

Research Essay

From The God Module to The I Am Identity

A constructive critique of Ramachandran and Blakeslee's contribution to the understanding of spiritual experiences from a purely materialistic and reductive perspective in the light of 'The Brain and Paradigm of Melchizedek'

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Abstract

Human consciousness, mind and soul have been reduced to material and energetic transactions by most neuroscientists. 'The Neural Basis of Religious Experience' as conjured by V.S. Ramachandran addresses the nature of religious and spiritual experiences attempting to relate them to particular areas of the brain. Ramachandran and Blakeslee have adopted a materialistic approach to the study of religious, spiritual and mystical experience (RSME); however, the cause of this experience still remains unknown and a mystery to science. It seems to me that their neuroscientific approach to religious experience and the spiritual dimension of a human being carries some value, since (1) it acknowledges the relevance and importance of these areas of human existence, and (2) it explores meanings associated with a sense of oneness or unity with The Creator, at the very least from a neurological perspective. However, a more inclusive paradigm will be required to provide a scientific description of spiritual revelation, union with The Creator, oneness with the universe, enlightenment, self, personality, character and identity. This is ideally the purpose of 'The Brain and Paradigm of Melchizedek' in explaining the neurobiology of Spiritual Values and the **I Am Identity**.

Keywords: Spiritual values, behavioral values, self, identity, enlightenment, consciousness, I Am Identity, The Creator.

The understanding of human consciousness, mind and soul has been reduced to material and energetic transactions by most neuroscientists with a promissory materialistic world view via the neuron doctrine.

Here I explore the neural basis of religious experience as conjured by V.S. Ramachandran in his attempt to research about the nature of religious and spiritual experiences and how they relate to particular areas of the brain.

I base my first observations and comments mainly on the book 'Phantoms In The Brain: Probing the Mysteries of the Human Mind' [1], where the authors V.S. Ramachandran and Sandra Blakeslee devote some chapters (8, 9 and 12) to what in their view is a scientific description of spiritual revelation, union with The Creator, oneness with the universe, enlightenment, self, personality, character and identity.

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Their neuroscientific approach to religious experience and the spiritual dimension of a human being is of value, since (1) it acknowledges the relevance and importance of these areas of human existence, and (2) it explores meanings associated with a sense of oneness or unity with The Creator, at the very least from a neurological perspective.

Ramachandran and Blakeslee have adopted a materialistic approach to the study of religious, spiritual and mystical experience (RSME); however, the cause of this experience still remains unknown and a mystery to science.

Some of the dimensions associated with RSME, together with mind and consciousness, are very difficult to test scientifically and have led the most prominent scientists, with the best intentions, to a view which reduces the phenomenon of human consciousness and conscience, the “Voice” of Wisdom, to a collection of only conscious and unconscious brain states that are seen as mechanical interactions between neurochemical components and energy systems. Despite this, as said before, their work is valuable and it allows for further explorations and new frontiers where more inclusive, holistic and systemic approaches may support a broader scientific-spiritual synthesis, facilitating an exploration of the universe with foundations in consciousness and spiritual values.

This is where I am standing in my observations and comments regarding Ramachandran and Blakeslee’s approach and work; (1) in gratitude for their effort and contributions to such a controversial and difficult area of research, and (2) with the desire to clarify some of the areas which are still oversimplified and can be confusing to other people.

Here I intend to explore aspects of a broader scientific paradigm to further research towards a spiritual-scientific synthesis, by establishing a verbal distinction between spiritual values and behavioral values, to bring clarity and depth to what is described or verbally reported as an experience of the spiritual realms (cause), and what is physiologically or energetically measured in the physical universe (effect).

A human being is a combination of an animal and a spiritual being and can only become conscious of The Creator’s Mind and “Voice”, when the proper spiritual conditions are fulfilled in his-her life. These conditions enable a cognitive map that gives access (with the brain, heart, respiratory and digestive systems working in unison) to a global awareness and perception of the dynamic interplay between the physical and the spiritual domains.

A question is raised as to which cognitive maps intervene and develop toward the realization that the physical body may just be a vehicle for the embodiment and expression of saintly thoughts, qualities and actions, as reported in such a diverse range of wisdom texts, in many different cultures and traditions.

Somehow, historically, this kind of experience has been associated with a network of beings in relationship with one another, such as, human beings, The Creator, and potentially, as has been reported by many people, disembodied beings, like ancestors, angels and other spiritual beings, who may guide human beings to a direct relationship with The Creator, or to enlightened states of consciousness, as in the case of Yeshua (Jesus) or Buddha (Siddhartha), who may serve as spiritual mentors, for example.

Faced with the challenge to integrate spiritual wisdom, scientific knowledge and personal revelation and insight, prompts us into finding scientific avenues to validate RSME, both from a 3rd person as well as a 1st person and even 2nd person perspective.

The reader need keep in mind that from a 1st person perspective, my preferred verbal approximation of The Value Giver, Creator and Sustainer of all life is Father-Mother-Love, meaning the cause of my existence, provider, sustainer, comforter, protector and nurturing source of my being, as well as scientific inspiration and insight.

Under this world view and paradigm, every human being has the potential for RSME, and to different degrees, every human has such experiences. For this, a healthy body and lifestyle are ideal, together with the commitment to embodied spiritual life, and this means the embodiment of spiritual values coming from The Source of All Spiritual Values.

This is where this exploration starts, with the knowledge and certainty of “I AM” in my human experience.

I Am the scientist-student of life who acknowledges his existence and the existence of his Creator, both as one indivisible existence, without any further scientific proof.

From now on my dear reader, welcome to the scientific world, paradigm and jurisdiction of the realm of The Order of Melchizedek and The Universe of Michael.

In ‘Phantoms In The Brain’ [1], Ramachandran and Blakeslee write regarding the nature of self:

What is the nature of the self? As someone who was born in India and raised in the Hindu tradition, I was taught that the concept of the self—the “I” within me that is aloof from the universe and engages in a lofty inspection of the world around me—is an illusion, a veil called *maya*. The search for enlightenment, I was told, consists of lifting this veil and realizing that you are really “One with the cosmos.” Ironically, after extensive training in Western medicine and more than fifteen years of research on neurological patients and visual illusions, I have come to realize that there is much truth to this view—that the notion of a single unified self “inhabiting” the brain may indeed be an illusion. (p. 227)

Ramachandran seems to acknowledge the possibility of the existence of a Creator whose scientific proof may be unnecessary and perhaps impossible. It seems to me that to him unity with others and life (oneness or enlightenment) implies the dissolution of a personal identity or self, perhaps equated to the dissolution of *maya* in Hindu religion.

For me, this form of egocentric identity, this habitual identity, is just an informational sense of identity developed by reward and fear conditioning, survival routines, nature, culture and social interactions in general. It is different than the I Am Identity, which is grounded in a sense of values like Love, Truth, Unity and Light, to name a few. This is a spiritual or existential identity.

Ramachandran and Blakeslee [1] write regarding this subject:

It’s known that bees engage in very elaborate forms of communication including the so-called bee waggle dance. A scout bee, having located a source of pollen, will travel back to the hive and perform an elaborate dance to designate the location of the pollen to the rest of the hive. The question arises, Is the bee conscious when it’s doing this? ... I would argue that it is a zombie. In other words, even though the information is very elaborate, is

irrevocable and held in short-term memory, the bee can only do one thing with that information; only one output is possible—the waggle dance. This argument is important, for it implies that mere complexity or elaborateness of information processing is no guarantee that there is consciousness involved. (pp. 243-4)

Based on the above quote, I propose that without the realization of The Creator's existence, as well as one's existence, human beings would live in a sort of habitual zombie state, like the one of the zombie bees.

Such habitual behavior would continue to govern the behavior of a human being and be veiled to him or her. In other words, no conscious awareness of potential oneness with the universe and The Creator would be available to human perceptions. In such a situation, human beings are left to either an accidental dissolution of the boundaries of such an informational sense of self, or some form of enlightened being to assist in such a liberating experience.

However, unlike the zombie bees, we have the choice to pursue such a path of liberation once we have been told of that choice. Enacting a conscious choice like that is our passport to move away from the waggle dance.

Based on the above we can conceive of character, identity and personality as integrated and integral to spiritual life, both in our human existence and beyond, where the I Am Identity takes precedence over any spatio-temporal, cultural, biological, legal or any other form of human constructed identity.

The dissolution or transformation of the informational identity takes place via the *energeia pneumatikon* or work of the spirit, to elevate us out of the narrow concerns, so that we can embrace the world, ourselves and others more deeply and widely.

This transformation takes place when human consciousness is touched by the agency of spiritual values, whose energetic counterpart in the physical reality registers, I conjecture, as electromagnetic fields of a sort.

This may culminate in self-realization as a genderless spiritual personal being with a genderless spiritual identity while in male or female human form.

Some questions for further research and exploration are:

- (1) What are the neural traces and bodily interfaces of such a spiritual value field?
- (2) How does the brain of spiritualized humans behave?
- (3) How is the DNA of the species altered by such an order of consciousness?
- (4) What are the epigenetic implications of such a spiritualization process for the human species?

How is the scientist to approach these questions?

If the scientist is in touch with The Creator or lives according to a particular spiritual path, such a scientist may find fulfillment in dropping his or her desire for further experimental proof regarding his or her spiritual experience. This means that a scientific approach is unnecessary.

For those scientists who still need to see proof to believe, perhaps both a spiritual or religious approach to life, combined with a scientific exploration of consciousness and cognition, may be needed to the fulfillment of self-realization.

For scientists who are convinced that self-realization is an impossibility in human experience, neither a religious nor a scientific approach to spiritual life may apply, instead only a wake-up call or strong incident or event in life, which may shift their perception.

All these situations have in common the need to connect with spiritual values and develop character, personality and commitment to the attainment of the I Am Identity. This means how the different aspects and dimensions, both internal and external, spiritual and biological, may, in the life of a human being, influence the organization of the brain systems.

Now, back to exploring the materialist reductionist world view of Ramachandran and Blakeslee [1]:

Imagine you had a machine, a helmet of sorts that you could simply put on your head and stimulate any small region of your brain without causing permanent damage. What would you use the device for? This is not science fiction. Such a device, called a transcranial magnetic stimulator, already exists and is relatively easy to construct. (p. 174)

However reductionist this might be, these kinds of devices may help us to understand that perception, apart from being influenced by chemical transactions, is also modulated by electromagnetic fields. Naturally this raises some questions, as follows:

- (1) Are fields manifested as oscillations in brain dynamics responsible for spiritual experiences?
- (2) Is there a value field and a field of consciousness, like God's Mind and Spirit that interacts with the electromagnetic fields that in turn modulate brain dynamics?
- (3) How do we go about this investigation?

When studying epileptic patients, Ramachandran and Blakeslee have been faced with patients reporting intense spiritual experiences with God while experiencing an epileptic seizure with lasting effects.

The first thing that comes to mind is the fact that Ramachandran and Blakeslee have acknowledged the existence of God in their book [1], when writing about reasons for the existence of these intense spiritual experiences as follows: "One is that God really does visit these people" (p. 182). They comment about such and other reasons, in relationship to a seizure in one of Ramachandran's patients named Paul, when referring to why such seizures may occur. They also write that this experience can neither be proved nor ruled out by empirical evidence.

My question is how and why they reach such a definite conclusion? What about the detection of certain kinds of electromagnetic fields or oscillations as physiological signatures associated with a person's spiritual experience or a fully realized human being in meditation, contemplation or prayer? Also, as has been proposed by many, one could think that such phenomena were merely chance or random physical occurrences, from a purely materialist scientific point of view.

However, from an RSME perspective, one could interpret the terms ‘**Son of man**’ and ‘**Son of God**’ as a human with identity in the flesh, and a spiritual being still in human form with identity in spiritual values, respectively; the former attributing randomness to such spiritual experiences and the latter attributing a revelatory process in union with The Creator.

What are the differences in their specific manifested electromagnetic fields, brain dynamics, cognitive capacities, motor control, will and volitional abilities, heart rate variability, respiratory patterns and neural processes in general?

Ramachandran and Blakeslee have made a contribution in studying religious experience, self and identity and its neural basis by the study and report of these events, in patients with seizure or other memory anomalies. However, it seems to me so far in my readings that they have missed some fundamental questions related to ordinary spiritual and religious people, as well as fully realized spiritual human beings.

Some of the fundamental questions that can be explored by scientists are:

- (1) How and where perception of identity changes in the brain?
- (2) How can we explore synchronicities as a functional pattern recognition skill in the human brain?
- (3) What is the power of prayer and meditation and which cognitive maps in the brain does it activate and how?
- (4) What needs to happen in the brain-heart-respiration dynamics of a human being in order to remove conflicting perceptions of reality across paradigms and world views?

Perhaps, a good place to start this exploration is with an example related to the perception of identity in order to answer the question, who am I as a person, a spiritual being, while occupying a physical body?

My identity is who I Am as a real person (a spiritual being) instead of my physical body (a vehicle of expression), therefore I can say, “I Am the Love of God expressed in music”, instead of saying “I Am a musician”, which can be seen as a mechanically functioning body just performing.

The phenomenon of character and identity can be treated via Conceptual Blending Theory. Conceptual Blending or Integration is the consequence of the last thirty year’s research in the area of cognitive science, amongst others.

There is considerable evidence that reason is encoded it appears, says Gilles Fauconnier and Mark Turner in ‘The Way We Think: Conceptual Blending and the Mind’s Hidden Complexities’ [2]. According to Fauconnier in “Conceptual Integration” [3]:

The neural architectures that evolved to produce perception, sensation, and bodily movements are at the heart of what we experience as a rational inference, conceptualization and meaning construction ... C.I. is a basic mental capacity that leads to new meaning, global insight, and conceptual compressions useful for memory and manipulation of otherwise diffuse ranges of meaning. It plays a fundamental role in the construction of meaning in everyday life, in the arts and sciences, in technological development and in religious thinking. (p.1)

It is important to mention that blending is intimately connected to a set of psychological and neurobiological properties due to the constant shift happening in the brain's highly interconnected cells or neural pathways.

Identity and character can be a complex phenomenon to describe or validate. Conceptual Integration Networks serve the purpose to emphasize frames, the blending of character and frame or the blending of a character with another character.

For example, when a person unifies in a mental space with Yeshua (Jesus), Buddha (Siddhartha), a loving Grandmother or the Universal Father-Mother, a fusion of characters may emerge as a consequence of an integration network. This means that a musician who, for example, lacks the qualities of Love and Harmony, may get to embody those qualities by unifying in a mental space with any spiritual or human being embodying those qualities.

This also means that there is a relationship between the emergent properties in the blend and the activation patterns of neurons in the brain. This is more than just having access to a different domain (target) from a source domain in metaphorical mapping, because in only having access the brain has yet to create a neural pathway to embody the experience.

Having a spiritual experience is different than continuously embodying spiritual values

Reporting a spiritual experience of “oneness” with the universe is different than manifesting The Love of God continuously in actions and words like, “I Am The Love and The Light of God”. This implies an identity instead of an experience that happens suddenly to somebody for a short period of time.

Some of those neural activations come from the forces, which are affecting human beings through the environment, or from what people share and how people interpret those messages from bodily states, purpose and many others. Some are related to culture, personal experience, biological evolution, while others are related to a sense of self and identity based on spiritual values and ultimately God Consciousness.

Ramachandran and Blakeslee [1] write regarding this subject:

But does this syndrome imply that our brains contain some sort of circuitry that is actually specialized for religious experience? Is there a “God module” in our heads? And if such a circuit exists, where did it come from? Could it be a product of natural selection, a human trait as natural in the biological sense as language or stereoscopic vision? Or is there a deeper mystery at play, as a philosopher, epistemologist or theologian might argue? (p. 175-6)

In their approach, the complex phenomena of life and the delicate fabric of reality are reduced to brain activity that surely is a mistake one should avoid making.

Generally speaking, it seems to me that the weakness of the approach that Ramachandran and Blakeslee describe in their book has its roots in the lack of definition and a clear distinction between **Behavioral Values** and **Spiritual Values**.

They simply talk about religious experiences and a sense of self and identity based on neurochemical interactions in the activation and deactivation patterns of different areas of the

brain and therefore subsequently their research leads to describe consciousness as an evolving phenomenon out of the interactions of the material dimension.

They write [1], “So here is the greatest irony of all: that the self that almost by definition is entirely private is to a significant extent a social construct—a story you make up for others.” (p. 254)

It seems to me that this creates a confusion between information processing and consciousness. From where I stand, it also seems that the totality of consciousness, God’s Consciousness, lays the foundations and supports the information processing of different living systems and expressions of life forms. God’s Consciousness defines the perceived boundaries of the elements of expression of His-Her Being, The Universe.

In other words, God’s Consciousness and Mind are foundational to all manifested reality as we perceive it.

I will propose that the proximity to God’s Consciousness by any living system is established by field’s resonance, particularly, spiritual values fields. These fields must have a neural trace in human brains. However, part of that neural trace may be perceived as random thoughts by humans before these human beings become fully realized in their spiritual identity and are able to consciously discern “God’s Voice” and its associated field of presence.

As this process of self-actualization takes place we become transformed in our innermost beings, once the psyche and its dominance of our thinking patterns in terms of our own needs, imaginings and desires are reworked by The Spirit.

In our voluntary exploration of the Laws of Nature, The Universe, The Mind, and the attainment of a conscious, everlasting relationship with The Ultimate Value Giver and The Universe, two categories of values can be identified from a human being’s perspective: **Biological Values** and **Universal Values**.

Based on the above it seems necessary to emphasize the distinction between, Behavioral (Biological) and Spiritual (Universal) Values as follows:

- (1) **Universal Values** are the antidote to greed, fear, anger, guilt, misuse of power and chaos in general.
- (2) **Universal Values** are an invisible yet apprehensible presence, essences and forces, which may beget noble human thoughts and feelings that are beneficial to the body, our mental, emotional and physical wellbeing.
- (3) **Universal Values** are the foundation to constructive intelligence and altruistic actions for the wellbeing of the human family and beyond.
- (4) **Universal Values** are spiritual values, with or without the agency of a human or a behavioral component. They are always liberating and ever-expanding our human consciousness; absolute in meaning, power, goodness, beauty and Truth, mainly related to our moral, spiritual and subjective nature.
- (5) **Biological Values** are behavioral values, sometimes limiting and sometimes supporting of human expression. They are relative in meaning, power, goodness and beauty, mainly related to a biological, physical and objective reality.

- (6) **Biological Values** are cultural, national and religious context-dependent, defining partial loyalties, territories and agendas.
- (7) **Biological Values** can be transformed by the agency of Universal Values.

All of this points in the direction of a long awaited scientific-spiritual synthesis, especially in relation to the exploration, identification, reception, perception and expression of Universal Values. This may lead to the need to measure and quantify the effects of the interplay between Biological Values and Spiritual Values.

Many may argue that spiritual values are purely subjective with their associated neural traces or components, however, such traces are to the eyes, hearts and minds of mystics, very far from being the only components of subjective experience. The neural trace or component of such an experience is of an objective nature. This also is only part of a collection of effects related to such an experience and in that sense disregards the possibility of a spiritual values field that may interact with electromagnetic fields, producing the kind of brain dynamics which add richness to spiritual experiences and their associated neural traces.

In other words, spiritual values are the causes while subjective experiences and their neural traces are the effects in perception.

At this stage we can state that spiritual values are different than the subjective experience of those same values. They are different than qualia and their neural components as portrayed by Ramachandran and Blakeslee [1] whom regarding this subject, have written: “Now you might ask, ‘Does any of this yield clues as to where in the brain qualia might be?’” (p. 244).

Faced with the brain dynamics of saints, prophets and prophetesses in contrast with hateful or violent people, we may find that such brain dynamics, for these different people, may look very similar in relation to behavioral values, and yet very different in relation to spiritual values. The areas of the brain and the body where spiritual and behavioral values register and leave their traces may be different. An example of this is when two different people talk very nicely, with a soft voice to another human being and in one case one is hateful while in the other case one is loving. To express with a soft voice or to express in a “nice” way is different than to Be Love.

The traces of a soft voice may be registered in the same area of the brain, with similar or the same patterns. On the other hand, the presence of love will register as a different heartbeat pattern and heart electromagnetic pulse with a different heart rate variability frequency and with different patterns of entrainment and synchronization between different oscillatory body systems, like the heart, brain, respiratory and autonomic nervous system.

This would mean that whatever neural traces we are searching for in the brain must be correlated to this heart rate variability frequency and levels of synchronization between different systems. Otherwise, looking “into the brain” is like watching a movie. We are only capturing a very limited aspect of reality.

It is important to mention that Ramachandran and Blakeslee are narrowing down consciousness to specific areas of the brain as stated in their book [1]:

But I will narrow the scope of inquiry even further and suggest that consciousness arises not from the whole brain but rather from certain specialized brain circuits that carry out a particular style of computation ... These examples will show that the circuitry that

embodies the vivid subjective quality of consciousness resides mainly in parts of the temporal lobes (such as the amygdala, septum, hypothalamus and insular cortex) and a single projection zone in the frontal lobes—the cingulate gyrus. (p. 228)

This Hyper Reductionism results as a consequence of the philosophical paradigm, which is the foundation of their research, as shown here:

And the activity of these structures must fulfill three important criteria, which I call (with apologies to Isaac Newton, who described the three basic laws of physics) the “three laws of qualia” (“qualia” simply means the raw feel of sensations such as the subjective quality of “pain” or “red” or “gnocchi with truffles”). My goal in identifying these three laws and the specialized structures embodying them is to stimulate further inquiry into the biological origin of consciousness. (pp. 228-9)

Now we move onto the work of research concerning the neuronal activity and the areas of the brain presumably involved in the attainment of enlightenment. One of the areas in the brain which has been proposed is the hippocampus, and an article “Religion and The Brain” by Sharon Begley [4], published in *Newsweek* on May 7, 2001, with the front cover displaying, “*God & the Brain - How We’re Wired for Spirituality*”, shows a picture of the brain that illustrates how people in prayer or deep meditation have shown neurological associations to different states such as transcendence, vision, enlightenment and feelings of awe.

Also, James Austin explains how, for example, cosmic unity is perceived when the parietal lobes quiet down, allowing the person to feel at one with the universe. Other areas of the brain have been linked to religious emotions, sacred images, and response to religious words, however, the origin of such experience is a subject of debate since, as Austin wrote in ‘Zen and the Brain: Toward an Understanding of Meditation and Consciousness [5]:

Broadly speaking, our answers fall into one of three categories. *Physicalism* holds that there are only physical entities in the universe, not values. *Idealism* says that values and meaning are implicit in the universe. *Perspectivism* replies that it all depends on your perspective. From the perspective of a pragmatist, what counts is what works. Within the moment of Zen awakening, however, the flash of insight-wisdom performs an awesome synthesis: it makes the three categories all valid simultaneously. Physical entities are seen into. New dimensions of implicit meaning are revealed. Everything seen works perfectly ... The hippocampus has become of further interest to Zen, because “transcendent” states of consciousness have been ascribed to discrete changes postulated to take place in certain of its CA cells. Is this hypothesis valid? (pp. 525-6, p. 182)

One of the more important subjects in neuroscience is the one of memory. Many different theories and views have evolved to deal with this subject. Following, I explore some findings in relationship to the Systemic Memory Hypothesis.

It is important to reiterate that in his treatment of memory and memory systems Ramachandran and his colleague opt for a reductionism with an ‘open inclusive explanation of spirituality and religious experience’ and with a neuroscientific perspective. This can be overcome by considering a systemic approach to the phenomenon of consciousness, spiritual values, religious experience and electromagnetic fields and their neural correlates.

First, we need to understand what is meant by a systemic approach to the understanding of life, systems theory and general systems thinking, as an integrative approach to science. Taken together, such notions and body of knowledge may serve as a platform or meta-theory to explain the behavior of complex systems as wholes. It deals with the relationships and dynamics of living systems, organisms, their emergent properties and the synergistic effect of its internal and external dynamics. One of the systemic principles postulated by this approach is that in a system, ‘the whole is more than just the sum of its parts’. For example, water is more than just the sum of oxygen and hydrogen; the relationship between husband and wife is more than what each of them is potentially and actually. This is because there are new emergent properties that are only present in the relationship between these elements yet absent in each part, at least initially until they become a whole.

Systems are engaged in recurrent feedback interactions between “different” elements in a circular relationship, continuously actualizing the state of the system in each of its elements. When this circular flow is interrupted or damaged, the system as a whole may suffer or cease to exist. An example of this may be the damage to a marital relationship, where the unity, integrity and trust are lost. These invisible spiritual qualities and values hold the relationship together and when these fields and attraction forces are disturbed, then the hearts and the brains of each of the individual components of a marital relationship may suffer.

In these kinds of circular loops there is an intrinsic type of memory that builds up and is sustained as the system functions in integrity and wholeness. This is systemic memory. According to this hypothesis, implicit (unconscious) storage of information and energy may be the rule in all levels of nature, and explicit memory (the conscious retrieval of information and energy) is regarded as a special case of implicit memory.

It is important to mention that recurrent feedback interaction occurs at all levels of creation, within all cells and molecules between neurons, people, planets, galaxies and universes. Therefore, when taken into consideration in the light of the systemic memory theory, many of the scientific unexplained observations and facts reported in parapsychology, homeopathy, kinesiology, organ transplant, and spiritual healing amongst others, can be understood.

When we consider the systemic memory hypothesis seriously, it seems that Ramachandran and Blakeslee are underestimating people, and the amount of those people that they call eccentrics, when they write in ‘Phantoms In The Brain’ [1]:

Except for a few eccentrics (called panpsychists) who believe everything in the universe is conscious, including things like anthills, thermostats, and Formica tabletops, most people now agree that consciousness arises in brains and not in spleens, livers, pancreases or any other organ. This is already a good start. (p. 228)

This is also a contradiction with his evolutionary views of consciousness and again is based on a confusing and ambiguous definition of the term ‘conscious’ and his philosophical approach.

It would be interesting to hear him explain why a person who receives a heart transplant and starts registering some of the memories of the donor in his own brain ends up reporting subtle change in biological identity and consciousness of self, as described by Paul Pearsall, Gary Schwartz and Linda Russek [6] and Mitchell Liester [7].

A simple case of the systemic memory effect may be observed when a person who is in stress, freely receives and unifies with a person who is in Love and Harmony. There is a transference of values from one person to another. This can happen in a silent encounter, a loving touch, some words of wisdom and comfort, therefore creating a unified loving interaction between both human beings. This means the stressed person remembers or retrieves the memory and the state of being Love by interacting with Love in another person. Now, they can be called a Loving or caring relationship or in systems theory language, a Loving bio-coupled feedback system. Gratitude, Humor, and Friendship would emerge as part of the synergistic effect related to the internal dynamics of this system.

This could be related to the dissolution of the boundaries of self (maya) that is mentioned by Ramachandran and Blakeslee [1]:

This need to reconcile the first-person and third-person accounts of the universe (the “I” view versus the “he” or “it” view) is the single most important unsolved problem in science. Dissolve this barrier, say the Indian mystics and sages, and you will see that the separation between self and nonself is an illusion—that you are really One with the cosmos. (p. 229)

A sense of unity with the universe may start just with the interaction, integration and unification of different memory systems of different types of human beings and other living systems.

In this example, the brain and the heart of each element exhibits a coherent behavior also reflected in certain neural-pathways. This needs to be taken into consideration when exploring the neurology of spiritual and religious experience, as well as spiritual identity and character, something absent so far in my understanding of Ramachandran and Blakeslee’s book.

In paper 9 of ‘Brain and Values: Is A Biological Science of Values Possible?’ by Karl Pribram, Schwartz and Russek [8] wrote:

Though neurons are clearly especially gifted in storing sensory and psychological information (because neurons are so highly interconnected, creating profoundly complex recurrent feedback interactive networks), it may be time to evolve our intellectual heritage and re-envision the brain as being a marvelously special case of a ubiquitous dynamic systemic (holistic) memory process in nature. (p. 252)

This theory has far reaching possibilities because it allows us to see memory as non-local, meaning that as soon as two open systems interact to form a larger system, then the memory of the interaction between these two systems will be stored in each part of the system. This poses the new question of how can this information be retrieved by any element of the system at any time? In the example of a Loving relationship we can say that psychologically the short-term memory of the interaction between the two people may be sustained as long-term memory by the interaction within each person.

The concept of recurring feedback interaction is implicit in Karl Pribram’s Holonomic Brain Theory. He proposes that the brain works as a hologram. Though this is of immense value, I will cover it very briefly in this document with the following quotation, which summarizes some interesting findings.

According to Jeff Prideaux in his article, “Comparison between Karl Pribram’s ‘Holographic Brain Theory’ and more conventional models of neural computation” [9]:

Karl Pribram’s holonomic brain theory weaves several concepts together in forming the holonomic brain theory. A partial list is the following:

1. The apparent spectral frequency filtering aspect of cortical cells
2. The relationship between Fourier transforms and holograms
3. The fact that selective brain damage doesn’t necessarily erase specific memories
4. The computational advantage to performing correlations in the spectral domain
5. His idea of conscious experience being concurrent with the brain performing these Fourier-like transformations (which simultaneously correlate a perception with other previously stored perceptions). He believes that conscious experience is the act of correlation itself and this correlation occurs in the dendritic structures by the summation of the polarizations (and depolarizations) through the processes in the dendritic networks.
6. The brain is a “dissipative structure” and self-organizes around a least-action principle of minimizing a certain uncertainty relation.

Another theory that deserves attention and ties together with all these findings is Rupert Sheldrake’s theory of Morphogenetic Fields, Mental Fields and Morphic Resonance. According to Sheldrake [10] the development of form is embedded in what he calls morphogenetic fields, those fields contain information (sort of a mold) for the further manifestation of form. He extends this concept to mental fields defined as the basis for habitual patterns of thought. These fields, it appears, interface with the electromagnetic patterns of the brain and go through and beyond it, thus affecting our bodies and behavior, as well as other people’s bodies and behavior. These fields are more extensive than our brains, reaching out long distances in many cases. In a sense, the human brain could be similar to a sort of antenna (transmitter-receiver) broadcasting signals into different mental fields. In turn the brain transforms those signals into different neural patterns to decode the information into, for example, vision, sound and sensation, amongst others.

This theory is an alternative view to the hyper reductionist approach of Ramachandran and Blakeslee.

This is a paradigm shift from a purely mechanistic view to a systemic and holistic one.

Human life and organisms in general, possess intrinsic properties absent in machines, as for example, when we cut an oak tree in different pieces and we observe that each piece can grow into a new tree. This is good evidence that the whole, somehow, exists in the parts. This is a systemic property that organisms and fields have in common, that mechanical systems lack, unless they are associated with fields.

This means that these fields have embedded memory and that through these fields a process called ‘morphic resonance’ takes place. This may imply interactions amongst similar fields where like attracts like or like influences like, they resonate. For living systems and organisms

like plants and animals, it seems that the structure of these fields has a cumulative memory based on what has happened to, for example, a species in the past, and that memory is carried out into the future as a form of habit.

All this applies to proteins, molecules, crystals, atoms, human beings, living organisms in general, planets, solar systems, galaxies, and universes at large. Some of the implications of this theory are that if a species, say a certain type of monkey, learns a new pattern of behavior, then this pattern will be picked up or learned easier by monkeys in another part of the planet or by the next generation of monkeys, even if they have been separated from their parents since birth. This means that hereditary factors depend on both DNA and morphic resonance.

In synthesis, we can say that morphic fields allow for influences across space and time via resonance or affinity. If this hypothesis is correct, then memory systems include the human brain and heart, a piece of wood, old buildings or any other medium capable of participating in morphic field resonance. Sheldrake suggests that the brain is more likely to be a tuning system than a memory-storing device.

When we consider the Morphic Resonance Theory, an interesting possibility arises. This is that because we can tune into our own memories, then we can also tune into other people's memories.

Before I continue, I consider it important to clarify that this is nothing new to me; it has been my ordinary way of being and experiencing life since childhood. There is nothing extraordinary about it. What seems extraordinary to me is that I came to realize that for many people this is a foreign experience and that for some other people, it seems they consciously or unconsciously choose to ignore or deny it. It seems that, in the language of this theory, some people are affected by mental fields with distorted and destructive thought-forms, a form of resistance to a unification with the larger whole. This may just be part of the evolutionary process of humanity, the evolution of human consciousness.

Some examples of challenging areas for scientific research that can be explained by this theory are: communication being to being (telepathy) with other humans and spiritual beings and particularly with disembodied loved ones. Implicitly is derived the immortality of the soul that once disembodied carries its memories of qualities and character into new forms of existence.

Another relevant aspect related to this theory is that prayer may affect the behavior of the physical world and this being so, its effect must be measurable, and science is called to investigate it. Also implicit, is that whoever chooses to be in God's Will is in resonance with a metamorphic mental field that encompasses God's Values. This can be related to scriptures in words like: "Be perfect as I Am, I Am the Tree and you are the branches", as well as testimonies like, "My Father and I are One".

It seems clear that to understand this phenomenon from a scientific perspective, a paradigm shift needs to take place from the idea that the mind is somehow localized in the brain. It is important to mention that God is different than any morphic field, however, it may affect any mental or morphic field and through them, matter itself. In the words of Sheldrake [11] "This is a description of the cosmos which has intelligence at every level, instead of a view that sees consciousness, as something that emerged from unconscious matter."

This is also very different than Ramachandran and Blakeslee's description of consciousness as an event that takes place between the interaction of material systems only, particularly when describing spiritual experiences, paranormal events like telepathy or the sense of union or unity with a loved one.

According to Schwartz and Russek [8]:

Pribram (personal communication) has suggested that valence (the foundation of value) is a prerequisite for recurrent feedback interaction and hence the creation of dynamic memory. His suggestion is consistent with dynamical energy systems theory. The concept of a system requires that the components be connected energetically. Energetic connection implicitly involves the concept of valence. In humans, emotion (in particular love) functions as valence, and emotion (in particular love and loving relationships) fosters memories. Valence in turn fosters the creation and maintenance of relationships. The systemic memory hypothesis predicts that the kind of memory that is stored is dynamic relationship memory. It is conceivable that the capacity to "re-resonate" with dynamic memory may involve patterns of valence as well. (pp. 269-270)

Also, George Ellis writes in "Ordinary and Extraordinary Divine Action: The Nexus of Interaction" [12]:

... we can consider the possibility of God's intervention in our physical reality and our world through God-centred minds: This is to consider the possibility that within the laws governing the behaviour of matter, there is hidden another domain of response of matter to life than usually encountered: matter might respond directly to God-centred minds through laws of causal behaviour, or there may be domains of response of matter encompassed in physical laws, but they are seldom tested because such God-centred minds are so seldom encountered. Then the distinction between ordinary and extraordinary action becomes a question of whether or not we have entered this domain. What has been classified as "extraordinary" action above would be "ordinary" action but in a different set of circumstances leading to a different kind of response and behaviour where God-centred thought dominates and matter responds. Thus, we have the possibility of the existence of a new order, new regime of behaviour of matter, where apparently different rules apply, when the right "spiritual" conditions are fulfilled. (pp. 359-395)

Again, this is significantly different than Ramachandran and Blakeslee's views, where they only describe changes in the neuronal activity leading to religious experience, as a consequence of electromagnetic stimulation of certain areas of the brain. The above implies actually that a human being in unity with God may alter certain electromagnetic fields around him, as well as in brains, hearts, or the weather.

As I have mentioned in other writings, even though the phenomenon of telepathy and remote viewing, healing and communication with spiritual beings may be of interest for many people, to me this occupies a secondary or tertiary level of importance. It is just a different technology of communication. With today's technology a human being can see people in different parts of the planet and can communicate long distance via smartphones, the internet, etc. Much more important to me is the possibility to know God, to love one's fellow human beings and to facilitate a freely rewired humanity to the continual awareness, with long-term memory effect to God's Values and Divine Order.

All these theories and hypotheses taken together provide a framework of reference to understand what spiritual values (existential, universal and essential values) are, which for the majority of human beings, find their expression in the context of behavioral (cultural) values. These two are intrinsically related and therefore, inevitably raise the need to also investigate the neurobiology of both spiritual and behavioral values.

From the above the need is derived to define what is an 'Evaluative System' and how does the brain participate in the creation of knowledge and meaning for intentional action and values based decision making.

I have defined an **Evaluative System** as the interaction of a **universal core value system of spiritual values and a set of normative values with implicit mechanisms to boundaries** developed through fear and reward conditioning that restrict behavior.

The universal core value system comes from The Source of all Spiritual Values while the set of normative values are a consequence of the operation of mental spaces, in conjunction with emotional responses and the natural mechanisms of the human species for survival ends or purposes, in the natural environment and culture.

An evaluative system enables a human being with the capacity to make decisions based on a combination of reactive responses to stimuli coming from his or her natural environment, in conjunction with the processing of social based rules and spiritual values in perfect interaction with The Source of those Values.

Only just recently neuroscientists are beginning to understand, from the point of view of the brain, the mechanisms by which the orbito-frontal cortex uses emotional information to assist in decision making. Some scientists like Edmund Rolls [13] have suggested that the orbito-frontal cortex is necessary for quick evaluation of stimulus reinforcement associations and that this evaluation has its own mechanism of adaptation to changes in the environment.

However, Ramachandran and Blakeslee [1] seem to be locked in their views of consciousness as quasi-centralized around the temporal lobe because they have confused spiritual identity with physical identity, as they have written:

Everyone would agree that qualia and consciousness are not associated with the early stages of perceptual processing as at the level of the retina. Nor are they associated with the final stages of planning motor acts when behavior is actually carried out. They are associated, instead, with the intermediate stages of processing—a stage where stable perceptual representations are created (yellow, dog, monkey) and that have meaning (the infinite implications and possibilities for action from which you can choose the best one). This happens mainly in the temporal lobe and associated limbic structures, and, in this sense, the temporal lobes are the interface between perception and action ... Temporal lobe seizures are often associated not only with alterations in consciousness in the sense of personal identity, personal destiny and personality, but also with vivid qualia—hallucinations such as smells and sounds. (p. 245)

Spiritual identity requires an evaluative system wired to distinguish between behavioral and spiritual values and to integrate them into meaningful intentional action when interacting with the natural environment and a cultural niche. Spiritual identity is concerned with maintaining

integrity in the face of biological survival that may lead to the compromise of spiritual or higher goals and meanings.

Authors like Edmund Rolls [13], Antonio Damasio [14], Howard Eichenbaum [15], Neal Cohen [15] and others, agree that the orbito-frontal cortex plays a significant role in our ability to respond and act in a social environment where there is an exchange of emotional input between people. Also, that the decision making process of a human being is based on an evaluative system that is stored in the frontal limbic cortex and takes into consideration the emotional qualities of a stimulus in order to access how meaningful it is, and what actions are adequate. Most neuroscientists also agree that the amygdala is one of the main neural structures that interacts with the orbito-frontal cortex in emotional processing. This coincides with some of the testimonies of Ramachandran and Blakeslee.

In the article, “Amygdalar and Hippocampal Theta Rhythm Synchronization During Fear Memory Retrieval” [16], Thomas Seidenbecher et al. show that the amygdala and the hippocampus act as a feedback system of emotional, spatial and declarative memory processing.

These and other findings lead to the possibility that the major systems involved in the processing of emotion are the limbic system, the amygdala, and the hippocampus together with the orbito-frontal cortex and the basal ganglia, and somehow, we ought to expect that these systems coalesce, perhaps via fields, with spiritual values and meanings.

What kind of experiments can be conducted to validate the interplay of spiritual values and behavioral values seems a major challenge to our scientific community.

In ‘The Book of Knowledge: The Keys of Enoch’ [17], (a Divine Revelation), J. J. Hurtak writes regarding the broadcasting of mental spaces of spiritual worlds or realms:

When the human mind receives events outside of its physical time frame of reference, it will perceive the presence of a second world which is operating faster than the conventional physical brain processes. Therefore, it will see how our physical world is within a “time-lag” subordinate to high speed events taking place in the second world. This second world shapes the conventional brain processes through time waves which are used by the conventional brain to recall memory, to capture events, and to participate in the thought structure of parallel worlds of intelligence. The supra-consciousness continuum, which makes this possible, emanates from the higher consciousness exercising a superior interpretive and controlling role upon the neural biological events of mental time interplaying with matter-waves and time-waves of the Light continuum. In actuality, this higher consciousness mind operates through the divine worlds which, in turn, affects the physical worlds through consciousness image programs of Light continuum which are not limited to time differences. The self-realized mind can then modulate time differences to step in and out of multiple realities between the physical world and the spiritual world out of which our physical reality is extended. (p. 443, v. 24-28)

Even though Hurtak’s narrative may be unfamiliar and hard to follow for human beings who have never had such experiences, for others who report such experiences, they find it easy to experience a sense of being part of a multi-dimensional community or family of Love beyond the flesh. The question is raised, how important is it for the human species to establish a relationship

and bond with a community of human beings that are able to broadcast these signals from the living cosmos, and their associated feelings of love and grace, to guarantee the survival of the species towards a higher state of spiritual and consciousness evolution?

In this respect Hurtak [17] writes:

The Higher Evolution is also able to beam spiritual knowledge from the recorder cell to a specific localized intelligence. For example, through the multi-light image transformation, the recorder cell template allows for light impulses arriving from a divine template to be allocated to specific localized zones of consciousness where they are adapted to the paradigms necessary for the distribution of Light. The template recorder cell sends out thought-forms of information that are continually active in space. Forms of advanced physical intelligence can directly tap into this information if they have a crystalline network within their brain cavity. For this reason the brains of advanced physicals will reveal the right and left hemispheres fused and a small crystal network in the right frontal lobe which acts as a crystal recorder or third brain transposing the language of the Higher Evolution into the vernacular. (p. 444, v. 34-35)

What kind of experiments can be conducted to validate this phenomenon is another major challenge to our scientific community. Here we have several subjects for research:

- (1) Can we find this crystalline network within the brain cavity from people who claim to be spiritually evolved?
- (2) Can we study the fusion between the right and the left hemispheres and the small crystal network in the right frontal lobe, as well as how it functions by transposing the language of the higher evolution and thoughts and feelings into the vernacular.
- (3) How are holographic communication and neural holographic processes involved in the broadcasting of those signals?

According to Hurtak [17]:

Man lives in his garden of consciousness creation receiving knowledge from the divine template and recorder cell through a *superholographic process* ... Holographic organization shifts emphasis from axonal impulses to the slow potential micro-structure that develops in the post-synaptic networks. (p. 445, v. 47, 52)

He also writes:

The brain of man is part of the Divine Mind, and by decoding the human brain's mechanisms of memory storage in relationship to the universal language process, a higher hierarchical memory is revealed and Man discovers that he is a pulsating geometry of a Divine Language system. (p. 454, v. 3)

In the presence of a higher hierarchical memory system based on a divine language, we may expect it to encompass the mechanisms to override any information that is stored in the brain or other bodily systems. This would allow the transformations of any cognitive boundaries created through fear conditioning, biological stimuli and responses in the brain of a human being, in order to liberate him or her from limiting or destructive behaviors with a new cognitive map in

resonance with spiritual values and meanings. This would also allow for the purification of intentions, goals and mental processes of the human being.

According to these ideas, Ramachandran's description of "oneness" and the dissolution of boundaries can be reinterpreted in a different light.

Ramachandran also mentioned the barrier of language as the main barrier to communicate spiritual experiences amongst different human beings. Paradoxically, language can also be used to liberate a human being from the perceived boundaries that Ramachandran talks about. Therefore, another topic of research may well be directed to answer the question of how such a process happens and what kind of language could be needed to fulfill this task?

So, my dear reader, after such a vast inquiry, I am leaving you with some ideas about how to continue to explore and expand our views on consciousness, spiritual experience, self, character and identity and ultimately unity with God and God Consciousness. For this, I have taken into consideration from the point of view of neuroscience and neurobiology, some of the views of Ramachandran and Blakeslee, as well as other scientists.

I have proposed the exploration of the interaction between the temporal lobe, the prefrontal cortex, the limbic system, and their relationship to physical and spiritual identity, respectively. This would be to find neural traces of such interactions, and such a research could be approached on the basis of a clearer distinction between spiritual and behavioral values.

Also, I have proposed that we search for a phenomenon that we can call a 'Healthy Blessed Seizure', brain activity similar to the ones related to epileptic seizures, therefore leading to the spiritual and religious experience of "oneness" with the added characteristic of this being in the control of the person.

Finally, I have proposed an exploration of the evaluative system's pathways related to the perception of the dissolution of boundaries and the experience of "oneness", leading to the realization of spiritual identity with the ongoing subsequent experience of continuously embodying spiritual values.

I am suggesting that a 'Healthy Blessed Seizure' is part of the chain of events that are related to the cause of a spiritual experience. I am also suggesting that the proper preparation in prayer and the genuine desire to listen to the "Voice of God" and the readiness to act according to the will of The Ultimate Value Giver, will produce some kind of entrainment between the prefrontal cortex and other brain systems, when the creation of spiritual meanings and knowledge is formulated as a complementary mind~brain relationship in resonance with The Creator's Mind. This synchronization is caused to provide the long lasting effect of knowing your spiritual identity and the ongoing embodiment of spiritual values.

This is very different to someone having an epileptic seizure or an artificially stimulated brain and reports only the experience of ecstatic unity with the cosmos. This my dear reader, is a starting point to the exploration and understanding of **The Brain of Melchizedek !!!**

At this stage, I will leave you with some considerations and questions:

- (1) Can Love or Happiness ever be lost to the brain?
- (2) Is there anything like the "Love Center" that can be permanently damaged?

- (3) What about a “hate center”?
- (4) Can a person be permanently switched on to hate because of a certain kind of brain damage?
- (5) Can a person experience Love and hate simultaneously or are they mutually exclusive?
- (6) Is the experience of hate or Love a random one or is it a choice?
- (7) If a choice, then why are some people in different circumstances blind to that choice, like a zombie bee?
- (8) Is Ramachandran referring to spiritual values when he uses words like Certainty, Unity, Love, Truth and Humor? What are the neural correlates of the experience of the spiritual values we call by these words, in the brain of different people with different cultural, epigenetic and spiritual propensities?
- (9) Could it be that a seizure follows a spiritual experience or is a spiritual experience always followed by a seizure?
- (10) An action of Truth is motivated by Truth, an action of Love is motivated by Love, and an action of Unity is motivated by Unity. So, where are the neural traces of actions based on values and where are the encoded neural mechanisms to the detection of those values?
- (11) Do the reception and the expression of these values involve different areas of the brain?

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