

Consciousness from a Spiritual Perspective

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Consciousness from a Spiritual Perspective

In this paper, the term '*Spiritual*' or '*Spirituality*' does not refer to any particular religion nor does it refer to any religious rituals. It simply refers to one's rational belief in one's own identity as a *metaphysical self* which is basically different in nature from the body, including the brain, and from Matter and from all its forms. And, since one's belief influences one's mind-set the term refers to one's outlook, attitudes, values, preferences, priorities, life-style, relationships, memory-content and behaviour, all based on the belief in the metaphysical self. The term '*Spirituality*' refers also to a simple *spiritual practice*, such as silent Meditation which is based on the afore-said *belief* and which strengthens one's moral *sense*, restores one's inner harmony and equipoise, reforms and improves one's *outlook* and *attitudes* and also gives relaxing, uplifting, enriching and ecstatic supersensuous or extrasensory *experiences*.

1. Consciousness from the perspective of Raj-Yoga Meditation

Since practicals, done under specified conditions, prove a theory and give validity to or credibility in a model, let us discuss Consciousness first, from the perspective of Raj-Yoga Meditation which is like a Science-practical and has been tested by medical researchers, clinicians, psychologists, psychiatrists and health scientists.

Raj-Yoga Meditation is a profoundly deep subject which opens to us many deep vistas of our mind and lays bare before us vast reservoirs of happiness and bliss which, hitherto, lay hidden from our view. Here, let us consider only one very elementary and rudimentary aspect of its practice.

When a person is introduced to the practice of Raj-Yoga Meditation, he occupies his mind with the thoughts: "I am a soul; a point of consciousness; a *Being-of-Light*. My original nature is of love, piety and peace. I am a *point of self-aware light* and spiritual energy. I am an eternal being, a child of God Who also is an Incorporeal Being-of-Light and is Knowledgeful and All-Peace, All-Bliss, All-Love and Kind, Compassionate, Loving..."

The practitioner has the above thoughts to the exclusion of all other thoughts, such as the thoughts relating to his body, friends, relatives, profession and whatever else there is in this *gross*, material or physical world. He has heightened awareness of only spiritual or meta-physical identity and, in this awareness, is the imagery of an infinitesimal *Point-of-Light*, for the self is like that.

In this practice, he also turns his attention to God Who is the Supreme among all souls and is the Incorporeal Being-of-Light Who loves all.*

*When one fixes one's mind in this mental affirmation, one feels that one is at a better level of consciousness. One experiences calmness and quietude and has an exhilarating feeling of lightness. One has also the feeling of enhancement or activation of one's spiritual and moral power. When one rises from this easy **Samadhi**, or stage of stability and tranquillity, one feels a great inner upsurge of self-confidence, enthusiasm, noble thoughts and benevolence. One feels drawn to this experience again and again and has an inspiration to live it, to be immersed in it and to be it. There being a qualitative difference between what one used to experience in one's day-to-day life earlier and this higher meditational experience and its spill-over, influencing the rest of the day, one hears an inner voice from the deep silence, saying to him: "Well, *this is* life; this is the real thing; this is extremely valuable. Why did I overlook this earlier? Wasn't it lapse on my part or mere misfortune to miss it? At least let me resolve now not to miss it in future...." Then one goes again and again into this experience of peace and bliss. When one goes into one's daily routine, after some experi-*

*God loves all as Mother, Father, Teacher, Preceptor, Friend, Helper, Companion or Guide. We are using the word 'he' for the self (soul) and 'He' for God, in a non-conventional sense. The word does not signify any gender or any male-attitude. One can, better, use 'it' in place of 'he' or 'He' but the pronoun 'He' is used here to signify the protective aspect of God and also the truth that God bestows divine inheritance of His benign attributes. God is *Mother* and *Father*, **both in one**, in this special sense that God 'Creates' a new being **morally**, out of each one of us as and when we link our awareness to Him.

It is mentioned in the Old Testament that Moses saw God as a Flame of Light. The Jews call Him Jehovah. Christians and Muslims also believe in the Old Testament. Many people in India also consider god as a Flame-of-Light and call Him **Shiva**. In their Out-of-Body experience also, many have seen the **Orb-like** Divine and luminous form of god. One may have the imagery of this self-luminous Form while practising Raj-Yoga.

ence of this Meditation, with a natural smile on one's face, love in one's eyes and sincerity in one's mind, people feel a subtle change in this practitioner, for he is now more loving, more co-operative, more honest, more sincere and more efficient. He has now certain abiding principles and has a spirit of service. He has goodwill for all. Jealousy, Anger, Greed and Wasteful and Negative Thinking are reduced in intensity, longevity and range and the mood is better and stable, and the level of anxiety, fear and tension has come down if at all it is still there. If the person had some criminal tendencies before, their grip on his mind has at least been loosened. If the practitioner had the habits of smoking, drinking or drug-abuse, he has now developed a distaste in these and his *will* has strengthened so that he now feels a strong urge to give these up and has regained the confidence to do it. He finds that this practice has made him a better person spiritually, morally, socially, politically and in other respects. Those who come in contact with him, observe this influence of Meditation on him gradually or quickly taking place. **So, this experiment has scientific verification and its results have confirmation in the laboratory of life provided one practises it properly as one maintains laboratory-conditions while performing scientific experiments. This is an experiment in the Laboratory of the Mind — *Gedanken* as Einstein would have called it in German.**

But there is yet another side to this experiment. Perhaps, this can be tested with some scientific devices too. Change in behaviour, lifestyle, spiritual experience, etc. may be hard to measure with a scientific instrument but this other aspect of Meditation has been *quantitatively* and *qualitatively* measured by using appropriate *scientific scales*.

As has been reported in books and periodicals during the last about forty years or so, and is *a demonstrable truth*, Meditation has a very positive influence on our psychophysical system. **The brain-wave, the blood pressure, the muscle-tone, the blood-lactate, the heart-beat, the breathing rate, etc., of a person in Meditation indicate that he is in a relaxed state of mind.** In fact, Meditation influences every cell of the body in a positive way and gives better immunity. It helps manage or cure many psychosomatic diseases. It liberates the mind from tension and *increases clarity of thought, efficiency, and*

power of judgement. It places one's relationship with others on a **morally sound basis** and takes a person out of negativity and morbidity and vicious circles of various sorts — both in the *physical* and the *mental* world.

Scientific proof : Demonstrable and
repeatable results

So, this scientifically, attitudinally and behaviourally tested practice shows that, while in Meditation, a person is in harmony with himself and with his body, and this influence manifests in the form of harmony with other living beings and with Nature and Environment. In other words, it proves that this is our natural state of being. This experience lasts not merely as long as one is in Meditation but rather, it extends to some period beyond the duration of practice so that one constantly has, during this period, the feeling which may be expressed in these words: “*Well, this is me. This is the life worth living. This is good. Oh, fine; Really fine; Very nice!*”

Now let us see, in retrospect, what were the essential constituents of the awareness or the mental affirmation during Raj-Yoga Meditation. It had the element of non-physical **self-identity**, for the practitioner said to himself, “*I am a metaphysical point of Light.* It had the **moral** ingredients as well, for it affirmed that the self, in its original nature, is **pure** or pious. It has the **emotional** content, for it said that love is the original nature of *the self*. It had also the **experiential** aspect, for it mentioned **peace**. It also referred to the **relationship** of the self with God, thus putting relationship on a much higher pedestal and on *nonphysical* basis. Moreover, it also drew **attention** to the **values** of kindness and compassion while being aware of God who has these attributes. And, basically, the affirmation itself was **Thought, Awareness** and **Attention**. Or, it was an **activated Belief** or a **realisation** of truth. *Now, let us ask ourselves whether moral values, emotions, experience of solace and inner peace, and realisation of Truth, are made up of Matter or its various forms of energy?*

Can these be synthesised in a laboratory from any material ingredients? Can these be explained in terms of Chemistry, Physics or Biology? **When there are no external stimuli and it is only self-aware-**

ness of a metaphysical kind (for it excludes all thoughts of Matter and the material world) and this special kind of awareness results in harmony, satisfaction, sense of attainment and pleasant feeling from a non-physical source or event, or a joy of supersensuous kind, would it not be proper to conclude that the subject is a non-physical or a non-material, i.e. a spiritual being? If these non-physical noumena are the stuff of which the self is made, or if these are the elements of which the self is constituted, would it not be reasonable to conclude that the self is non-physical?

If greater and greater degree of identification with the body, matter or its forms results in more and more disequilibrium and disharmony, wouldn't it be natural to conclude that the nature of the self is *non-material* and *metaphysical*? If nothing in the material world, including the world of electro-magnetic fields, sub-atomic quanta, of computers and robots, has '*experience*', '*emotions*' or '*self-awareness*' as its core, wouldn't it be wrong to consider the self as an epiphenomenon of brain or matter? If we do not have any model as yet in Physics, Chemistry or Biology and in the matter-of-fact or the imaginary world, wouldn't it be better to accept this common sense view which is experientially verifiable and scientifically testable, that the *self* is a *spiritual being*?

Support from other areas of research

Especially when we have evidence from the investigated and verified cases of re-incarnation, scientifically collected and examined case-histories of Out-of-Body Experiences (OBE), Near Death Experiences (NDE), and hypnotically age-regressed cases to support the truth that the *self survives the physical death*, and we have the paranormal and extrasensory experiences also that support this view, would it be wrong even then to think that *the self* is non-physical and that it is not an emergent phenomenon of the brain?

Clinical tests

Many clinical tests have shown that though limbic system and hippocampus are associated with our emotions, yet these are the brain-parts used for exteriorisation or manifestation only; these are not the

experiencer. Researchers have been able to evoke emotional responses by applying electrodes, etc. to these parts of the brain but the subject did not feel anger or such other emotions. Only physical manifestation of pseudo-anger could be elicited while the subject himself laughed and felt amused at the happening.

Scientific explanation of mind-body or
self-brain contact

With all the evidence available, it seems that it would be reasonable to conclude that the field of the non-physical self has its contact with the subtle field of the physical quanta in the sub-cortical region of the brain at and around the hypothalamus, thalamus, limbic system, hippocampus and the brain-stem or what some researchers have called: the *psychotropic* region. It is now well-known that this region acts as a link between the psyche (Mind) and soma (Body). It is now being increasingly realised that human consciousness is a composite entity, so to say which is homogeneously inclusive of (1) general awareness, (2) emotional experience, (3) analytical consciousness and (4) 'awareness of awareness' or awareness of all these abilities and that all these four are, in one way or the other, linked as a field to the field formed by hypothalamus, limbic system, hippocampus and brain-stem and the emotional elements were attributed to the limbic system, memory to hippocampus, and incisive consciousness or logical and abstract thinking to the cortical region, but now it is known that all these also are linked to Hypothalamus which controls, through the pituitary (the Master Gland), all the endocrine glands and also the autonomic nervous system and the homeostatic functions.

If even now someone says that the self or the Consciousness is an emergent phenomenon of the brain and that our thoughts, like the energy quanta at the subatomic level, form a field, one would have to answer the following questions:

Questions, addressed to those who consider
mind as epiphenomenon

- (1) *How do emotions, experience and the moral sense emerge from the brain or any other physical base and what, in the first in-*

- stance, does make it a plausible thesis that these non-physical noumena arise from the physical phenomena?*
- (2) Do we have any mathematical equations, physical laws or chemical formulas that can explain Emotions, Experience of Love and Joy or Moral tendencies?
 - (3) If the thoughts are like quantum phenomena or if they have emerged from the brain, what form should our Meditation or Yoga take? What should our Affirmation now be? Should it be: "I am a quantum phenomenon, I am a jumble of dancing particles..."
 - (4) Does the hypothesis or the theory that Consciousness is a quantum phenomena or has emerged from the brain, explain the extrasensory perceptions, the paranormal phenomena and the parapsychological and emotional experiences?
 - (5) Does the model, based on the hypothesis that Consciousness has emerged from the brain or the brain-body combine, explain what is *the goal of life* or what meaning life has and what is *the place of man* in the scheme of things or in the drama of life?
 - (6) Has Meditation, based on the belief that Thoughts and Emotions are quantum phenomena been ever tested by someone? If they have been tested, what result on the body and mind have they produced?

If the answers to the above questions do not provide us with a *better model* and better results, then it would be more scientific to continue to have faith in the truth and Consciousness is a non-physical, non-emergent entity.

2. A sound identity for sound humane relationships

Further, we find that human existence has a network of relationships. At present these relationships are based on various kinds of identities. Man, to-day, identifies himself with his body, family, language, country, race, community and so on. **All these multifarious identities exert their pulls on him and each one of these demands loyalty.** Not only does this result in confusion and conflict in man's own mind and give him moments of trauma and torment but it works as a great *disintegrating factor*: *The relationships built on these identities that*

derive their legitimacy from the association of Consciousness with that which itself owes its existence to something material, has not been able to lead society to a system where there is abiding peace, wholesome harmony and lasting amity. It has not uplifted man from narrow considerations, it has tied man into many knots — one upon the other. It has not liberated his mind and given him a wide horizon of thinking, into which all directions can merge but, on the other hand, it has built many walls of separation which put artificial limits on his love and conscience and do not let his spirit free so that it could fly with freedom.

Now compare this with the understanding that the self or the Consciousness is a non-physical entity and that its relationship with all other human beings is of brother souls since all are immortal children of God. **It will be found that one feels that the blinkers or hoods of ignorance have been removed, all kinds of fanaticism have fled away, narrow-mindedness has gone and one feels that one belongs to the whole family of humankind. Even though one knows one's nationality and language, etc.; yet one now has the knowledge that integrates and prevents an explosion or implosion of society into innumerable bits. This concept and feeling of world-brotherhood is the only *uniting force* that can harmonise the society into one whole and generate *genuine concern* for each other and stop human energy being frittered away on perpetrating or preventing violence and many other kinds of mad frenzy.**

A challenging question

“is there”, one may ask, “any other sound and matter-of-fact basis for our society to have a feeling of universal love and goodwill and mutual concern? How can any theory, that is built on the hypothesis that the self has emerged from Matter at some stage, give a sound pedestal to human relationships?” The world can never become a good place to live in nor can our society be a better one without love which is the sap or the blood and the essence of life, and there can be no lasting love without this spiritual root. The tears of the poor cannot be wiped dry nor can the agony of the deprived millions be extinguished nor can the diseased, the weak and the aged, be looked after well if our

attitude is not humane and the reservoir of love has become dry. But which other social model, except the one based on spiritual relation of world-brotherhood, can infuse a spirit of love? This question of relationships is very crucial and the answer provided by the belief in a metaphysical soul has the strength enough to demolish all other hypothetical foundations for human relationships.

One should realise that all our political and economic systems, all talk of Human Rights, all Law have a bearing on human relationships. All history also is connected, in some way, with human relationships.

So, life as it is, cannot be understood except in the context of relationships. And, relationships cannot have a sound and valid base without considering the self as metaphysical, i.e. spiritual.

3. All knowledge is for life

After all, knowledge is for life, for joy, for happiness, for elimination of pain and for problem-solving; So, whenever we have a bit of new information or a new theory, we should test it with this touch stone. We should examine it from this point of view and see whether it will help build a better society and a better world order. We should see whether it will promote values and better relations and happiness or it will lead to a worse situation and will unleash forces of disintegration and immorality?

If we find that this belief in a metaphysical self passes this test, or would pass this test better than any other current concept, belief or theory, then it is better to hold it at least as long as we do not have a better concept.

Further, we should see whether the theory would equip us with such knowledge and build such attitudes as would enable us to face various difficult situations and problems in a better way. For example, we should ponder whether it would bring peace and tranquillity to our mind or it would result in emotional turmoil or instability, wavering moods, floundering will and collapse of Values in face of tests.

Divine Guidance and Help and People's blessings

It has been found to one's tremendous advantage, on the basis of continuous experience, under many testing situations, that Raj-Yoga

Meditation, practised sincerely, brings **God's guidance and help** which has immense value. One can relate many experiences, from one's own life, of such events in which God, the Best Friend or Best Guide, Himself blessed the practitioner with love and care and revealed the solution to a tricky situation or a hard problem.

Also, the practice of Raj-Yoga Meditation enables a person to be so loving and co-operative that his colleagues and kin, or friends and relatives, bless him for his pleasing and helpful manners, and even his professed adversaries, later, change their stance and attitude into one of co-operation and help.

Thus, we find that not only is the belief in metaphysical nature of Consciousness based on truth but it promotes moral values and better relations and a better world order and equips a person with such attitudes and knowledge as enables him to have better mind-set and to come out better in face of difficult situations.

This understanding answers scientific
questions better

Some scientists raise a valid question. They say that, since so many bits of information come to our brain through our senses every instant, the situation in our brain is comparable to a chaos or a catastrophe and there can be many probabilities as to the final outcome. So, the question is: how, in such a situation, do we have **a unified mind**? They suggest that, since our mental states are abrupt and are events at micro-level and are unpredictable, so the Catastrophe Theory would apply to this situation of quantum phenomena. They consider thoughts like quanta. But if we consider that, in this situation, there is a metaphysical particle in the brain which has a particular background and outlook and attitudes and that forms *the point of reference*, then, perhaps, we could appreciate that it is this *self-conscious particle* that determines the final result in the form of a particular decision, etc.

Another question generally is from the point of view of split-brain and split personality phenomena. In these cases also if we think that it is the metaphysical self which uses, sometimes, one, and, sometimes, the other hemisphere or that this metaphysical self, sometimes, expresses one emotion and, sometimes another, then we will be able to

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and as supported by relevant disciplines of
Science and various Religions and systems of
Philosophy and Psychology

- Part II -

appreciate better than this thesis about the metaphysical self answers such questions, better than any other theory.

One point that supports our explanation of ‘split thought’ is that two opposite thoughts do not occur at the same moment nor two opposing emotions or experiences manifested at the same instant.

In the light of the above, it seems fairly valid to believe in soul as a *metaphysical particle* that is *self-conscious* and is related to all other humans *as a brother* and has, therefore, some responsibility for the well being of all for observing some essential ethical values.

Before Science came on the world scene as an organised and formalised branch of knowledge, such as we have to-day, Consciousness, under the nomenclature of *Self, Soul, Mind* or *Psyche* was discussed by Religion, Philosophy and Ethics. In its earlier stages, even Psychology and Ethics also were part of Philosophy and, so, the nature, the form and the states of consciousness and also the soul-body connections were discussed in Religion and Philosophy only. So, I have discussed briefly the nature of the self or consciousness, first with light of Religion and then in the light of science, then some, not all systems of Philosophy. I have discussed it very briefly, keeping in mind the constraint of time. In the 3rd part I will discuss it from the point of view of psychology.

Nature of self or consciousness from the perspective of religions

Man had been asking himself, for a period of at least about 2500 years — of which we have some reliable record — the pertinent question: ‘Who am I?’ He wanted to solve *the riddle of the self*. He also wanted to know the difference between himself as a conscient entity and the material world, of which the self was conscious or aware. He further wanted to know whether the thoughts, Will, memory, emotions, habits, tendencies, etc. had emerged from his physical system, including his brain, or these were the characteristics or functions of a separate entity. By solving this riddle, he wanted to discover the meaning of his existence, his place and role in the cosmos and also the cause of sufferings.

We find, from a study of the history of Religions and Philosophy,

that originally, the main purpose of man's search - after-the truth was to know the self so as to get ultimately released from all kinds of sufferings, and presently, to lead a life of good actions and to have an experience of peace and bliss. Man has had also the curiosity to know if there was another Conscient Being, who was much superior to and mightier than him, and was the Creator and the infallible Guide and he wanted to have mind-to-mind communication with that Being.

The core of Religious and Spiritual thought

Starting from Brahmà or Adam and acquitting ourselves with the inspirations, contemplations and reflections of the Vedic and Upanishadic seers and sages, the Biblical saints and the Founders and Prophets of various religions, we find that there is a vast diversity among various religions and within the same religion, on many important religious themes, including the question, relating to nature and form, etc. of Consciousness or self. The revelations or the doctrines, enunciated by the Founders of religions — the Sermonizer of Bhagwad Gita, Zoroaster, Buddha, Mahavir, Abraham, Mosces, Christ, Mohammed, Nanak, Dadyanand and others differ widely from each other. However, a careful study of these would lead us to the conclusion that there is a core which is common to all. Here are the beliefs common to all or most of them.

All religions believe:

1. That there are sufferings in this world and these sufferings have some cause; the cause of these sufferings is man's violation of some laws and, among these laws, are also *the moral laws*.
2. That man's actions and intentions which violate moral laws are called 'bad', 'evil', vicious or sinful actions and these emanate from *ignorance*, illusion, delusion, defiled nature or willful violation.
3. That man has *awareness* (including *self-awareness*) and the abilities of *thinking, cognition*, and *rational faculty*, which vary from person to person and these faculties give him the ability to see that there are good as well as bad or evil actions with positive or negative results respectively.

4. That man has ***the will*** or ***the desire*** and the faculty or ***judgement*** and, therefore, he is responsible for his actions, for he can choose between good and bad.
5. That man has the ability of ***feeling*** and ***experiencing*** and also the emotions and, if he desires to be liberated from sufferings and from the experience of pain, and aspires for happiness, he should exert his ***will***, and give up the evil and imbibe in him what is good or virtuous.
6. That man has the ability ***to learn, to retain*** and ***to recall*** or ***recollect***, i.e. he has the ability called '***Memory***' and he should, therefore, learn the truth about the self, the world and the Creator and should remember his true identity and use this ability (Memory) in a right and virtuous way.
7. That he has the ability ***to realise*** his identity as different from others things and persons and to consider ***the self*** as an individual or a **person**.
8. That this individual, which has awareness, Will, memory, etc., has also the ***ego*** or the '***I-ness***' which is the feeling of his identity as the 'self'.
9. That, while in the body, the soul has certain altered **states of consciousness** in the form of wakefulness, sleep, bliss, intoxication, swoon, coma, etc., when it is in a body.
10. That this individual self has the ability **to relate** with others and it may thus have various affinities, bonds, relations, associations, etc. A person should not do actions that result in bondage.
11. That ***the self*** **does not die** with the body, for, it has to reap the fruits of its actions even after the body dies and is disposed of. So, the self, also called the soul, *Atman* or *Ruha* is, by its very nature, *different from the body* which is constituted of the elements of Matter.
12. That the soul has an aura or a field or certain sheaths round it and the field exerts its influence on Matter.
13. That the ***moral qualities*** and ***the experiences*** like peace, bliss, love, etc. pertain to the realm of soul.
14. That the soul does not have mass or extension like the Matter and is indivisible.

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15. That the soul is a **traveller from another world** called *Brahmlok, Parlok, Satyalok, Avyakt, 'Highest Heaven' or Fifth or Seventh region on high* into this world, where the basic moral law of action is that *sooner or later you will reap as you sow*.
 16. That this self has **a goal or a purpose**, namely the attainment of liberation from all sufferings and attainment of perfection and complete and ever-lasting happiness.
 17. Some say that the soul resides in the heart whereas others say that it is *in the brain* in *Bhrikuti or Trikuti Ajna Chakra or Brahm Randhra* and it is from there (i.e. the brain) that it influences the heart and also every cell through its field, acting upon the nuclei of the hypothalamus and the thalamus and the nervous mechanism connected to them.
 18. The theistic religions further believe that there is a **Supreme Soul**, God or a Parent Soul, who is above physical birth and death and is **Incarnate** and above all sufferings and is the only Knowledgeful, Peaceful and Blissful and Almighty Being-of-Light.

Consciousness from Spiritual or Religious
Perspective

If we put together all the above basic beliefs or precepts at one place, this coherent statement would emerge: 'In every human body, there is a soul or a self which has self-awareness, consciousness, Will, cognition, rational sense, emotions, memory, ego or 'I-ness', ability to experience, and to relate to others and have various affinities and bonds and to survive after it leaves the body so as to settle the accounts of its actions; this entity, by its nature, is a meta-physical entity and the souls are higher or lower in respect of their moral stature and, according to the theists i.e. religions, there is also a Supreme Soul. Also, according to some religions, the soul takes an other body after it leaves one body and, according to some others, it does not reincarnate but it continues to exist and get reward or punishments. If does not die.

Qualitative change by practice of this precept

This precept has been put into practice by thousands or millions of individuals over the last at least two millennia and it has been found that this brought qualitative change in their life. They were able to transform their unsocial or evil tendencies and to attain self-control and peace and solace. They became considerably free from worries and felt mostly liberated from wasteful and negative activities and, by their own practical life, they inspired many others. Moreover, they had what is called 'religious experience' or 'spiritual ecstasy' which is very different from the sensory experience and which they valued as the greatest attainment that life offered.

Also, the above belief-system had, for them, the potential of explaining many phenomena and solving many questions, relating to life.

It had also the capability of liberating man from narrow loyalties and from fissiparous tendencies, based on one's identity with race, region, language or community and, in its place, it gave the concept of the bigger family of mankind. It also gave man higher responsibility as a moral agent.

The practice of Yoga, Meditation, Prayer, Positive Thinking, etc., based on the belief in the soul, gave man lot of mental relief from stress and energised and inspired him greatly and illumined his mind to an extent, with positive and creative thoughts.

Of course, those who were not sincere in their belief and practice and were only ritualistic and body-conscious, without any self-control or discipline, they behaved as fanatics and religion stood defamed mainly because of them, i.e. because of lack of transformation in their behaviour and habits. But if we do not mix up religion with pseudo-religion, we will have positive opinion about Religions which gave man the belief in the identity of the self as different from the body.

This concept has consciously or unconsciously
been the basis of society

On the whole, we may say that the above basic understanding about the self or the human soul has been the basis of the society and its various systems. This has given to the society some basis for moral and human values and has also provided the concept of world-brother-

hood with all its accompanying moral, social, economic and political implications, provided one cares. ***If this concept, precept or tenet, namely that souls are moral agents, responsible for their actions and that they are metaphysical entities, who survive physical death and reap the fruits of their actions, is taken away from our conscious and subliminal mind, then the whole present-day moral, social and legal structure would become shaky or they would crumble down because it would not have any firm and enduring basis for worthwhile values, such as love, mutual concern, sympathy, compassion, co-operation, service, honesty, etc.***

We give an example of how the belief in a *non-physical self as a moral agent* forms the basis of all laws. As we all know, only a person, who has committed the crime should be held responsible and be punished. To punish *someone else* for a crime is against all canons of legal and social justice. A father cannot be punished for the crime of a son nor can a son be punished in place of his father. Now, the biological sciences tell us that, in a period of seven years, all our body-cells are replaced by new ones so that, after every seven years, there is another body in the place of the one that was there earlier. The whole body-chemistry undergoes change during a period of seven years. So, if a person has committed a crime and has gone into hiding for seven years, he could claim freedom from all legal action against him by saying that the person (in this case ***the body*** that was there seven years before, who had committed the crime, is no more existent and that he (the present body) is *only a successor* of the former and is, therefore, a different person. But, we know that in practice, Law does not spare him on this ground. It punishes the culprit even if he is traced after many decades because, sub-consciously or unconsciously, it is felt that the conscient person (the soul) is the same even though the body is totally changed. The law takes note of the *conscient being* and not of the body only that changes after every seven years.

The spiritual perspective vis-a-vis various
disciplines of science

If we think deeply on the nature of Thought, Emotions, Will, etc., we will come to the conclusion that these are metaphysical in their

nature, for ***Thought is not quantifiable*** as various forms of Physical or Material energy are measurable. ***Not only has Thought no mass but it can cross all barriers of time and can go into the distant past and far-off future. Thought has a moral dimension also which various forms of (material) energy do not have. According to Physics, speed of light is the ultimate or the highest in the universe but the speed of Thought is very much higher so that it cannot be measured. In fact, Thought is the basis of all measurements. Light takes about eight minutes to travel from the Sun to the Earth but Thought takes only a small fraction of it. Other forms of energy, such as Light, Heat, Sound, etc. cause sensations but Thought it is that feels the sensations or prevents them from causing sensations. Sound takes the form of words and melodies but it is Thought or Mind that understands the meanings of these words and appreciate the melodies. Thus, Thought is altogether a different kind of Energy - a spiritual energy. it is not chemical, physical or mechanical energy.***

Thoughts, Emotions, Will, etc. are not the epiphenomena of the brain even though they use various parts of the brain for their manifestation. We may be able to record, with the Electro-Encephalogram (EEG), the brain waves and categorise them into Alpha, Beta and Delta and know from these whether a person is in a state of restfulness, wakefulness or in a state of drowsiness, sleep or tension but **the EEG does not enable us to contact the Thought rather it is the Thought which makes use of the EEG and knows its own state.**

Similarly, the emotions, such as love, kindness, compassion, astonishment and enthusiasm and the feeling, such as joy or grief, etc., are not the attributes or work of Matter or its forces. Specific part of the brain is used for their manifestation and exteriorisation but it is a separate metaphysical Being *who has* these emotions and experiences. This has been scientifically concluded by experiments by such well-known brain-surgeons and researchers such as Penfield.

Likewise, Will or Wish also is not the attribute of something material because it envisages *a goal* and determines *a plan* to achieve it and, finally, when a wish or a desire is fulfilled, it is the person who says: 'My wish is fulfilled'. It is not the wish which says: 'I am fulfilled'. Clearly, the wish is different from the person whose wish it

was.

Is not Thought, etc., an epiphenomenon
of the brain?

Some people say: Thoughts, Emotions, Will, etc. are not material in their nature but when the material elements get together, in a particular manner, into a particular combination and state, then consciousness or Thought, of itself, emerges in the brain and body. This view, however, is not correct because *brain like other material things, is an object or Thought: it neither thinks nor is it a generator of Thought. All material things without an exception, are the objects of enjoyment but the enjoyer is different from Matter and material things.* The conscient souls is the **user** or **the enjoyer**. Material things do not exist for their own use but for a conscient being. For example, a bed exists not for its own sake but for a man or a woman.

Again, brain and material elements, in simple or combined form, cannot transgress laws of Physics, Chemistry or Nature, According to the law of Physics, a reaction is always equal to the action and, even in the unbalanced equations in organic chemistry, the laws of conservation of Mass and Energy are not violated. But, these laws do not apply to Thought and Emotions which shows that they are, by their very nature, different from Matter; they are non-physical. We give an example:-

Suppose a person has gone to a religious gathering and, there, he listens to a religious discourse. Now, according to the laws of Physics and Chemistry, the voice of the lecturer should go to the auditory areas of the cortex of the listener and get decoded there and the reaction of the voice should not go much further than the energy of the original words or sound. But we find that not only does the listener pay *attention* to the discourse, of his own free *Will*, but he *thinks* over it deeply again and again in order to find answer to many questions which the discourse has raised in his mind. That shows that not only does the action in the form of lecturer's voice produce a reaction in the form of electrical impulses but also it goes much further, for it invokes the *Will*, invites the *attention* and provokes *the action* of the listener. **The reac-**

tion, in this case, is not equal to the action; it goes much beyond the well-known equation of Physics. Obviously, there is a metaphysical entity which uses its *Will* and *Attention* and exercise its power of *Decision*, etc. so that the original stimulus has extended far beyond its expected range and has triggered not only *bio-chemical* and *biological* processes but has also stirred up the metaphysical abilities which do not belong to anything material. But, if still someone says that the Consciousness has a material origin or that it emerges from the brain even though it is non-physical, then *he has to explain how a non-physical entity can emerge from something physical. If he doesn't, then he will be raising more questions than he would be solving.* As far as we know, no one has, upto now, been able to explain how consciousness can emerge from Matter when the former is *qualitatively* and *functionally* different because it has *emotion, experiences, purpose*, etc. while Matter, and things made of Matter, do not have these.

What Karl Popper, said about consciousness
as an emergent product?

Even the famous philosopher of science, Karl Popper, who considers Mind as an emergent product of brain admits *that his this belief is of no explanatory value.* Says he: **“From an evolutionary point of view, I regard the self-consciousness minds an emergent product of the brain. It has no explanatory value, and it hardly amounts to more than putting a question mark in a certain place in human evolution.”**

Do altered states shows that conscious
is an emergent product?

2. Some people say that if and when we alter the brain, the mind or consciousness is also altered and this shows that Mind is a product of Matter. For example, if due to some accident, speech centre of a person's brain is damaged, the person is unable to speak. Similarly, if and when certain drugs are injected into the body of a person, the moods and states of consciousness of that person are altered. On the basis of these arguments, they say that the consciousness is an *emergent phe-*

nomenon; it is a product of the brain. *But the argument does not hold good if one keeps in mind that brain is the mechanism used by the non-physical self and, so, if the mechanism is damaged or altered, the user cannot function normally.* In order to make this point clear, let us give the example of a person who records his transactions, stocks and accounts on a computer, *if his computer has been damaged or destroyed, he would not be able to function normally. But that does not mean that if the computer is damaged, then the user also is damaged and the computer and the user are one and the same.* Similarly, if the soul cannot function because of damage to the brain, it does not mean that brain and soul are the same.

Does analogy of a computer show that
consciousness is material?

However, there are eminent scientists and technocrats who would say that consciousness is not distinct from brain. They say that ‘Consciousness’ is the name given to the intelligent functioning of our brain which is like a super-computer. For example, Marvin Minsky of M.I.T. who is a leading figure in computer research, says that a computer with “The general intelligence of an average human being” will soon be created. He further says that “The machine will be able to educate itself. In a few months, it will be at genius level. A few months after that, its power will be incalculable”. Later, “If we are lucky, they (the machines) might decide to keep us as pets.” **It seems that the reason for his this statement is that he considers only ‘intelligence’ as the characteristic of Consciousness. He seems to overlook the fact that human intelligence is always accompanied by emotions, experience, purpose, relationships, etc. There is a lot of difference between the human intelligence and the artificial intelligence of a computer which is programmed by a human being and is the creation of human intelligence which is the programmer and which has experience also.**

Another, such expert, Professor Arthur Harkins, a Director at the University of Minnesota, says that, by the year 2000, people will be getting married to robots and society will begin to ponder the definition of “human”. Now are not such views funny! Isn’t the emotion of

love (between a husband and a wife) being clearly overlooked?

Obviously, such scientists do not ponder that our *Will, Emotions, Desires, Experiences, Values*, etc. are the very essence of what we call 'humanness'. It is not mere intelligence which is the distinctive feature of human being but these other abilities also inseparably accompany intelligence in a human being. So, their misconception allows them to suppose that machines and computer of sufficient sophistication can become conscious! *They fail to realise that their such view will confuse people about their place in the world, and about their goal and would undermine further the human values and will also destroy the traditional institutions in the society.*

Opinion of Eugene Wigner

On the other hand, there have been scientists, like the Nobel Laureate Late Eugene Wigner, who said: "There are two kinds of reality or existence; the existence of consciousness and the reality or existence of everything else. The latter reality is not absolute but only relative." Wigner said this because the measurable things and phenomena are known to man only because he has consciousness.

Consciousness is not a material force
said Thomas Huxley

Even Thomas Huxley, who strongly promoted Darwin, has said: "I understand the main tenet of materialism to be that there is nothing in the universe but matter and force; and that all the phenomena of nature are explicable by deduction from the properties assignable to these two primitive factors...It seems to me pretty plain that there is a third thing in the universe, to wit, consciousness, which...I cannot see to be matter or force or any conceivable modification of either".

Consciousness does not come from
neurophysiological synthesis says Sir John Eccles

Similarly, Sir John C.Eccles, in the book *Self and its Brain*, says: "The experienced unity (of consciousness or Mind) comes not from a neurophysiological synthesis, but from the proposed integrating character of the self-conscious mind". Eccles has said this while discussing how many messages coming to various brain centres through the ears,

eyes, nose, skin, etc. simultaneously are synthesised and decoded so as to make a composite picture or a sense out of them all. He is of the firm opinion that this is done by the self which is not an epiphenomenon of the brain.

5. Penfield's experiments show consciousness is not an epiphenomena of the brain

Further, Penfield's research also have shown that even massive removals of cerebral cortex do not seem to completely abolish awareness but small lesions in the brainstem produce irreversible coma. Penfield has also shown that in 'anecephalic monsters', i.e. in those persons who are born without any cerebral cortex, there are states of wakefulness and sleep alternating each other and the person can smile and cry also but it cannot understand or speak because the cerebral hemispheres are not there. So, it shows that though the two hemispheres are responsible for higher thought - processes and understanding the language-code, etc., yet these are not the seat of consciousness. *Penfield performed many experiments by stimulating various sites or points on the brain. For example, he stimulated the motor cortex and produced the bodily movements, such as the movement of a hand, but it did not produce any conscious effects. He came to the conclusion that consciousness is located near the Hypothalamus and the Brainstem and is not an epiphenomenon of the brain.*

6. Mind-Body contact takes place in the brain

This finding also explains the question of Body-Mind connection. We have already said that some Religions say that the soul dwells in the heart whereas others say that the soul dwells in the brain at a point called *Bhrikuti* or *Trikuti* or *Ajna Chakra*, which is in-line with the mid-point between the eye-brows. Many have said that the soul is infinitesimal; it has no extension and is *indivisible*. So, it could be understood in the light of the research done by Penfield and others that the soul has its field in the proximity of the Thalamus, Hypothalamus-pituitary-combine and the limbic system and the brain. Here, it functions through the Sympathetic and Pra-sympathetic nervous system and the Pituitary, which is the Master gland. As is now well-known, all

the body-functions, including that of the heart are controlled and conducted from here.

Brain-death and not stopping of heart-beat
shows disconnection

In the olden times, people could judge the presence of life and the soul by feeling the beats of heart. They could also feel the effects of one's emotions easily on one's heart. So, they could easily come to the conclusion that the soul dwells in the heart because the stopping of the heart-beats signalled the physical death. But now, in the light of the medical research, it is amply clear that it is the *brain-death* which is the major proof of the death of a person's body and, so, it could be understood because of these other factors also that actually brain is the seat of the soul which, of course, has a field.

Experiments on "the clinically dead"

Above, we have given some clarification about the non-physical nature of the self or Consciousness and have given evidence from various disciplines of science which support the truth that the self, the soul or the Conscious entity, in every human body, is a *non-physical* one and it is not an epiphenomenon of the brain. This truth, which is common belief of all religions, is supported by the research conducted on '*the clinically dead*' or what has now come to be known as *Out-of-Body Experience*. The name of Dr. Raymond A. Moody, MD, in this field, has become fairly well-known, for he did the pioneering work. Dr. Moody conducted research on three kinds of cases: (i) those who were resuscitated after having been pronounced clinically dead by doctors, (ii) those who, because of accidents, illness or serious injury came very close to death and (iii) those who, as they were dying, told their experiences to other people who were then present and, later, these people reported their death experiences to Dr. Moody. Dr. Moody studied about 150 such cases and constructed a model of death-experience. These are described in his book, *Life-after-Life. All these things point to the truth that the soul, the self or the conscious entity does not die with the body but rather survives after the body has been disposed of. In these 'Near-Death-Experiences' or 'Out-of-Body' Experiences, peo-*

ple report that they observed their physical body and events relating to it from a perspective outside of the body. Although a percentage of these cases are unreliable yet extensive and intensive research in this field leads conclusively to the truth that the soul survives the death of the body and is different from the body and the brain.

Visions of the Supreme Soul

*These cases also give evidence about the existence of the Supreme Soul or the Parent Soul because many persons reported that, at the point of death, they saw a **Being-of-Light** which was of the form of an **Orb-of divine Light** and which gave the experience of a **loving Parent** and then they saw, in quick succession, the picture of their past acts as one sees events shown by a movie.*

Cases of Research on Re-incarnation

Research has also been scientifically done in the cases of children who gave accounts of memories of their past lives. Ian Stevenson, Head of the Department of Psychiatry at the University of Virginia, USA, has done very extensive and thorough-going research in this field. He investigated more than 2000 cases, from all over the world, of children who claimed that they had lived before their present life. Though some cases were false and fabricated yet investigation into many cases confirmed their veracity. Ian Stevenson investigated the details of the place and people as the children had described and also the details about the dead persons which the children claimed to have seen. He came to the conclusion that there was ample verification and confirmation of all these. He was, therefore, convinced that the conscious self can travel from one physical body to the next after one body has been destroyed.

Research in the field of Hypnotic Age-regression

Recently, lot of research has been done in the field of Age-regression. Though it has been found that, in some cases, the mind of the hypnotically regressed persons tends to fabricate illusion and, therefore, the statements of all the subjects are not acceptable, yet there are many cases that have been verified, as for example, the case of an American woman in Philadelphia who, under hypnotic regression,

manifested the personality of a Swedish farmer and spoke fluent Swedish though investigation about her showed that she had no previous contact with any Swedish in her life. Dr. Helen Wambach, Ph.D., among many other researchers, has done remarkable work on the experiences of rebirth and past lives through the method of hypnotic regression. He regressed about 750 subjects back to the moment of death in their previous life and then to the moment of their entry into the present body. He took many subjects into numerous past lives. After going through his book, one comes to the conclusion that there definitely is a metaphysical entity which takes rebirth after giving up one body. The soul is not only non-physical but is a traveller that moves from one body to another and also, as many, under hypnosis, saw, from the World of Souls to this world.

Explanation of unified experience in the
light of Theory of Relativity and the
Data-processing theory etc.

One special characteristic of our Mind or Consciousness is that we always have **a unified experience** though we are being constantly bombarded by innumerable data or bits of information. Let us see whether our view that there is a metaphysical soul, ensconced in the brain, helps explain this or it is a hurdle?

According to Einstein's Theory of Relativity and his *gedanken* (experiments in the mind), any space-time event can be viewed from an innumerable number of reference-points, each giving rise to a different result, a different interpretation or a different experience.

In the light of this, let us take up the view of the scientific community, to-day, in regard to the messages received in our brain. These messages, fed into our brain by our various senses, lead to something like numerous space-time electro-magnetic events. These space-time electro-magnetic events, at particular moment, are numerous because we receive simultaneous messages from the eyes, the ears, the nose, the tongue, etc. So, according to Einstein's afore-mentioned theory, there should, at one point of time be **many experiences**. Further, since our frame of reference will affect our measurements of the location, speed, direction, mass, length, momentum, energy, frequency, etc. of

each one of those events or objects, *our experiences should be innumerable*. But, contrary to this expected result of *gedanken* (though experiments) we always have *one unified experience*? The question is why and how we have a *unified* experience?

We further know that our observations and, therefore, our conclusions based on those observations, are also coloured by the difference in our measuring apparatus and also by our attitudes, beliefs, past experiences, prejudices and even by our desires. *So, taking all these factors into consideration, if there are the numerous simultaneous electromagnetic events in our brain, and, so many are the frames of references, then our experience could not have been 'one' as it really is. Since our experience is always one and unified, it would be reasonable to conclude that there must be a single point of reference, working as a co-ordinate origin, to which our experience owes its one-ness or uniqueness. The universal fact that we always have only one unified experience is a clear evidence of the truth that (i) there is only one co-ordinate origin which works as our reference-point and (ii) that there is only one set of attitudes and beliefs which lead to the 'one-ness' of our perception or experience. What else can be this one co-ordinate origin which also has one set of beliefs and attitudes? Conclusively, there must be a metaphysical point, namely 'the soul'.*

Even if we have never observed this point or metaphysical particle which works constantly as one single frame of observation and reference, it becomes necessary to recognise the existence of such an entity, for this explains why we have a *unified* experience. This entity is *the soul*. It is this which has beliefs, attitudes, past experiences, etc. *Without accepting its presence as a point of metaphysical Light, our experiences cannot be explained.*

Explanation of unified experience vis-a-vis Quantum Mechanics and Catastrophic Theory

Now let us think over the question of '*unified experience*' vis-a-vis the Quantum Mechanics and the Theory of Chaos or the Catastrophic Theory.

Quantum Theory deals with different energy states that a system can occupy. This branch of Physics helps us to understand the behav-

behaviour of atoms and sub-atomic particles, etc. This theory tells us that whereas we can predict the behaviour of large objects, such as an aeroplane or a cow in large areas, we cannot predict tiny changes at the micro level in small areas. We cannot give exact details of time, energy, momentum, position, frequency, etc. at the micro or the atomic and subatomic level because *our every act of measuring disturbs the system or the event that is under observation*. At that level, we cannot say when or which thing will occur. We can describe *the probability only* of a particular activity because the events at the micro level are *abrupt as a catastrophe* such as occurrence of an explosion. The special kind of theory in the branch of mathematics that deals with such abrupt and catastrophe-like events and explains in terms of probability is called *The Catastrophic Theory*.

Now, the events in our brain that take place due to the bombardment of the information-pieces hurtled by our senses are compared, because of their abruptness and complexity, to a situation of catastrophe or anarchy or a calamity. There is a kind of a storm or explosion of information in our brain and, as a result of this, there can be a vast range of probability due to there being a number of ways we can approach that information or to the problem posed by that information and so, there can be a number of possible decision, and, as a result of it, there can be a number of mental states that can occur. *Despite this tremendously vast range of possibilities, there is an abrupt decision, sometimes or often taken instantly. How does this happen? So, the pertinent question is: Who determines or What determines as to how to look at that flood of information and how to react to it or what will be the approach and what do we want to experience? The scientists say that, because of the afore-mentioned reasons, all our mental activity corresponds to the changes in the quantum energy states which the Quantum Mechanical equations would describe in terms of probability, using the Catastrophic Theory.*

Further, the Quantum Mechanics and the Catastrophic Theory tell us that these mental events, which are like the micro-quantum phenomena, *would always be unpredictable*. We cannot say with any degree of certainty what course of action the Consciousness or Mind of a particular individual would take. In other words, an individual's action

to us *would always be uncertain*. But, we all know that, in actual practice, we can pretty well know it if we know what are a person's usual choices. After all, everyone of us has some **fixed** tastes, inclinations, choices, habits and way of thinking and deciding and even when we deviate from our usual choice, we do so because of certain other **fixed** factors of our nature.

So, a plausible explanation could be that even if the quantum-level or micro-level forces or bits of information in the form of electrical impulses trigger our decisions and mental states in random leaps and quantum - jumps of our consciousness, their results are not frustratingly un-predictable; these decisions, mental states and courses of actions are determined largely by our 'samskaras', tendencies, motives, habits, prejudices and choices and by our Will. And the Will and the Samskaras and the tendencies, etc. reflect the presence of a non-physical or metaphysical entity that triggers our thoughts and decisions into definite direction and course of action.

The concept of soul strikes a balance between
free will and determinancy

Those who are strong supporters of the Quantum Theory and the Theory of Catastrophe, suggest that their view-point increases the scope for **a free will** and demolishes the belief that we are in a fairly or totally deterministic world. True, but the presence of a soul does not place any hurdle in this. On the other hand, it strikes a fair balance between the two view-points. It accepts that the situation due to numerous messages and bombarded information is, no doubt, *abrupt* and offers *many choices* but the proclivities, hopes and aspirations, level of understanding and, above all, the *samskàras* of the metaphysical being, the soul, act as the *determining factors* else the decision could not be taken abruptly or *instantly*. And, we know from our own or others' experiences that whenever there is confusion and wavering of Mind and whenever the decisions are not taken quickly, the reason is that the person has *a number of interests* rather than *one* particular interest and he has *a dual personality with sets of opposite samskàras* which shows that these are the *determining factors*. And, these are the characteristics of the individual souls — the metaphysical entities. Thus, the Quantum

Theory and the Theory of Catastrophe when rightly applied, support the truth about the existence of a *metaphysical being*, called the soul, in the brain, rather than reject it.

The soul as an eternal point of energy *vis-a-vis*
the Law of Entropy

According to the Second Law of Thermodynamics, every action or inter-action within a system results in less and less available energy and in greater and greater disorder or disorganisation.

This Law can be explained by the example of petrol used in a motor vehicle. When the petrol is in the tank of the vehicle, its molecules are in a much more ordered state, for their composition or their chemical bonds is intact. But when the vehicle moves, the petrol molecules turn into vapour and their chain or chemical bond is broken apart and it combines with the oxygen of the atmosphere and forms carbon dioxide gas. Thus, the energy that was stored in the form of chemical bonds of the petrol molecules is released and scattered in all directions and cannot now be restored in its original state. Also, there is wear and tear of the vehicle and the system is moving towards greater and greater disorder. Since Entropy is the measure of disorder within a system, we can also say, that 'the system is moving from a lower to a higher entropy'. 'The term *Higher entropy*' means that there has been great loss of energy and there would now be lesser amount of energy available for use. '*Low Entropy*' means that there was small loss of energy and so there is still 'great amount' of energy available for use. *So, the Entropy Law states that every action leads to higher entropy.*

Since, according to this law, less and less recoverable and usable energy will be left in a non-living system as a result of every action and more and more would be the disorder, there will, at one stage, be a state of anarchy and very great loss of energy so that, ultimately, the universe will meet what is called '*the Heat Death*' because of higher and higher entropy and loss of heat.

Now scientists say that this Second Law of Thermodynamics would be operative on any system and, so, if the soul is a store of conscient energy, it would gradually lose its available energy and would reach a stage of death, so to say, or it will have unavailable energy. These

scientists also say that the belief that the soul is *eternal* and *survives the death* of the body, violates the Law of Conservation or the Law of Entropy in Physics.

What these scientists say is true in one sense only. The Entropy Law is inviolable in a *non-living system* only and that too if the system works in a *linear fashion*. The Law may not be applicable, and the energy-loss may even be reversible, if the system works in a *cyclic fashion* and is a *living system*. Let us explain this statement.

When we look at the conscious activity, we find that, often if not always, our conscious behaviour tends to move to a state of greater order rather than to disorder and confusion which the Second Law of thermodynamics or the Entropy Law would envisage. **At last we notice that if we have the right knowledge of consciousness and also of its functioning, we can intervene and stop degradation which we seen in a non-living system. We can also bring back our conscious system to its original state or level of order.** It may be useful to give here the example of a car and its driver. It is true that less and less energy would be available when the car is driven and the petrol molecules would split up and would get transformed into other states and the energy-loss would be unrecoverable because of the linear progression towards entropy (higher and higher loss of energy). But the driver, who is a conscient being, would learn more and more by experience and his mental state would have greater order. In other words, his ability or skill of driving would improve. So, at the level of consciousness, greater and greater order would result, leading to lesser entropy or even to zero entropy if the person marches towards perfection.

The example given above is not a solitary one. We clearly see that while the degradation is increasing in the material universe, we experience greater order in research and exploration and sophistication. What was once considered as impossible, has now been made possible. People has now made great advancement in Science and Technology and this has led to high system of accuracy and precision. We notice that when a person has the knowledge of a certain system, he can bring change and restore the original order. **This shows that there is a conscient entity on which the law of Entropy does not work in the linear fashion and this conscient entity, called the soul, can return**

back to its original state of highest order by means of the knowledge of how its consciousness works. What we have to do is to know our aim clearly and to remove our ignorance which is the cause of disorder. All this takes us to the conclusion that consciousness is a *non-physical* entity.

In the context of the Law of Entropy, the scientists also allege that if Consciousness is a non-physical energy, then its various forms, such as Thought, Reasoning, Intention, etc. would not be able to act upon the synapses in the brain because, by their nature, the two are different. While the former (consciousness) *is metaphysical*, the latter *is physical*. The former *has no mass* whereas the latter *has mass*.

In regard to the above, we should remember that there are probabilistic fields of quanta which carry neither mass nor energy but which, nevertheless, can exert effective action at the micro-level. Even so, the soul's field, or the field of Consciousness, can act on probabilistic synaptic events in the manner similar to the probability-fields of quantum mechanics.

Soul is re-charged or re-energised by Meditation
and is Entropy is reversed

*We should also keep in mind the fact based on experience of the practitioners of yoga, that when they stabilise themselves in the awareness of the self as a metaphysical being and establish a conscious love-link with God, they feel **energised**. They feel **re-charged** with spiritual energy even as a battery is re-charged by linking it to a source of electricity. This experiment can be done by anyone, maintaining the conditions necessary for it. This leads us to the conclusion that *mental (psychological) action*, done by the soul, does not result in loss of energy or in greater entropy.*

Recycling of negative energy into positive
reverses Entropy

What happens is that if the soul does *a morally bad action*, its positive energy is converted into negative one. The negative available energy now increases. If the soul returns to positive thinking or to Meditation, it is able to re-convert the negative energy into the positive

one even as we recycle certain material things.

Also, by the practice of Yoga-Meditation, the spiritual field of God or the Supreme Soul acts upon the field of the soul and this helps the process of transformation of the soul so that it now is able to recover the positive energy which now becomes available to it for use.

Further, if we keep in mind that the events of the world are not linear and that the Time is cyclic so that there comes a point of the cosmic order when the Time Wheel, having completed one cycle, takes the turn of the position from where it started, then we will be able to understand that, even in the material world, the Entropy would be restored to zero.

Cases of brain Brain-splitting

Since the year 1960, till date, many surgical operations have been performed to treat cases of severe epilepsy. The operation involves separation of the right and the left hemispheres of the brain by cutting *the corpus callosum*, which is composed of about 200 million nerve-fibres and nerve-cells which normally function to transmit information between the two hemispheres and co-ordinate their motor activities also. This cutting of *corpus calosum*, which serves as bridge between the right and the left hemispheres, cured wholly or partially, the patients suffering from severe epilepsy. The reason for ‘*splitting the brain*’ was that it was thought that the damage or disorder in one hemisphere would not produce disorders in the other because all direct connections for transmitting information between the two had been cut. Roger Sperry of California Institute of Technology was awarded a Nobel Prize for doing leading work in this field. He and others discovered many noteworthy facts in the cases of split-brain patients or in patients, in whom one of the hemispheres was surgically removed.

To understand the changes caused by these surgical operations, called *commissurotomy*, it would be necessary to know that *the left hemisphere of the brain is connected with the right side of the body and the right side of the body is connected with the left side, except that the right hemisphere is connected with the right nostril and the left hemisphere is connected with the left-nostril. It would also be necessary to know that the left hemisphere has the speech centre and it*

also does the specialised functions of reasoning, abstract and analytical thinking cognition etc. Whereas the right hemisphere is associated with the aesthetic, i.e. the appreciation of music and beauty of form and colour, etc. and with emotions; it does not have centre of language-decoding or verbal expression.

Following are some of the facts that came to light by performing some peculiar tests on split-brain persons:-

A 'split-brain' person was shown certain neutral geometric figures to his right and left eyes, which means to his left field and right field because each eye is connected with the opposite hemisphere. Suddenly, a pin-up shot of a nude figure was shown to the *left eye* which is connected with the *right hemisphere*. The person was asked as to what he was seeing. The person said that she saw nothing or that she saw only a flash of light. But when the person was replying thus, there was, on her face, a grin. In the next couple of trials, the person also blushed and giggled. These signs on the face showed that the person knew what she had seen and was intentionally giving a false reply. When the person was asked: "Why you are grinning if you have seen nothing or if you have seen just a flash of light", the replies of the person indicated that the right hemisphere had no idea at this stage as to what it was that had brought the grin on his or her face but its emotional effect got across.

We have already said that *the right* nostril is connected to the *right* hemisphere and *the left* nostril to *the left* hemisphere unlike other parts of the body which are connected with the opposite brain-hemisphere. Roger Sperry performed certain tests using the odours. When an odour was presented to *the right* hemisphere through *the right nostril*, and split-brain person was unable to name the odour but he or she could tell, by some suitable reactions, whether it was pleasant or unpleasant. For example, if the odour was unpleasant, the person would express this by a grunt but he or she could not say whether this odour was of onions or garlic or of decayed materials. But, in this case also, the feelings through *the right* hemisphere got across to *the left*, i.e. the speaking hemisphere.

There were also other tests performed by Roger Sperry. In one test, he showed photos of some persons to a 'split-brain' person, ex-

posing the photos to his *left eye* and, thereby, to *the right brain*. He showed the photos of Hitler, Castro, President Nixon, etc. and asked the patient to express his or her approval (or pleasure) by thumbs up and disapproval (displeasure) by thumb down. The patient was asked to indicate his or her emotions by thumbs up or thumbs down because the *right* hemisphere, to which the photos were presented, has no speech centre or centre of verbal expression though it exteriorises the emotions. When the photos of Hitler and Castro were shown, the patient put his or her thumb down, when the photo of Nixon was presented, the patient wavered for a while because, in those days, the famous Watergate scandal was on. Suddenly, the patient was shown his or her own photo, the patient again gave a thumbs-down response but the patient also had a distinct sheepish self-conscious grin. This led Sperry to conclude that the right hemisphere does reflect '*self-consciousness*' and it also thinks in terms of *moral values*, for, without this how could it have put thumbs down when the photos of Hitler and Castro were presented and how could it have expressed a grin when his or her own photo was shown?

On the basis of the data available from the above tests, some scientists think that there is not one but there are two persons in the brain, each one using one hemisphere. They say that, if the same person were using both the hemispheres, it should be able to know what is happening into the other hemisphere.

But a deep thinking would lead us to the conclusion that this is a wrong opinion. The fact is that the right hemisphere has no speech centre and, so, the conscious self *cannot express* what is happening. If it were to make use of the left hemisphere to express the event, then it would lose its contact with the right hemisphere because the *corpus callosum*, which was the channel for information-transfer, has been cut. However, the expression by means of a grin shows that the *self-aware person* is there. So, why not conclude from this that there is only **one self-conscious person** but, sometimes, it acts through the right and sometimes through the left hemisphere. However, since the hemisphere which has speech centre, is different from the other hemisphere into which the odour is being fed or to which the nude photo is being presented, one same self-conscious person (soul) cannot express

the feelings as it used to because the connected parts have been severed and there is not only no transmission of experimental information from one to the other but also the centre for verbal expression too has been disconnected.

We can see that, even in normal life, we, sometimes, seem to do two activities at a time. For example, a person may be driving his car and at the same time, discussing some problem with someone seated by his side. The reason why we see these two actions being done *simultaneously* is that mind or consciousness is *meta-physical and infinitesimal* and it takes almost *no time* to use one hemisphere and, almost instantly, the other hemisphere and, in case one of the hemisphere has been disconnected and removed, to use the parts of the hemisphere to which the electrical impulses are feeding the information.

Confirmation of the above view that there
is only one person

Sperry had performed tests on the left hemisphere also of the split-brain persons. For example, he flashed to the *left* visual field (connected with the *right* hemisphere) the word “eraser” and the person was asked to search it out from a collection of objects, using only the touch with the *left* hand. The person correctly located the ‘Eraser’ but when he or she was asked to name the object he was holding in his left hand, he was unable to do it. Doesn’t this imply that when the word ‘eraser’ was flashed before his left eye, the right hemisphere was able to understand it so that it *correctly located* it and held it up in his or her left hand but the person *could not utter* the name because the speech centre was in the left hemisphere?

Moreover, the following findings confirm the afore-stated viewpoint:-

1. Even after removal of the hemisphere, a person is alert, responsive and intelligent and a casual interaction with such a one would not reveal that he or she differs from the rest of the humanity because of commissurotomy, i.e., the surgical operation separating the two hemispheres though there are certain deficiencies noticeable because the sensory information that goes to one hemisphere is not passed on to

the other hemisphere. Since one hemisphere can do without the other, this clearly shows that neither of the two hemispheres is the seat of Consciousness of Mind though both of these are used by Mind.

2. It was observed that when the left hemisphere of a patient was totally removed for treatment of a large brain-tumour, despite the loss of language capability, which is known speciality of the left hemisphere, the patient had all signs of intelligent and active behaviour. *It is clear enough that the right hemisphere is capable of sensory and motor action even in the absence of the left hemisphere which, until only a few decades ago, was strongly considered to be the seat of the soul or Mind.*

Some questions or an arguments with a
touch of humour

Also, if there were two self-conscious persons — one in each hemisphere then the person in the right hemisphere should, perhaps, object to the removal of right hemisphere and, similarly, the person in the left hemisphere should object to the removal of that hemisphere because they would feel that it is being ousted or done away with or is being put out of employment.

Moreover, any emotion expressed, after commissurotomy should be half the emotion as it was when both the hemispheres were intact. But this is not so.

All these tests, therefore, not only show that there is only one 'self-aware' person (soul) in the brain but also that the soul is seated neither in the right nor in the left hemisphere but is outside of these, having its field spreading over hypothalamus, thalamus, brainstem and the limbic system. It also shows that 'self-awareness' is not an epiphenomenon of the brain but rather 'Consciousness' is metaphysical in its nature.

The split personality phenomenon

The split personality phenomenon is different from the split-brain phenomenon because, in the latter, the two hemispheres had been disconnected by commissurotomy whereas, in the former no such surgery has been done and the doctors treating the patient thinks that there are more persons than one in the brain.

The case of Miss Beachamp may be cited in this context. Morton Prince, her psychiatrist says that there were several alternating personalities that manifested in her and he was faced with the problem of finding which was the real Beachamp that he should preserve so that the others be either integrated or they become extinct. He (psychiatrist) says that some of these personalities expressed deep anxiety that they would get extinguished because of the psychiatrist's treatment. Moreover, those several personalities confronted each other and they also expressed their own selfish concerns and their views, opinions and value-systems. Sometimes they pursued different goals even and they displayed different 'wills'. They tried even to change each other's views and also to bargain with each other. So, some people think that there is not one point of Consciousness in the body but there are many points or Consciousness. However, on the basis of complete study, one would conclude that **there is only one person though the same person manifests different or multiple personalities. For example, during one such attempt, when two different personalities were bargaining with each other, the patient said: "Are you guys trying to make two people out of me?"**

Further, Bernard Williams, a psychiatrist, says that the fear of different personalities that they would be extinguished by the psychiatrist were unjustified. He says that when Miss Beachamp was cured, "They spoke freely of herself as having been Beachamp-I and Beachamp-4. The different personalities seemed to her to be due to very large differences of her moods or states. She regretted those moods and said: "After all, it is all myself."

Thus, it is clear from the scientific evidence and its proper interpretation that the soul is a *metaphysical* being, seated in the brain and that two hemispheres are neither its seat nor are there separate 'Consciousness' in them. On the other hand, there is only one self-aware being who seated near hypothalamus co-ordinates the two hemispheres or uses each one of them as the case may be.

