The Self

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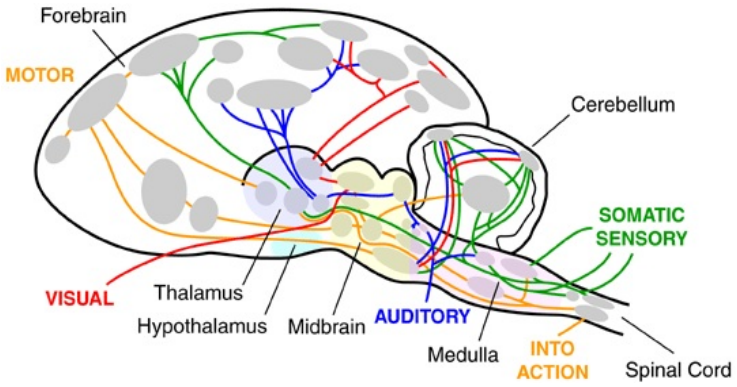

Since the human organism is a dynamic system both physically and psychically, then, by definition, it is evolving toward greater complexity. Since our psychological makeup has a organic basis, the human brain, then our psychological development will be contingent upon neurological development. Likewise, since a spiritual state of consciousness is a quality of the human psyche, then it will have a neurological basis as do all other psychological processes. Furthermore, with increased neural network development comes an increase in organizational complexity within the neural structure and with an increase in organizational complexity comes enhanced processing (Schroder et al., 1967.) The most complex forms of human brain processing are intellectual and spiritual in nature. Since, the drives for performing specific acts of human behavior are associated with specific neural substrates that vary in their levels of

complexity and are proportional to the processing level, then as the level of complexity of the neural substrate increases then so to will the complexity of behavior and the degree of meaningfulness of the act in relation to the self and universe. It is through increased neurological complexity that the organic brain matures and with this organic maturation the metaphysical self also matures.

Each individual act of behavior can be seen to be influenced by a specific stage of neurological development that is the result of dominance by one of the four different minds that reside within the human brain. The four minds are: the physical, the emotional, the intellectual, and the spiritual. The individual self is a composite of the four minds and is the synergistic quality of the four minds. The evolution of the self is a progressive unidirectional vector that begins the transitional process toward self-realization and spiritual consciousness at the oldest mind--the physical. Normal growth of the self then proceeds through the emotional and intellectual minds and culminates at the spiritual mind. The evolutionary order of the first three minds is the product of the triune brain model (MacClean, 1973). Placing the development of the intellectual mind before the spiritual mind is done for a couple of reasons. Many religions subscribe to the belief that the individual must first attain a state of intellectual perfection before spiritual perfection can be achieved (Letvik and Senzie, 1986, Wilber, 1986, Chirban, 1986) and the work of Maslow (1971) and Kohlberg (1976) contends that the intellect develops before the spiritual.

The Brain and Its Associated Behaviors

The human brain consists of 3-brains-in-1 (MacClean, 1973). The triune brain is composed of three neural substrates that are represented by the reptilian brain, the paleomammalian brain, and the neomammalian brain and each brain is connected to

the others. Each brain functions separately from the other two and is a bio-computer that has its own unique genetic programming, its own precise kind of problem solving intelligence, its personal understanding of self in the universe, its own sense of time controlling how best to behave, its own meaning for being alive, its own memory of how best to survive, its own special actions to express itself, and its own mode of living life. All acts of human behavior are specific percentages of precisely identifiable reptilian, paleomammalian, and neomammalian brain mappings that work in parallel towards the resolution of problem states.

The reptilian brain computes aggressive behavior, fighting, fleeing, the selecting of leaders, compulsion, territorality, repetition, ritual, reproduction, conformity, the establishment of social hierarchies, and the regulation of physical housekeeping duties (MacClean, 1973). The paleomammalian brain and its dominant component, the limbic system, are responsible for creating a plethora of emotions, most of which are concerned with the formation and preservation of the family and society (ibid.). Such behaviors include: greed, gluttony, selfishness, jealousy, reactionary emotions, social attachment, tribalism, fear, love, hate, pleasure--especially sexual, and sometimes paranoia. An individual whose life is dominated by the paleomammalian brain is usually afflicted with various addictions, and seeks pleasure (Letvik and Senzee, 1986). Obviously, within a industrial society the behaviors that associate with the two lower brain centers are continually reinforced. More important, the attributes of consumer greed/gluttony/selfishness, and fascist tribalism map to the paleomammalian brain. Consequently, the Machine is dependent upon its members to utilize the paleomammalian brain--the more efficiently they can use the paleomammalian brain then the more value they will be to the Machine. Some may state that the Machine does not teach emotions. On the contrary, the Machine does teach the emotions that

are conducive to its own ends of consumption and "war" but, the Machine does not teach emotions that are conducive to individual happiness, self-growth, and true love based community.

The neomammalian brain, which is primarily composed of the frontal lobes, is responsible for many higher order cognitive skills that will be discussed later. The frontal lobes are the seat of two of the qualities of the self--intellectual and spiritual thought. The four minds can be seen to map to specific neural substrates (brains) of the triune brain. These are: physical--reptilian, emotional--paleomammalian, intellectual--neomammalian, and spiritual--neomammalian. According to Maslow self-realization possesses many spiritual qualities and self-realization evolves after the intellect and before the aesthetic/spiritual. Accordingly, it can be deduced that self-realization maps to the neomammalian brain.

Each neural substrate in which the mind(s) reside is a composition of neural networks that may or may-not innervate other neural substrates. Neural net innervation allows for communication within the brain system. Communication exists between components that reside within a specific neural substrate and/or between components existing outside it (Nauta and Feritag, 1979). Neural pathways emanating from the hippocampus and amygdala (both of which are contained within the paleomammalian brain) loop (communicate) to both the neomammalian forebrain and the reptilian reticular activating system (ibid.). The amygdala is responsible for shunting energy forward into the neomammalian brain thus creating the "kindling effect" (Wada, 1976) or backwards into the reptilian brain (Lingo, 1987) and plays a major role in memory (Mishkin and Appenzeller, 1987). This "kindling effect" is associated with the various states of spiritual consciousness--nirvana, kundalini, the frontal lobes experience, etc. (Lingo, 1987). More specifically, the amygdala is the click switch that shunts

consciousness forward and induces the "frontal lobes experience." Since often times individual acts of behavior are responses to environmental inputs that associate with prior memory experiences produced by similar inputs in the resolution of specific problem states, then it can be deduced that the amygdala is a servo mechanism that drives individual acts of behavior. Consequently, depending upon the type of memories and/or behavioral templates housed within the individual brain, the amygdala will shunt consciousness to the neurological substrate that can best fulfill the needs and/or wants generated by the individual's memories. For example, if an individual is taught by his or her industrial-consumer state that materialism is the means by which he or she can attain happiness and life meaning, then the amygdala will shunt consciousness energy to the reptilian and paleomammalian brains where competition and greed will strive to ensure that the "need" is fulfilled. Unfortunately, the Machine has the effect of clicking the amygdala backwards into retrograde consciousness contracting behaviors--consciousness contracting to the extent that the individual is not taught how to click the amygdala forward into the frontal lobes and the subsequent states of spiritual consciousness.

At this point one may question how the Machine clicks the amygdala backwards. Simple--through fear. The amygdala is where fear is learned and remembered (LeDoux, 1994). So, when fear is encountered it is the amygdala that directs consciousness backwards into the paleomammalian and reptilian brains where it can be dealt with efficiently via self-preservation practices. When the Machine instills fear into the daily lives of people, then the response of the individual brain is to direct consciousness back into the lower brains and away from the higher brain centers. Obviously, when consciousness energy is being shunted backwards to the lower brain centers, then it is not being shunted forward into the higher brain centers. Hence, fear

is the primary mechanism the prevents the individual from attaining self-realization and spiritual states of consciousness.

The level of excitement or inhibition of an established neural net determines its weight vector (McCulloch, 1965). Since neural substrates/components are composed of neural networks, then neural substrates/components will also be of an excitatory or inhibitory nature and possess a cumulative weight vector. Consequently, behaviors and drives that are associated with a specific neural substrate can be inhibited or excited by intrinsic and/or extrinsic inputs that target the neural nets/substrates for processing. Obviously, the social conditioning produced by the Machine has a neurological impact upon the individual, but we still are left without a model as to how Machine idealogies repress the minds that map to the higher brain centers. For this we need to first turn to the study of flip-flop circuits in the field of electrical engineering.

The study of flip flop circuits in amplifiers illustrates both the excitatory and inhibitory effects that the three different neural substrates and their respective minds have upon each other, and individual acts of behavior. In flip-flop circuits as the input increases so does the output, similarly as the input decreases so does the output (Tank, 1987). Accordingly, as extrinsic inputs excite a specific neural substrate (amplifier), then there will be an increase in behaviors under the influence of drives associated with the substrate. Such inputs may also act as role reinforcers since behaviors emanating from the neural substrate in response to environmental stimuli are stored within the domain of prior experiences to be used for comparative purposes in the resolution of future problem states. Consequently, behaviors associated with a highly targeted neural substrate will be exhibited more frequently than behaviors associated with other substrates that lack prior experience about the inputs. Put in the context of attitudes and beliefs taught by the Machine, as consumer behaviors are encouraged then they

will be expressed more frequently. As spiritual attitudes are neglected, then spiritual states will be displayed less frequently.

Amplifiers composed of flip flop circuits also mutually inhibit each other to the extent that the result of a high output in one amplifier will drive down the input of the other amplifiers (Tank, 1987). Each amplifier drives the other one to be in the opposite state. Likewise, if environmental inputs are processed by a specific neural substrate, then the neural networks contained within it will be placed in an excitatory state. The excitation of the neural substrate will, in turn, elicit the realization of the associated drives and corresponding behaviors of the substrate, and increase the relative weight of its respective mind within the soon to be defined self matrix. Consequently, according to flip flop circuit theory, an increase in the drives and behaviors associated with one mind, will inhibit the expression of drives and behaviors associated with the other minds.

By ordering the four different minds according to their biological age: physical, emotional, intellectual, and spiritual and working from the center out, then inhibitory flip flop circuit results exhibit themselves. In comparing the emotional mind to the intellectual mind it is easy to see that one is the antithesis of the other. The emotional mind is often equated with the irrational, in contrast, the intellectual mind is regarded as the seat of rational thought. As the relative weight of irrational emotions increases, then the relative weight of rational intellect decreases. Hence, the emotional mind and the intellectual mind are diametrically opposed and inversely proportional, and emulate flip flop circuit results.

The drives of the reptilian physical mind are the antithesis of the neomammalian spiritual mind. In religious literature the spiritual is often seen to transcend the physical (Letvak and Sven, 1986). When one compares the behavioral characteristics of the reptilian brain (aggression, fighting, and selfishness) with the neomammalian brain trait

of spirituality (pacifism, peace, and altruism), the dichotomy appears. When the reptilian physical mind dominates, then the higher level of neomammalian spirituality is inhibited. Neither aggression and pacifism, nor fighting and peace can be acted out simultaneously by the same individual. Therefore, the physical mind, and the spiritual mind are diametrically opposed and inversely proportional.

It should be clear now how thought control is maintained by the Machine. By emphasizing both reptilian and paleomammalian behaviors, then both intellectual and spiritual modalities of thought are repressed proportionally to the stimulus provided to the lower level brains that it associates with. In essence, the modern industrial state is inhibiting individuals who comprise the state from circuiting into their higher brain centers and attaining a state of self-realization by bombarding the lower brain centers with continual stimuli. But, this is still not the complete picture of how the different minds work with each other--this will be further explored in a bit.

At this point it needs to be restated that what we are concerned with is the behavior emanating from the drives associated with the dominant neural substrate. The quality of being human entails the interaction among the four minds. To assume that only one mind exists and drives the individual to performing specific acts is to assume incorrectly, since such an assumption would deny the individual brain of its synergistic self, which is the very quality that provides us humans with our biological uniqueness. However, this is not to imply that a specific mind cannot dominate individual acts of behavior. Neural substrate dominance is determined by the element within the self matrix with the greatest relative weight.

Model of Self (Ψ)

This section needs to be prefaced with a defense for the model. Some may be prone to criticizing it because they may falsely label it as being just another mechanistic application. Since the self is defined as being nonlinear and synergetic--where the whole is greater than the sum of its parts--sets it apart from mechanistic models which are linear, and non-synergetic. Ergo, the Self is anything but mechanical.

The four components of the self (physical, emotional, intellectual, spiritual) form the tetrahedron Ψ. According to Buckminster Fuller, the tetrahedron is the minimal form that can stably exist within the universe (Fuller,). Each node (Φ, E, I, Ω) of the tetrahedron Ψ has the capacity to act alone or in combination with other nodes in the resolution of problem states in an attempt to increase the survival efficiency of the organism. The center of gravity of the Ψ-tetrahedron is the self, which is the synergistic metaphysical force that propels the bio-physical self (matter) through space, over time, in reaction to or in interaction with extraneous environmental factors. The 4-d scaler matrix Ψ defines the self as a driver/scaler in determining the direction of the omni-directional goal directed behavioral vector $\boldsymbol{\beta}_{\upsilon}$. Being synergetic, the consciousness energy that makes up the self (Ψ_{ε}) is nonlinear such that $\Psi_{\varepsilon} > \Phi_{\varepsilon} + E_{\varepsilon} + I_{\varepsilon} + \Omega_{\varepsilon}$. Hence, the range Ψ is the transformative synergistic quality of the consciousness energy contributed by each domain (Φ, E, I, Ω).

The weight of each element within the Ψ-matrix is determined by both intrinsic and extrinsic environmental factors.

Intrinsic factors are the result of:

1. Parallel communication between Ψ-tetra nodes in the resolution of problem states.

2. Bio-genetic programs.
3. Level of biological and psychological development.
4. Memory events that have been imprinted upon a neurological substrate that, in turn, maps to a specific Ψ-tertra node. If the event is traumatic, then the recursive inhibitory effect that the effected node will have upon surrounding Ψ-tertra nodes shall be defined as the bound energy of neurosis.

Extrinsic factors shall include:

1. Both the metaphysical and the physical universe.
2. Social and cultural emanations that produce wants that map to specific neurological substrates to which the specific Ψ-tertra nodes map.
3. Inter personal, social, and cultural templates that model how specific acts should be addressed and determine how the self shall react in present/future relations to similar acts.

Furthermore, Ψ expresses itself in the material world via quantifiable behavioral acts represented by the behavioral vector $\boldsymbol{\beta}_{\upsilon}$. The quantitatively verifiable $\boldsymbol{\beta}_{\upsilon}$ is a function of the qualitative $\boldsymbol{\Psi}$.

Hence, for any extrinsic or intrinsic x_{in} input then

$$\Psi[\Phi(x_{in}) + \mathbf{E}(x_{in}) + \mathbf{I}(x_{in}) + \boldsymbol{\Omega}(x_{in})] = \boldsymbol{\beta}_{\upsilon}$$

Therefore, the self matrix (Ψ) is defined as a 1 X 4 matrix where each element represents the relative weight of each mind in the composition of the individual Self. Each element represents the relative weight vector of each mind in driving individual acts of behavior. Thus, Ψ = (physical, emotional, intellect, spiritual) or Ψ = (φ, ε, ι, ω). For example, a newborn's survival needs may be represented by the Self matrix Ψ =

(.997, .003, .000, .000). In other words, the newborn is pure reptilian survival response. A toddler who has the need to bond to a primary care giver and who may be exhibiting the beginning stages of intellect may have the Self matrix Ψ = (.440, .555, .111, .004). The consuming industrial worker who goes to church on Sunday may have the Self matrix Ψ = (.333, .555, .221, .001). The Self matrix of a lawyer may look like Ψ = (.444, .011, .544, .001). The Self matrix of the lawyer, while practicing his or her profession, can be described as an individual driven by reptilian aggression/competition and neomammalian intellect. The Self matrix of a self-realized individual may look like Ψ = (.010, .200, .390, .400), and the spiritual sage may have the Self matrix Ψ = (.010, .010, .010, .970). Granted, all of the preceding values are arbitrary at this point but they should give an idea as to how a composition of the four minds drives individual thoughts and acts of behavior.

To assure survival and reproductive success the human brain will organize functionally in order to increase the individuals probability of success. One way the brain organizes functionally is for one mind to associate with another mind in an attempt to increase efficiency in the resolution of problem states. This association defines the efficiency vector weight of the Self. To maximize the efficiency vector weight, the mind that dominates individual acts of behavior will work in parallel with the highest mind, in terms of evolutionary development, which it is most compatible with. For example, the reptilian physical mind will associate with the neomammalian intellectual mind and the paleomammalian emotional mind will associate with the neomammalian spiritual mind. But, when both the reptilian and paleomammalian brains are the targets of Machine ideologies, then both the neomammalian minds will be suppressed to a large extent, and the chains of mind control are tightened.

Current Machine social conditioning inputs target the reptilian physical mind in males will induce an association between the physical mind and the intellectual mind. This act of social conditioning is crucial in explaining the patriarchal nature of industrial-consumer societies. In these competitive societies it is the aggressive/competitive (reptilian) intellect (neomammalian) that is not only established as the norm, but also has the greatest chance of attaining success as determined by the Machine. The reason is that a self dominated by a reptilian brain that has a refined neomammalian intellectual brain results in highly efficient reptilian behaviors. Also, within the industrial-consumer state male stereotypes and reptilian behavioral reinforcers exist pervasively and most forms of entertainment revolve around male acts of competition and aggression. Consequently, since reptilian male conditioning inputs are most ubiquitous within such societies, then the input weight vector is greater and thus elicits a reptilian responses proportional to the input weight vector. Hence, it is the male stereotype that is given the greatest degree of social reinforcement.

The work of Changeux (1983) shows that intrinsic communication from within the neurons environment can affect the organization of any particular network. In other words, as neurons communicate with one another in response to stimuli then they will, in turn, have an impact on the organization of the network in which they reside. Extrapolating this result into the triune brain model we can see that over stimulation of the male reptilian brain and its physical mind will lead to the formation of more organized networks within the reptilian brain. This increase in reptilian brain organization will subsequently retard the progressive development of the self due to an increase in the reptilian brain output weight vector that, in turn, lessens the input weight vector innervating the higher neural substrates and will inhibit the organizational development of the neural networks associated with the higher neural substrates.

Consequently, a form of process elimination of the higher neural substrates is induced due to a lack of functional activity. The result is a male who is driven by acts fighting, compulsion, territorality, aggression, and the establishment of social hierarchies--hierarchies that establish male territorality. Male behavioral roles that emulate such include: Lawyers, military leaders, politicians, business leaders, coaches, athletes, etc., and the capitalist system as a whole. These are the same killer-ape behaviors that create exploitative and dominating attitudes towards nature. Obviously such attitudes and modes of behavior are void of any spiritual interactions with the earth.

To maximize the efficiency vector weight a dominant paleomammalian emotional mind will work in parallel and associate with the neomammalian spiritual mind. Social conditioning inputs target the paleomammalian emotional mind in females. Consequently, to maximize success the female paleomammalian emotional mind will work in parallel with the neomammalian spiritual mind. This can be supported by the preponderance of women, as much as 75% in some cases, which make-up the number of participants that attend transpersonal and Buddhist functions (Tart, 1991).

From the above data one may infer that the female brain is more prone to evolutionary success since the spiritual mind is more complex than the intellectual mind due it being the last mind to evolve. Given that highly efficient reptilian behavior has made our species the most efficient of killers of both "man and beast" in the history of the planet, and the fact that the spiritual mind is governed by acts of peace and compassion, then the possible contributions of each toward the possible extinction of the species should be self-evident. This is not to imply that the emotional neomammalian spiritual brain has attained the highest states of spiritual consciousness. On the contrary, the emotional-neomammalian spiritual Self will map to the lower stages of Wilber's hierarchy of spiritual consciousness (1986). The intellectual-neomammalian

spiritual self will map to even higher stages of spiritual consciousness. Finally, a neomammalian spiritual mind that does not associate with any of the lower minds will map to the highest of spiritual states.

Neural substrate dominance may be the result of a process similar to synaptic elimination and is referred to as process elimination. This is where what may have begun as a process innervated by many neurons (or networks) is reduced to one nerve (network) innervating it (Cowan, 1979). One factor that may determine the results of process elimination is "functional activity" (ibid.). As inputs target specific neural substrates, then to insure behavioral efficiency any nonessential or "nonfunctional" networks will be eliminated and/or inhibited so that only the networks that will increase the probability of success will remain intact and will subsequently experience an increase in their neural network vector weight. If lower level behaviors are continually reinforced, then the reptilian and paleomammalian substrates and their associated drives and corresponding behaviors will replace, and subsequently dominate, higher order behaviors due to process elimination in response to functional activity within the environment. The result is that humans behave the only way that they have been taught to behave--as intelligent snakes with dysfunctional frontal lobes.

The Frontal Lobes and Human Behavior

The largest component of the neomammalian brain is the frontal lobes that are estimated to makeup as much as 33% of the total cortex. The law of proper mass states that the larger the tissue area, the more important the functions associated with it. Accordingly, the behaviors and minds that can be associated with the neomammalian brain will be the more important functions in determining the human quality and evolutionary success. Since we have mapped both the intellect and spiritual

qualities to the neomammalian brain/frontal lobes, then we can deduce that it is the intellectual and spiritual aspects of the self that are of greatest human import. Furthermore, these two qualities may be what set the human species apart from the rest of the animal kingdom the majority of whom lack frontal lobe development. The are exceptions to large brain masses within the animal kingdom--most notably the dolphin. This in itself raises a plethora of ethical issues that will not be covered here. Back to the frontal lobes.

The role of the frontal lobes is many fold. Some of its more important attributes are empathy, cooperation, altruism, and the ability anticipate problems. All of these attributes are attributes that are of vital importance to the Deep Ecology movement. When patients who had massive lesions to their frontal lobes were instructed to repeat the conditions of the problem, they were either unable to so or would repeat only one of its elements (Luria, 1973). They were also unable to generate a cognitive model of the problem, were easily distracted, and did not attempt a preliminary investigation of the condition of the problem (ibid.). As a result, they immediately began to seek solutions impulsively and performed a series of fragmentary observations, totally unconnected with the content of the problems and without any plan (ibid.). Luria also found that patients were unaware of the meaninglessness of their solutions (ibid.).

Animals whose frontal lobes were removed surgically exhibited hyperactivity and were scattered and stimulus-bound (Fuster, 1980). Patients who suffered from frontal lobes disorders also exhibited apathy, and had difficulty in controlling their behavior (Stuss and Benson, 1986). Such patients also displayed a loss of will and continued to pursue a problem despite the evidence for error (Fuster, 1980). The frontal lobes also play a role in concentration during problem solving tasks (Mizuki, 1980), and appear to be the seat of the self and individual autonomy since they establish a point of view

relative to environmental events that allows for the distinguishing between the self and others (Nauta, 1973).

All of the above studies were done on animals or humans who suffered trauma to or removal of the frontal lobes. Yet, if one were to perform a qualitative examination of our society, especially of the young, then it would appear that many individuals display the same types of behavior in varying degrees. It is estimated that 9% of the boys in America and 2% of the girls have been identified as hyperactive (Barkley, 1981). Up to 15% of the school aged population may suffer attention deficits (ibid.), boys are six times as likely to be afflicted--but, these seem to be very conservative estimates at best. The disproportionate number of afflicted males may be due to the fact that their reptilian brains are targeted by Machine conditioning inputs more. Specific problems associated with attention deficits emulate many of the frontal lobe lesion studies, they may include, but are not limited to: short attention span, restlessness, poor impulse control, destructiveness, over arousal, inability to delay gratification, aggression, belligerence, poor social problem solving skills, excitability, low average intelligence, lack of conscience, learning disabilities, under achievement for intelligence, and low self-esteem (ibid.). Up to 24% of our societies youth have been identified as possessing these afflictions (ibid.), these are the ones who are labeled as needing professional help. An individual suffering from antisocial personality disorder may display some of the following characteristics (Magid, 1990): need for stimulation, proneness to boredom, lack of guilt, lack of empathy, poor behavioral controls, impulsivity, irresponsibility, failure to accept responsibility for actions, and juvenile delinquency. Estimates are that 0.05% to 15% of the adult population may suffer from such afflictions (Rosenthal (1970) in Magid 1993). These esteem needs are of primary importance, since in Maslow hierarchy of needs esteem comes before self-actualization and

aesthetic needs. Accordingly, only after the esteem needs have been met can one then grow into the self-realized state. Consequently, with low esteem, the result of the Machine's dehumanization process, it becomes impossible for the individual to attain self-actualization.

All of these studies imply that the frontal lobes are not functioning properly. If the frontal lobes are not functioning to their full extent, then it would be naive to expect such individuals to display thoughts and behaviors that can be attributed to the frontal lobes--the more notable being creative genius and spiritual consciousness. In essence, the Machine, through its social conditioning, performs a psycho-lobotomy on its members. This is to the advantage of the Machine, because now the unquestioning masses can be herded into fulfilling the needs of the Machine. This environmentally induced quiescence is supportive of neurology Nobel Laureate Sir John Eccles dormant brain hypothesis (1974).

The Eccles hypothesis, which proposes that the human brain is 90% dormant, was proven experimentally by studying hydroencephalics (Lorber, 1981). The conclusion was that the human brain is "almost solely" dormant (ibid.). At this point it would be appropriate to address arguments of objective scientist that contend that the human brain is **not** dormant. To address the problem effectively, then one needs to refer to system analysis. By definition the individual human being is considered a dynamic system and all dynamic systems will exhibit growth/change via evolution or revolution. Since, the human brain is the physical seat of the metaphysical self, then it is the evolutionary medium from which the self evolves. Human brain evolution does not necessarily mean larger mass, but rather implies the formation of more complex neural networks and the ability to circuit into these more complex networks. To contend that the human brain is used to its full potential, implies that we as a species do not

possess any evolutionary potential since we have nothing to further evolve into. The question to be asked here is: What system of logic would subscribe to the concept of the life process as being characterized by dynamic evolution, but then state that one sub-system (humans) of the system of life is no longer capable of evolving? This is a *non sequitur.* This leads into the second argument, the implication that we as a species have reached our evolutionary zenith. To stand back and view our species and observe overpopulation, greenhousing, war, famine, pestilence, nationalism, ignorance, poverty, racism, narcosis in its various forms (drugs, alcohol, and religion), and violence leaves one with a feeling of despair. To say that we are no longer capable of evolving leaves one without hope.

The contention is that the frontal lobes are not being utilized to their optimum capacity due to domination of the lower neural substrates, and the subsequential retarding of the organizational development of the neural nets contained within the frontal lobes. The result is that the individual exhibits behaviors that can only be associated with the drives of the lower two substrates of the triune brain. In essence, the neomammalian brain has been reduced to a state of environmentally induced quiescence, environmental to the extent that the industrial-consumer state provides reinforcers for specific types of behavior that inhibit higher modalities of thought. Hence, a societal induced pre-frontal lobotomy seems to have been occurred at the level of the psyche. Consequently, Machine conditioning erect metaphysical walls between the individual and his or her spiritual mind. The result is a machine produced automaton that is nothing more that a hollow reptilian shell, driven by emotions that can only identify with the Machine and its various institutions. Subsequently, if social conditioning deprive us of access to our spiritual self by generating lower level wants, then social conditioning are, in turn, depriving us of our freedom of self expression and

the right to grow into our full potential. Hence, social conditioning not only commit hubris against nature by its expanding capitalistic policies, but are equally as quilty of retarding, suppressing, and denying individual self-realization and spiritual growth.

Conclusion

The evolution of the self is genetically determined to the extent that to be fully human each individual must attain progressively higher modalities of thought and behavior. Two of these higher genetically determined needs are self-realization and the attainment of spiritual states of conscious. Christ, Buddha, Lao-Tsu, etc. were all mutants who experienced such states of consciousness (Bucke). The implication is that all of humanity possesses the potential for attaining equal states of spiritual consciousness as history's sages have. But, there are two factors that affect the evolutionary growth of the self--the extrinsic input weight vector and the intrinsic input weight vector. This paper addressed only the extrinsic input weight vector as generated by the industrial-consumer state (the Machine). The intent was to show how the Machine overemphasizes the expression of the lower level reptilian and paleomammalian brains via consumerism, education, religion, and sports. Continual stimulation of these lower neural substrates inhibits the natural growth into the higher neural substrates and therefore, retards the growth of higher states of individual consciousness. The walls placed between the lower level brains and the higher states of neomammalian self-realization and spiritual consciousness are both physical and metaphysical in nature. The physical retardants toward self-realization were shown to exist with the model of the self and flip flop circuit results. The metaphysical dilemma was illustrated by showing that lower level reptilian behaviors and paleomammalian behaviors are inversely proportional and diametrically opposed to higher states of

individual consciousness. Consequently, it is impossible for an individual to attain higher states of consciousness when he or she willingly accepts and participates in a life style that reinforces lower level behaviors and thought and that discredit the validity and existence of higher modalities of thought.

Only when the socially produced extrinsic input weight vector that targets the reptilian and paleomammalian brains and generates perceived needs is reduced, will the self also be free to evolve into the higher neomammalian minds. With the elimination of socially produced perceived needs, then the individual will no longer be enticed to fulfill the perceived lower level needs of greed, lustful sex, pleasure in general, aggressive and competitive acts, and other targets of the emotions. The individual thus gains his or her freedom since behavior is now based upon rational thought and is free from the influence of others--the self is free to mature. The various mediums of communication that exists within our society could begin by encouraging and reinforcing individual acts of behavior that revolve around the neomammalian brain and its associated minds. What is needed is a revolution that will envelop the species with a higher state of consciousness. A brain revolution where the pursuits of higher order intellectual and spiritual modalities of thought replace the lower level drives associated with the reptilian and/or paleomammalian brains. But, before a social revolution can take place a revolution within each individual at the level of the brain must first occur. An individual brain revolution where each individual willingly accepts his or her own responsibility of growing up into whole brain power!

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88
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