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Consciousness and Evolution: Unified Theory of Consciousness, Matter and Mind

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I. The Cosmological Cycle: Unified Theory of Consciousness, Matter and Mind

In the last seventy years, the theory of Relativity has altered our views of space and time, while Quantum theory has necessitated a new conception of the nature of matter and energy. Yet, even earlier than that, Max Planck had indicated that he regarded consciousness as fundamental and matter to be a derivative of consciousness. According to him, we cannot get behind consciousness; everything we talk about, everything we regard as existing, postulates consciousness [1].

In this context, Paul Davies, editor of the book *The New Physics* [2], has suggested that the role of consciousness in a quantum observation still remains an unresolved issue, and that it may be that this frontier-the interface of mind and matter-will turn out to be the most challenging legacy of the New Physics [2, p6]. In a similar vein, Nick Herbert has pondered, in this book review paper *On the End of Physics* in the *New Scientist* [3], that among the successes of modern physics may lurk some tiny murkiness destined to become the seed of the next scientific revolution, just as the quantum behaviour of light turned out to be the seed which overthrew classical physics.

There is indeed an increasing concern that the strictly objective, quantitative and reductionist methodology of the natural sciences is inadequate to investigate the dynamics of mind and consciousness [4, 5]. By contrast, the science of yoga has evolved as a system to expand mind and consciousness, and offers an appropriate methodology to investigate the so-called 'problem of consciousness'. Clearly, the time for propounding a new paradigm of science, in the form of a Unified Theory of Mind, Matter and Consciousness, is overdue.

The Fundamental Entity: In this new Science paradigm, the first and foremost is the concept of **Absolute consciousness (or Consciousness)**, as the fundamental entity, incorporating the Cognitive and Operative principles. Starting from here, we will now embark on the trail of the Cosmological cycle (as illustrated in **Table 1** and **Figure 1**), as explained by Prabhat R. Sarkar, in his book *Idea and Ideology* [6].

Table 1: Cosmological Cycle

1. CONSCIOUSNESS	5. Mind Development through unfolding of consciousness in organisms.
2. Cosmic Mind	6. Complex organisms, plants and animals.
3. 5 Fundamental Factors	7. Human beings (Unit Mind)
4. Primitive Mind	8. CONSCIOUSNESS

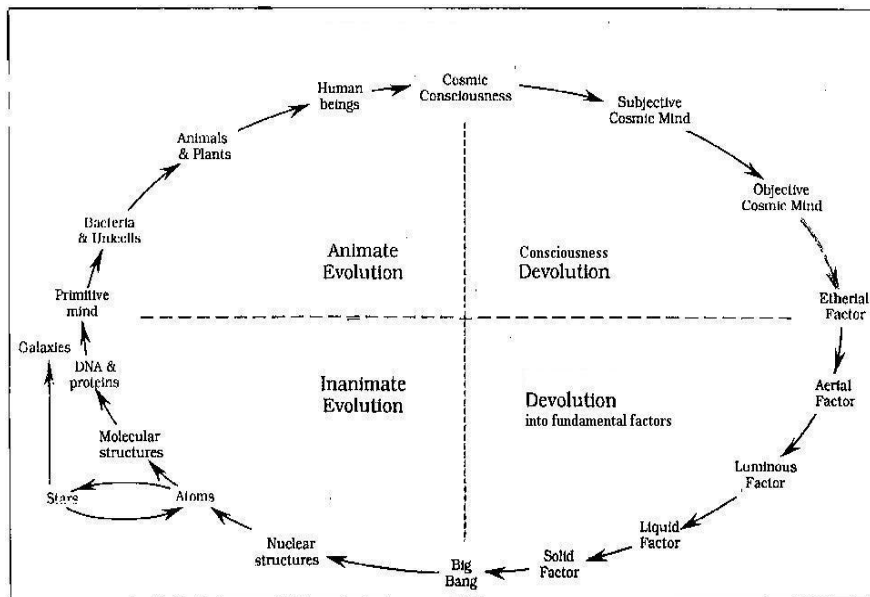


Figure 1. Cosmological cycle

Stage 1, Development of Cosmic mind: The next event is that **Consciousness devolves into Cosmic Mind**, and **Cosmic Mind devolves into matter**. How? Through the Operative principle (or *Prakriti*), the Cosmic mind gets expressed into the five fundamental (etherial, aerial, luminous, liquid and solid) factors, providing the

constituents of the physical universe. These five fundamental factors are understood to be a spectrum of wave forms described as ethereal, aerial, luminous, liquid, and solid Factors (in order of decreasing wavelength).

It is tempting to postulate some correspondence between the five Fundamental factors (5FFs) of this yoga cosmology and the modern categories of particles and waveforms of matter with their associated structures, as depicted in **Table 2**, below [7].

Table 2: Five Fundamental Factors and Modern Categories of Matter

Fundamental Factor	Modern Categories of Matter		Associated Structure
	Particle Form	Wave Form	
Ethereal	Etheron	Spatio-temporal wave	Universe
Aerial	Neutrino	Dark matter wave	Galaxy
Luminous	Photon	E/M wave	Solar system
Liquid	Electron	Electron Cloud	Atom
Solid	Quark particle	Quark wave	Nucleus

These 5FFs are associated with sensory properties called *tanmatras* [7], as shown in **Figure 2**. The subtler waves (of longer wavelength) surround and pervade cruder waves (of shorter wavelength), but not vice versa. For example, the Ethereal Factor pervades all the other factors but the Liquid Factor can only pervade the Solid Factor. These 5FFs are known to us through their sensory attributes. For example, the Ethereal factor carries the ‘sound’ sensory attribute, the origin of the primordial sound. The aerial factor carries the ‘sound’ and ‘touch’ attributes. The Luminous factor carries the sound, touch and light sensory attributes; the Liquid factor carries sound, touch and light attributes. The Solid Factor carries the sound, touch, light, taste, and smell attributes, as indicated in figure 2 [7].

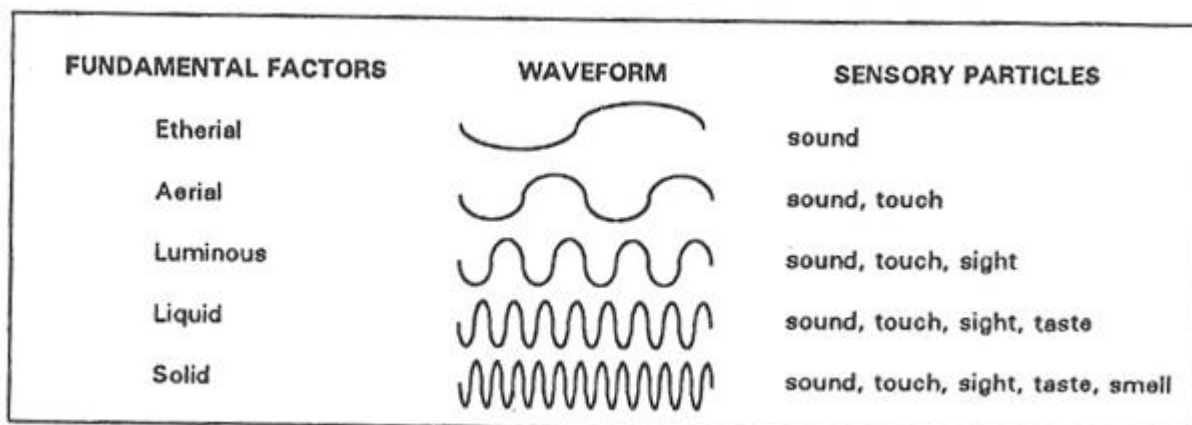


Figure 2: The dual wave-particle description of the physical world according to yogic science. There is a spectrum of wavelengths but discrete sensory boundaries.

As regards the relationship between this wave-particle description of the physical world and that of 'new physics', we can state that corresponding to these five FFs, there are five levels of structure in the new physics, as provided by **Figure 3** [7].




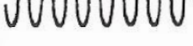
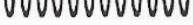
Yoga's Description			Physics' Description		
Fundamental factor	Waveform	Sensory Attributes	Particle Type	Particle Charges	Physical Structure
Ethereal		sound	vacuum state particles	?	space/time
Aerial		sound, touch	dark matter particles	flavour	galactic
Luminous		sound, touch, sight	?	?	stellar system & planets
Liquid		sound, touch, sight, taste	electron	flavour, electric	atomic
Solid		sound, touch, sight, taste, smell	quark	flavour, electric, colour	nuclear

Figure 3. A comparison of Yoga Science description of the physical world with that of modern physics. Although the language and methodologies are very different, there are patterns of similarity which suggest that they are indeed describing the same world.

All these five factors are formed by the pressure of the Operative principle (or Prakriti), referred to as *bala* [6]. As the factors get formed, they can form structures which are (i) visible if they also contain the liquid and solid factors, and (ii) invisible if they contain only the ethereal, aerial and luminous factors. Now, as a result of this *bala* on the structure made up of the solid factor as well, two opposing forces develop: one exterior or centrifugal with a fissiparous tendency and the other interior or centripetal to maintain its solidarity. The collective name of these two exterior forces is *prana* or energy. If the interior force is the resultant, then a nucleus is formed within the solid factor and a solid structure is formed, and its solidarity is maintained.

These physical solid structures are composed of all the five fundamental factors with their respective nuclei. The controlling nucleus of all of these fundamental physical nuclei is the controlling point of their collective *prana*, known as *pranah* or vital

energy. Under the influence of the resultant interior force associated with the congenial environment of *pranah*, a portion of the physical solid structure gets pulverised and transformed into a subtler factor than the 5 FFs; this subtler factor is ectoplasm or crude mind [6]. In this way, unit mind evolves from matter, as the origin of life; the mechanism of expression of life will be further elaborated later on.

In the absence of the congenial environment of *pranah*, life does not get expressed. Then as the exterior force dominates on the physical structure (under the continuing pressure of the Operative principle), a stage is reached when there is explosion of the physical structure (known as *jadasphota*). As a result of this explosion, the physical structure get disassociated into the five fundamental factors and its constituent solid structural portions explode into hot matter particles (of quark soup) which also contain the five fundamental factors [6]. This explosion corresponds to the Big-bang. The hot matter particles, upon cooling, give rise to common particles, namely photons, neutrons, electrons and quarks. With further cooling, photons and neutrons begin to react to form deuterium, an isotope of hydrogen. Afterwards, the deuterium collects protons to form a helium nucleus. Then, the excess protons capture an electron to create common hydrogen.

Thus, this new Science Paradigm's Cosmology theory explains (i) the formation of matter and visible universe (made up of the stars and planets) from explosion of the physical solid structure (ii) how the explosion occurs and (ii) what preceded the explosion (or Big-bang), which conventional physics is unable to provide. An explanation is also offered for the formation of the invisible matter made up dark matter and dark energy.

Stage 2, Cosmology, the Birth of the Universe: Following this explosion (Big-bang), nuclear matter (protons, neutrons, electrons and other heavier particles) comes into existence, as the universe cools with expansion. Hydrogen and helium nuclei are formed, and later complete atoms, eventually resulting in stars and galaxies. Thus, the universe explodes into existence from a space-time singularity.

Now this big bang explosion of the solid segments of the physical structure, due to the resulting exterior force acting on the physical structure (formed from all the five fundamental factors), results in the **formation of the visible universe of galaxies**. Likewise, from the disassociation of structures that are made up of only the other more subtler factors (such as the ethereal, aerial and luminous factors), we could have the **development of the invisible universe of dark matter and dark energy, comprised of the particles associated with the first three fundamental factors. This is perhaps how the invisible universe comes into being**, which again conventional physics is unable to explain.

Stage 3, Release of Mind from Matter: In the earlier stage of the Cosmological cycle, the Cosmic mind emanates microvita, which can now energize matter to form ectoplasmic mind [8]. How?

Firstly, the concept and science of microvita, as propounded by Prabhat R. Sarkar [9] is new. In his book *Microvitum in a Nutshell* [9], he states that there are entities which come within the realm of both physical and psychic expressions which are smaller and subtler than atoms, electrons and protons, and in the psychic realm may be subtler than ectoplasm. Such entities are termed as microvita. The Microvita are termed to be fundamental, sub-microscopic living entities which organize energy to create forms, structures and processes in the universe.

Millions of microvita may compose a carbon atom and individual electrons. The microvita that are related to virus may explain the origin of life and evolution of species through the creation and addition of new genes. What is then the starting point of life? It is these microvita that are carriers of life in stars and planets, and not carbon atoms. These microvita create minds and also develop minds, as indicated in the next paragraph.

As we have stated above, the five categories of elements (referred to as the 5FFs) are a spectrum of wave forms, characterized by their sensory attributes. Now, working through these sensory attributes are subtle emanations of microvita from the Cosmic nucleus. So then, following the Big-bang, the matter structure (of fundamental particles) also contains billions of microvita, which have both objectivity (energy) and subjectivity (consciousness). They energise a disordered set of atoms (in an inorganic structure) by means of synthetic reactions, to develop an organised physical (organic) structure and manifest (albeit as a consequence) a biopsychic field, representing a primitive (unit) mind (Figure 2). As the quantum of ectoplasmic mind-material keeps increasing, the inanimate physical structure concomitantly gets more and more energized into an animate (or life) structure, thereby providing the template of primitive life structures [9].

Then, in the process of adaptation of the organism to an external environment, positive microvita augment the biopsychic field of the primitive mind, and by the process of positive feedback increase the complexity of the physical structure (as illustrated in **Figure 4**). Death of the organism occurs if there is an imbalance between the biopsychic field of the mind and the degree of complexity of the physical structure to express the field.

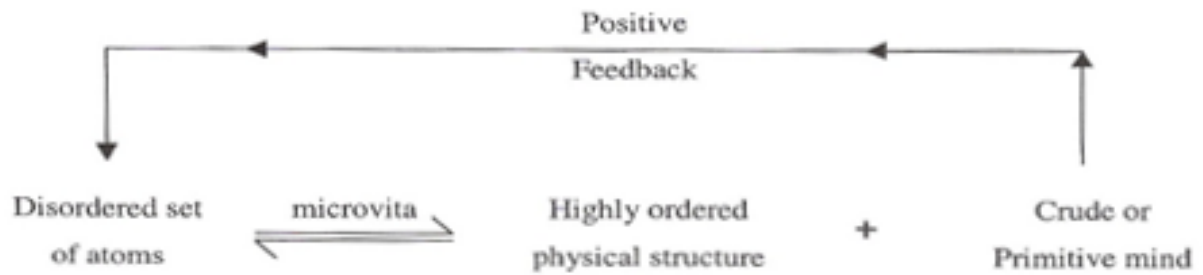


Figure 4: Emergence of a primitive mind and life-structure, through energization of matter by microvita. The positive feedback keeps the forward reaction going, causing more and more development of ectoplasmic mind material.

Stage 4, Evolution: Further development of the above created primitive mind of primitive organisms (unicellular organisms and bacteria) into more complex organisms and then into plants and animals, due to the process of unfolding (or evolution) of unit consciousness and development of subtler layers of mind under the influence of Cosmic Consciousness. To express this development of mind, in turn requires more and complex nervous and anatomical structures.

Eventually, the mind develops into a more complex and subtle mind of a human being. How can the human mind further develop so as to merge with the Consciousness (to complete the Cosmological cycle) is now explained below.

II. Biophysics of Biopsychology

As indicated above, there is an evolution of consciousness in us, and as Susan Blackmore puts it, the evolution of consciousness is the reason for making us conscious [10].

Psychic Forces on the mind: There are two types of psychic forces acting on the mind of a person: a centripetal force towards the cosmic nucleus and a centrifugal force away from the cosmic nucleus. The centrifugal psychic force on the mind is caused by its interaction with the environment, and also due to the reactive momenta of the impressions on the mind caused by one's interactions and behaviour. These impressions lend a characterizing property to the mind, which dictates the nature of its response to the environment, in the form of its behaviour and sentiments (such as joy or sorrow, kindness or anger).

These expressed sentiments are due to the intrinsic propensities embedded in the psychic glands or *cakras* (in the subtle body), which regulate human behaviour and also human organ function through the hormonal secretions of the endocrine

system's glands. The expressed sentiments further affect the *cakras* (as a feedback system response), and thereby influence the endocrine system's regulatory substations of organs, whose main controlling station is located in the brain (Figure 5). Hence the organs also get affected by the triggered endocrine glandular hormonal responses, caused by the malfunctioning, sentiment-laden mental glands or *cakras*. This then causes degeneration of the physical structure and ill-health.

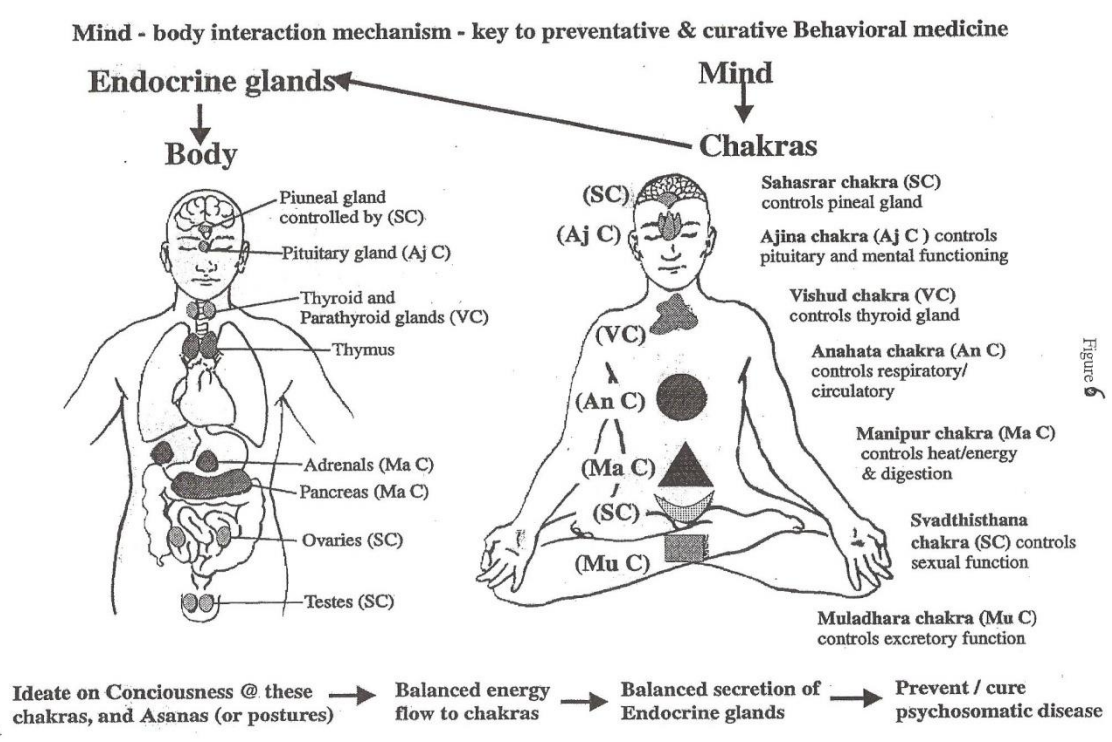


Figure 5. Mind-Body Interaction Mechanism-key to Preventive & Curative Behavioural Medicine

Psychic Rejuvenation (by mantras)

Mental restlessness is due to the distracting effects of the propensities, seeking expression through the sensory organs, and thereby creating an imbalance in the mind. Since the propensities (or *vrttis*) are associated with malfunctioning by the psychic glands or *cakras* (or *chakras*), one can regulate the expression of the *vrttis*, and thus balance the mind by regulating the glandular secretion, how? By causing mental stimulation of these *cakras*, by means of (2-syllable) psychic (and acoustic) *mantras*, having the ideation of consciousness, we can help to overcome these propensities by dilating the unit mind to the cosmic mind, and thereby provide psychic rejuvenation. This process of concentrating on (and stimulating) the *cakras* by means of mantras, having the ideation of Consciousness, is called **Meditation** [10].

Psychic imposition of Consciousness outlook on these *cakras* (or psychic glands or energy centers), by means of mantras, in turn draws positive microvitae, enhances the biopsychic force on the mind, and dilates the mind. Now, when the mind gets dilated by this internal stimulation of these *cakras* (by means of mantras with the ideation of Consciousness, at the site of these *cakras*), these sentimental feelings and instincts are also controlled, and eventually get removed or defaced. This contributes to spiritual progress, aside from also contributing to one's physical and mental well-being and health. In this process, as the *kundalini* (spiritual energy) rises from one *cakra* to another, the associated mental feelings and the associated occult sound experiences are documented in **Table 3**.

CHAKRA	MENTAL STATE	SOUND OF
1. Svadhisthana	I am not alone.	Crickets (the first expression of Cosmic Mind)
2. Manipura	Proximity to Cosmic Entity	Ankle bells (Jhum-jhum)
3. Anahata	Close contact with Cosmic Entity	Sweet Flute sound
4. Vishddha	I am one with the Supreme	Ringing-bell
5. Ajina	I am THAT	OM

Table 3: Occult Sound Experience.

Psycho-Somatic Therapy (by Meditation)

In daily life, the objectification of the mind (resulting from harsh interactions and painful situations) produces deformations of the mind, mental pain and psychic ailments. This also results in dysfunction of certain organ systems (through the above-mentioned *cakra-endocrine system pathways*, as depicted in Figure 6), and concomitant physiological ailments. This pain can be alleviated by the dilation of the mind, by ideating on Consciousness (Figure 6), by means of appropriate acoustic mantras having the connotation of union of unit mind (or consciousness) with the Cosmic mind.

This has the effect of attracting positive microvitae, which are the subtlest living entities (emanating from the Cosmic mind) that infuse pranah into inanimate structures and make them animate (i.e., having a primitive mind). The positive microvitae, in turn, increase the psychic centripetal force of Consciousness on the unit mind (**Figure 6**), and causes it to further dilate. The dilated mind experiences blissful feelings, and in turn, (through the *carka-endocrine pathways*) contributes to healthy organ systems functioning as well as psychic well-being.

This then is the basis of (i) psycho-somatic therapy for psychic (or mental or behavioural) ailments, (ii) psychic and behavioural rejuvenation, and (iii) for maintaining good physical health.

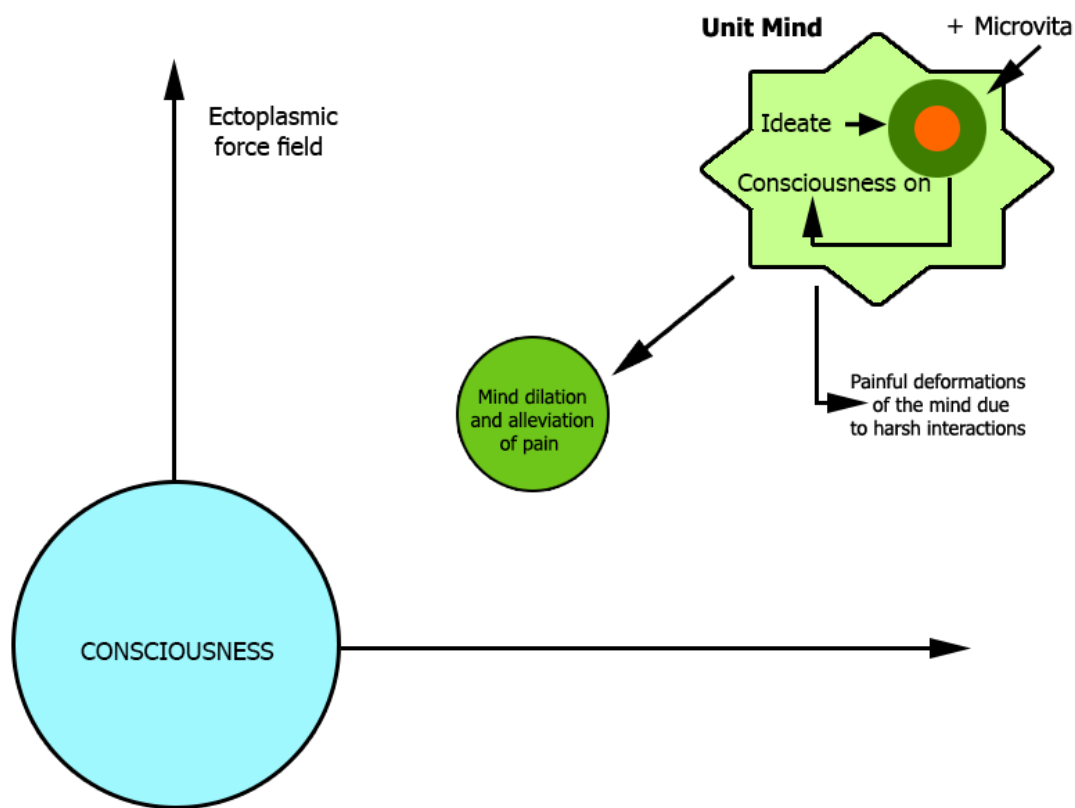


Figure 6: The Consciousness field and the presence or location of mind in it. It is schematized that when a person (or her/his mind) ideates on Consciousness (by Meditation), the mind dilates i.e., develops in ectoplasmic density. This, correspondingly, enhances the Consciousness-field force on it, and alleviates the mental pain. The mind keeps dilating until it merges into Consciousness, to attain enlightenment leading to *salvation* or *nirvana*.

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