systems) and is keenly interested in education and philosophy.