Intelligence and The Body–Mind

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In psychology, physiology, and medicine, wherever a debate between the mystics and the scientifics has been once for all decided, it is the mystics who have usually proved to be right about the facts, while the scientifics had the better of it in respect to the theories.

William James[i]

INTELLIGENCE AND THE BODY-MIND

There are people who are considered highly "intelligent" in our day and age who are helping to build weapons of mass destruction. There are "intelligent" people developing chemicals that are highly toxic and become great pollutants to our environment. The age-old defense for this is that science is exclusionary from ethics and the moral use of its products and by-products. But if so-called "intelligent" people are spending large amounts of their time, energy, and talents helping to develop technology that has great potential for such disordering, destructive use, it raises the questions as to what really is intelligence, and what is it to act intelligently, to think intelligently, and to be intelligent?

Most scholarly definitions of intelligence to date have dealt with the subject largely in knowledge terms, in terms of one's capacity to acquire knowledge and one's ability to critically apply knowledge. In a study conducted in 1987, 1,020 specialists in the fields of psychology, education, sociology, and genetics were asked to rate what they believed were important elements of intelligence. Over 96% selected "the capacity to acquire knowledge" as one of their choices (Snyderman & Rothman, 1987).

Is intelligence simply a knowledge-based phenomenon, or has science and our society largely approached this subject in too strict of terms? A person can become relatively knowledgeable in a certain line of work. He can learn how to perform well in that area and can even become a specialist or an "expert" within that field. All of this has to do with a person's functional abilities, with what he can or cannot do. What does this have to do,

however, with how conscious a person is, or how conscientious he is? A person, in effect, can learn all this, can become very knowledgeable in a given field of study, and yet remain largely unconscious of his actions, of what drives them, and to where they will lead.

Perhaps it is time that we readdress the subject of intelligence from a more wholistic perspective, from looking at it not only in functional terms but also in ethical and consciousness terms. To do this, let us begin by looking at two very distinct natures of mind that humans employ, the head-mind and the body-mind.

Two Human Nervous Systems/Two Minds

The first mind we will look at is the computational, knowledge-based mind, what will be referred to in this paper as the head-mind. The head-mind is linked to our physical nervous system and the sensory data it receives. Through the physical central nervous system, a person receives input from his/her environment through the sense organs and is then able to mentally order and organize this data such that he/she may respond more effectively and efficiently. This is a knowledge-forming process in which vast quantities of knowledge about things and how to do things can be organized and ordered into memory banks. Through the ages, as man has interacted with his environment and has built upon his mental organization of sensory inputs, he has progressively developed his knowledge base of the existential world in which he lives.

Physicist David Bohm (1980; 1994) spoke of this mental system and its history as the system of thought:

> What is the process of thought? Thought is, in essence, the active response of memory in every phase of life. We include in thought the intellectual, emotional, sensuous,

> muscular, and physical responses of memory. These are all aspects of one indissoluble process. To treat them separately makes for fragmentation and confusion. All these are one process of response for memory to each actual situation, which response in turn leads to a further contribution to memory, thus conditioning the next thought. (1980, p. 50)

Following Bohm's (1980; 1994) line of reasoning, the head-mind can be seen as a highly complex, reactionary phenomenon. It consists of the active memory response to sensory input and of the layer-like building of memory and knowledge through these responses. As Bohm (1980) indicates, this memory response system includes all reactionary forms of thought, including "intellectual, emotional, sensuous, muscular, and physical responses of memory" (p. 50).

The head-mind acts as a highly advanced computer that responds to and builds off of new sensory input. When developed, the head-mind can become a very effective decision-maker and problem-solver within its areas of expertise. As knowledge is built up, the head-mind develops a more highly effective and efficient map for responding to problems that occur within these knowledge domains.

For example, an auto mechanic that has worked in the business for twenty years will most likely have a greater knowledge base than a mechanic who has just started and will therefore be able to more effectively and efficiently diagnose car problems. However, if the new mechanic is more versed, say, in newer car models, he may have a greater expertise within this area than the older, "more experienced" mechanic and will therefore be more effective and efficient within this area of auto repair.

If the head-mind, therefore, deals with the mental organization of sensory input and with the development of knowledge-based skills and responses, what nature of phenomena does the body-mind deal with? To help answer this question, let us first look at the existence

and workings of a second human nervous system, as distinguished from the physical central nervous system identified by Western medicine.

From an energetic perspective, a second, corresponding nervous system is detectable in humans. This system, while still largely overlooked by Western science, has been known for years by esoteric teachings in both the East and the West (Collinge, 1998; Bailey, 1953). Indian philosophy refers to this nervous system as the chakra system.

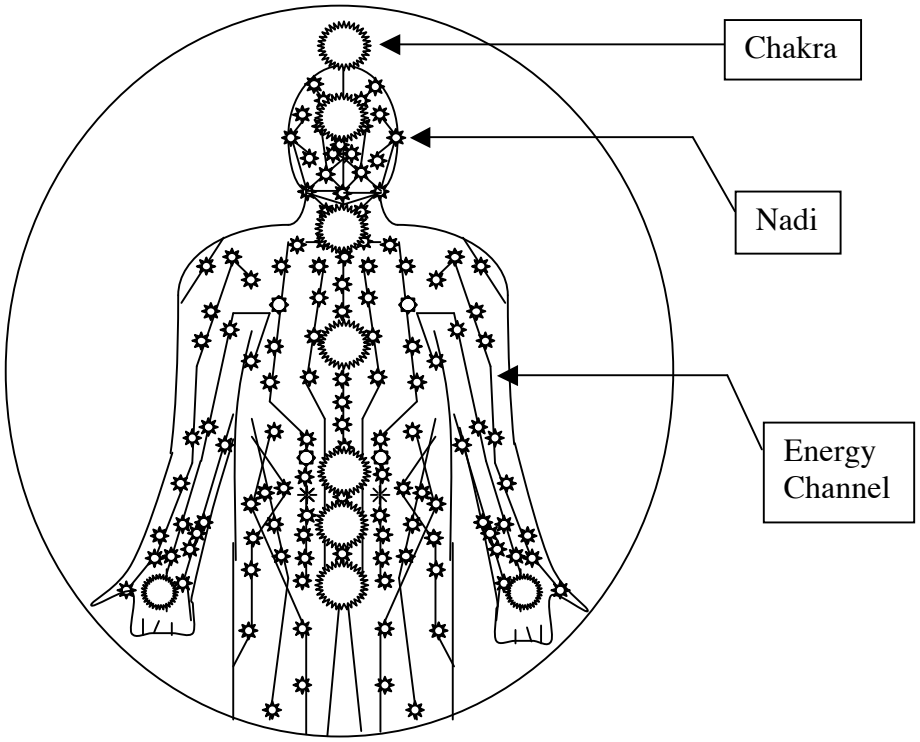


Figure 1. The Chakra System

This system parallels the central nervous system in that it too runs up and down the spine and is connected to a vast network of energy receptors/transmitters called "nadis" (Gerber, 1988). These nadis, of which there are millions, interconnect to form minor chakras, which then intersect to form the seven major chakras.

William Collinge (1998) describes this energetic nervous system in terms of the different names that indigenous cultures have given it.

> For thousands of years Oriental conceptions of our energetic anatomy both from China and India have shared the understanding that there are pathways along which our vital energy flows through our body, analogous to the unseen network of underground streams in the earth. In Chinese medicine these pathways are called our "meridians," and in India they are called our "nadis."
>
> … While our acupuncture points could be thought of as tiny energy centers, we also have several much larger energy centers. These are major centers of both electromagnetic activity and the pooling and circulation of vital energy and are recognized in indigenous cultures the world over. In the Huna tradition of Hawaii, they are called "auw" centers; and in the Cabala, they are the "tree of life" centers. In Taoist Chinese tradition the term is "dantien," and in yogic theory they are called "chakras." (p. 33-35)

This second nervous system has not gone completely unnoticed, however, within the field of Western medicine. Dr. Giuseppe Calligaris[ii] (as cited in Bek & Pullar, 1995; Schweizer, 1987), a professor of neurology and psychology, discovered a complex network of lines in the human skin that formed geometric shapes similar to those found in nature. At the intersections of these lines, of which there are millions, he found that the skin temperature is lower than other places on the skin and electrical conductivity is higher.

Through carefully orchestrated research studies, Calligaris (as cited in Bek & Pullar, 1995) discovered that these contact points, which he called "plaques," link directly to the conscious and subconscious portions of the mind:

> The stimulation of these plaques has the effect of opening the door so that the corresponding [energy] rays can stream through. A mechanism is released which gives direct access to the subconscious; the normal sensory perceptions are bypassed and the person in question can go beyond the limitations normally experienced with the consciousness. The subconscious is lifted to the level of the consciousness and the person receives extrasensory perceptions beyond his usual realms. (p. 51)

With reproducible results, Calligaris (as cited in Schweizer, 1987) demonstrated that when particular points of his test subjects' skin were stimulated, the subjects showed various forms of clairvoyant perception, with different points relating to differing natures of perception.

In a study in 1978, Dr. Hiroshi Motoyama (1978) collected experimental data which help to confirm the existence of the chakra system. In measuring the electrostatic energy emissions of advanced meditation practitioners, Motoyama was able to detect significant electrical disturbances in the regions correlating to the location of the chakras his subjects claimed to be activating.

Dr. Valerie Hunt (1978) at UCLA conducted a separate study in which she studied the bioelectric energy variations in areas of the skin corresponding to the positions of the chakras. Hunt paired these electrical readings of her test subjects with the recorded observations of a trained psychic aura-reader, who was present in the room but had no contact with the electrical readings at the time. The results showed that the electrical readings were able to detect distinct wave patterns associated with each of the different chakra colors that were recorded by the psychic. Moreover, the observed changes in the aura-fields of the test subjects correlated exactly with changes recorded by the electrodes.

These studies indicate that a second, energetic nervous system does indeed exist in humans. Moreover, Dr. Calligaris's (as cited in Bek & Pullar, 1995; Schweizer, 1987) work suggests that this energetic nervous system corresponds to alternate modes of perception,

what can be collectively grouped as extrasensory perception. According to Calligaris (as cited in Bek & Pullar, 1995), "normal sensory perceptions [what this paper refers to as the head-mind] are bypassed and … the subconscious [what is referred to in this paper as the body-mind] is lifted to the level of the consciousness and the person receives extrasensory perceptions beyond his usual realms" (p. 51).

This notion of a second, more encompassing mind has existed in Eastern esoteric literature for centuries. Zen Buddhists, for example, often refer to it as the discerning but non-discriminating, or non-differentiating, mind (Suzuki, 1998). According to one Zen master (as cited in Suzuki, 1998), the non-discriminating mind can be described from three different angles. It is "formless" in that it transcends the world of forms (of objects and things). It is "non-abiding" in that everything is seen systemically and as a continuum rather than as separate pieces or thoughts. It is "unconscious," not in Western psychology's sense of the word, but unconscious in the sense of seeing beyond one's sensory-based consciousness.

Another example is the Tibetan Buddhist body-massage practice called Kum-Nye, which is reputed to help awaken this body-mind by using pressure points on the body (Tulku, 1975). While the author has found no known study directly linking these Tibetan pressure points with those discovered by Dr. Calligaris (as cited in Bek & Pullar, 1995), the similarity between these two practices and their observed impact on consciousness suggests a commonality in the phenomena with which they are concerned. According to one Buddhist practitioner (Tulku, 1975), "if practiced with the proper understanding, [Kum-Nye] can put us in touch with the pure energies of our situations … we may see that these situations are not so different from so-called 'higher realities'" (p. 9). In both cases, the practice of stimulating

particular pressure points on the body has been observed in inducing shifts in perception, from sensory to extrasensory.

Let us now return to the question regarding the body-mind, of how it works, and of what nature of phenomena it works with. To do so, let us begin by looking at it in evolutionary terms. The body-mind has often been relegated to what is colloquially termed sixth-sense perception, or intuition. Evolutionarily speaking, it could be argued that both animals and prehistoric man needed the use of the two nervous systems and their corresponding minds in order to survive.

> One, the autonomic [nervous] system, reacted to close stimuli, the other, second, system allowed the man or animal to sense danger at some distance away—hurricanes, for example, earthquakes, the approach of predators. Nowadays there are still people who are able to foresee disasters, earthquakes and pending deaths and accidents. Wild animals retain their sensitivity to environment; indeed their survival depends upon their innate ability to sense the approach of predators and the location of food supplies. Early man would never have lasted had he not enjoyed the same aptitude, sensing the approach of strangers or wild animals from great distances away. Furthermore, he knew instinctively which plants were good to eat and which were not, by being drawn to them or repulsed. (Bek & Pullar, 1995, p. 56)

It appears, however, that modern man, living in the civilizations he has built up, has lost the need for such extrasensory perception in order to survive. Therefore, while man has continued to develop the head-mind through time, moving up the evolutionary ladder, or as Maslow (1970) termed it, the Hierarchy of Needs (from satisfying basic survival needs toward the fulfilling of higher-order needs), this body-mind has been left relatively dormant and undeveloped within the subconscious of the common man/woman (Bek & Pullar, 1995).

So how does the body-mind operate? It operates not in terms of knowledge and content, like the head-mind does, but in terms of energy. This can be seen by looking at the nervous systems with which the two minds correspond. The central nervous system receives

sensory data and therefore the head-mind operates on the basis of this data. The head-mind essentially deals with things, with that which already exists.

The body-mind, on the other hand, is linked to the energetic nervous system which deals directly with energies. Through internal reflection upon these energy experiences, the body-mind is able to see the potential within things. This is because energy is evolutionary by nature; it is always in the act of becoming (Bohm, 1980). A person who "sees" energies, therefore, sees things in process terms, in terms of the potential that can be enfolded and unfolded within things.

In Western literature, David Bohm (1980) speaks of these realms as the implicate and supra-implicate orders of the universe. Ken Wilber (1983) refers to them as the subtle and causal realms. Many mystic traditions, both Eastern and Western, also speak of these two realms. What they all point to is the sourcing of energies and the patterning of energies which lead to the things we see, touch, taste, smell, and hear in our everyday world of existence.

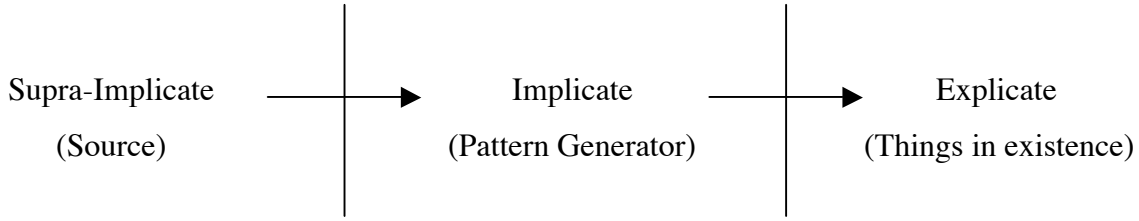


Figure 2. Embedded Orders

If a person wishes to move from working with what exists and what can be done with what already exists, to working directly with what potentially can be and the desired future

that can be created from that, he must orient himself to energies rather than things. This is the essential difference between the two minds and what they enable us to see and do.

Most scientific theories on intelligence to date have dealt with the subject from a strictly head-mind perspective. These theories have focused on such criteria as speed of reaction, problem-solving abilities, memory capacity, and knowledge comprehension (Anderson, 1992; Sattler, 1992). These functional abilities can then be roughly measured in terms of speed and accuracy of response, ability to solve problems of greater and greater degrees of complexity and abstraction, demonstrated competency within different fields of knowledge, etc.

According to David Wechsler (1944), author of the widely used WISC-R (Wechsler Intelligence Scale for Children—Revised) and the WAIS-R (Wechsler Adult Intelligence Scale—Revised), intelligence consists of an aggregate of different mental abilities, which by working together as a whole, make up a person's "global" capacity for intelligence.

> … [T]he measurement of intelligence consists essentially of some qualitative and quantitative evaluation of mental productions in terms of their number, and the excellence or speed with which they are effected. That is the only function which any measure of intelligence can possibly have. Abilities are merely these mental products sorted into different classes of types of operation. Thus, the class of operations which consists of effectually associating one fact with another and recalling either or both at an appropriate time is called learning; that of drawing inferences or educating relations between them, reasoning ability; that of merely retaining them, memory. (Wechsler, 1944, p. 5)

All of these measurable aggregates, however, focus on the mental, computational abilities of a person. They, in effect, measure how advanced a computer a person can be.

From a body-mind perspective, intelligence has much more to do with the evolving of energies. It has to do with the relative capacity to see the inner potentiality of things and to ascertain those actions that will lead to the manifestation and further evolution of that

potential. Intelligence from this perspective is always working with what potentially can be rather than with what already is.

Orders of Energy and Levels of Intelligence

How is it that energy works? The second law of thermodynamics states that the general trend of physical processes is towards increasing entropy, or in other words, states of increasing probability and decreasing order (Bertalanffy, 1968). From a developmental and evolutionary perspective, however, we can see that overall, living systems through time have tended to increase in levels of order and organization rather than decrease (Russell, 1983). This does not mean that the second law of thermodynamics is invalid, but rather that it is limited to the study of closed, and therefore non-living, systems (Prigogine, 1980). Therefore, to truly study and understand energy in living systems terms, in terms of human beings and human consciousness, we must study and understand life and life processes.

Modern physics has shown us that all things that we see, touch, taste, smell, and hear are manifestations of energy (Zukav, 1979). We are, in effect, swimming in a bath of energies. Furthermore, energies are not all the same in nature. There are different orders or natures of energy. The field of quantum physics was founded on the discovery by Max Planck (as cited in Zukav, 1979) that energy travels in discrete packets, or quanta. These energy packets correspond to light frequencies, and at each color frequency, all the corresponding energy packets have the same amount of energy. In other words, all the energy packets of green light are the same size and all the energy packets of violet light are the same size, though larger than those of green light. Therefore, there is a spectrum of energy that

corresponds with the spectrum of light, with lower frequencies having lower energy and higher frequencies having higher energy.

Dr. Hunt's (1978) research findings on the wave pattern emissions of different chakra centers suggest that humans receive and transmit different orders, or quanta, of energy through the various chakras. These orders of energy, therefore, may be equated to the chakra energies which are depicted within a number of different mystical traditions (Bailey, 1953).

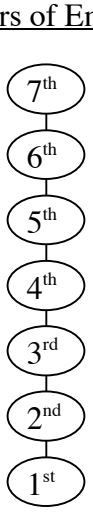


Figure 3. The Chakras

It can be hypothesized that each quanta of energy electrochemically affects the body-mind in different ways, thereby enabling the body and mind to perform different echelons, or orders, of work (Krone, 2000-2001). These are orders of work in the sense that philosophers Jan Smuts (1926) and Ken Wilber (1983), in paraphrasing Smuts, speak of them, work that encompasses and has impact upon greater and greater wholes.

> Everywhere we look in nature, said the philosopher Jan Smuts, we see nothing but wholes. And not just simple wholes but hierarchical ones: each whole is a part of a larger whole which is itself part of a larger whole. Fields within fields within fields,

> stretching through the cosmos, interlacing each and every thing with each and every other.
>
> Further, said Smuts, the universe is not a thoughtlessly static and inert whole—the cosmos is not lazy but energetically dynamic and even creative. It tends to produce higher- and higher-level wholes, ever more inclusive and organized. This overall cosmic process, as it unfolds in time, is nothing other than evolution. And the drive to ever-higher unities, Smuts called holism. (Wilber, 1983, p. 75)

It is hypothesized, therefore, that with each level of chakra energy, the body-mind is enabled to work at different levels of holism.

The first quanta of energy enable the body to deal with the stress that is placed upon the body from moment to moment (Krone, 2000-2001). This order of energy, in effect, powers the damage control system of the body and mind. The second quanta, or chakra, of energy enable the body to work with energy flow and with the distillation of toxins produced and ingested by the body. The third chakra energy enables the body to maintain a steady state through homeostatic management of perturbations to the system (see Cannon, 1932). Psychologically, this would be evident in the equanimity and emotional balance of a person.

Esoterically, all of this has been known and utilized by energy healers for thousands of years (Bek & Pullar, 1995). More recently, Western scientists have begun to research and work in this arena as well. Quanta light machines have recently been developed, and are currently being tested, that help heal and regenerate these different bodily processes through the emission of different light frequencies (Hunt, 1996).

These first three chakras, therefore, are inherent in our energy makeup; they are part of our biological existence. As a person moves to the fourth chakra, however, a threshold is passed. The person moves from being merely a receptor of energy to being a generator of energy, in the form of an energy field (Krone, 2000-2001). It is with this chakra that a person

begins to generate feelings of compassion, faith, and hope. At this level, a person's intelligence comprises more than just his knowledge of things, more than just his cognitive thinking powers. At this level, a person's intelligence includes the power to uplift and help make anew the energy states in oneself and others. This would help explain why plant growth is affected by the generative emotions of compassion and love—emotions that are commonly attributed to the fourth chakra—as a variety of studies have indicated (Hutton, 1982; Tompkins & Bird, 1973).

It is at this fourth level of energy that a person begins to self-actualize. It is a mental shift from constantly working on the stabilization of oneself and the environment in which he lives, to one of working on the development of self and the selves of others. Abraham Maslow (1973) observed a similar shift in his studies with self-actualizing people:

> [The research] led ultimately to the discovery of a most profound difference between self-actualizing people and others, namely, that the motivational life of self-actualizing people is not only quantitatively different, but also qualitatively different from that of ordinary people. It seems probable that we must construct a profoundly different psychology of motivation for self-actualizing people, i.e., expression—or growth motivation—rather than deficiency-motivation. … Our subjects no longer "strive" in the ordinary sense but rather "develop." (p. 186)

The work of self-actualization, however, is not a stable process in and of itself. All organisms are part of greater systems which influence the way they behave and think. For instance, for a student to remain and be successful in our current education system, he must learn to adopt certain behavior patterns befitting of his role. The student cannot just run around the classroom hollering whenever he feels like doing so. He must sit at a desk and not speak out of turn. A student must also structure his thinking in certain ways. He must develop and follow certain thought structures in order to solve math problems, write scholarly papers, and perform science experiments. This was Piaget's (1952) basic thesis, that through

organization and adaptation, all organisms become a function of both their nature and their environment.

Therefore, for a person to continue to work on self-actualization, he must also begin to work on the actualization of the larger systems of which he is a part. This is what the fifth and sixth chakras enable us to do. Fifth chakra work has to do with the adopting of roles within a system (Krone, 2000-2001). For any system to function, certain roles must be carried out by the constituents of that system. If teachers stopped serving their role, for instance, or students theirs, our education system would cease to be able to function. What roles we choose to serve, however, will impact the way we structure our thoughts and pattern our behavior. For example, a real estate agent would look at and relate to a plot of land in a very different way from the way a farmer would, or the way a geologist would.

What fifth chakra energy does is enable the body-mind to see how different roles structure a person in different ways and, combined with fourth chakra energy, to see which roles will be a developmental match for a person's unique nature and stage of development. By adopting a role, a person starts to actualize the self he needs to be in order to perform that role. This notion corresponds with esoteric literature (Bailey, 1953), which describes the fifth chakra in terms of the power to express. It is through the adopting of roles that people find vehicles or contexts in which they can develop their capacity to self-express. As people develop in their capacity to perform their roles, the systems which they are serving also develop. Therefore, it is a matter of choosing roles which will cause both the individuals and the systems of which they are a part to be upwardly mobile in regard to the chakra energies. Fifth chakra work, therefore, deals not only with the development of an individual, which is

mainly fourth chakra work, but with the development of that individual in relationship to the development of the larger systems of which he is a part and within which he works.

Rather than continuing up the hierarchy of chakra energies, let us now return to the subject of intelligence as it relates to these orders of energy. It has been hypothesized in this paper that the different quanta, or chakras, of energies enable the body and mind to perform different orders, or echelons, of work. Evidence of this with the lower three chakras can be surmised by the accounts of esoteric healers' abilities to affect different bodily processes through the emanation of vibration frequencies (Bek & Pullar, 1995). This is further backed by recent developments with quanta light machines that affect different processes within the body through the emission of different quanta of light energy (Hunter, 1996).

Furthermore, it has been hypothesized that different echelons of mental powers are enabled by these different levels of chakra energy. While the author has found no existing scientific evidence of this, it seems feasible that experiments could be devised to test this hypothesis. For example, a researcher could use psychological assessments to measure a person's emotional stability and the changes in this measurement as the person underwent a series of light therapy sessions. For the time being, however, reason will have to suffice as the means for building a case for this hypothesis.

Continuing further with this line of reasoning, the argument could be made that these orders of mental powers and a person's relative capacity to utilize these different mental powers are equivalent to a person's level of intelligence. Day to day, hour to hour, a person may fluctuate up and down these orders of energy. At times, a person may be operating at a high order of energy and therefore be able to employ higher mental powers. At other times, for instance, when a person comes down with the flu, he may operate at a lower level of

energy and thus only be able to employ lower orders of mental powers. Everyone has had days where his mind seems to move at a sloth-like pace and others where it speeds along. Therefore, following the definition of intelligence being developed here, it can be stated that a person's level of intelligence will fluctuate in natural cycles and/or waves.

Functionally, a person can begin to learn how to manage these energy states by engaging in processes that help to drive the body-mind upward in levels of energy. Yogic practices of meditation, mantras, and body movements, all can be used for this purpose of moving people's mental capacities, one's level of consciousness, so to speak, to higher orders of energy. Therefore, functionally speaking, a person's level of intelligence has to do with the level of mental capacities at which he is able to operate.

A person's level of intelligence, however, also has what may be called a "being" component to it. In other words, it has a qualitative aspect to it as well as a quantitative aspect. This being aspect of intelligence deals with the capacity to bring more and more life and liveliness to the things we interact with. This is related to one's work in developing a religious attitude toward life (Krone, 2000-2001). One can work on generating a greater and greater compassion for life, on building faith in oneself and one's capacity to live life more fully, on inspiring greater hope in others, and on developing a truly religious caring toward the development and evolution of life in all things.

Two famous examples of this aspect of intelligence can be seen in the figures of Mahatma Gandhi and Martin Luther King. Both men were, mentally speaking, clearly very bright. But they could not have accomplished what they did without the level of being that they developed and created around them. Through their lifetime, they developed greater and greater capacities to lift the people they interacted with (whether they be enemy or ally) to a

higher order of being. In fact, English generals would advise new officers to avoid meeting Gandhi at all cost (Easwaran, 1978), because they knew that when they interacted with him, it was awfully hard for them not to love the man and not to see the situation with India in a very different light. Therefore, intelligence has not only a functional aspect but also a being aspect, an aspect that involves not only raising one's own intelligence but also that of those around one, through the sparking of new life.

Of Mice, Human Ears and our Grandchildren's Grandchildren

We live in a world today that operates primarily through the head-mind. The rules by which we conduct our science, our businesses, our education systems, our legal systems, and just about any other system in our society, are rules based upon that which can be sensorially observed. If we cannot see it, taste it, touch it, hear it, or smell it (either directly through our organs of sensory perception or indirectly through the mechanical instruments which we devise) then it, in effect, does not exist. The question that this raises, however, is what implication this has for our world today.

Just recently, a news column in the local paper reported the following:

> A brochure landed on my desk last week, depicting a bioengineered mouse with a human ear growing out of its back. The brochure was promoting a teach-in that will be held at New York's Hunter College the last weekend in February. Some 40 speakers will discuss the links between industrial science and global trade. The caption beneath the mouse asked the question: "Do we know what we're doing?" (Abate, 2001)

This article brings us full circle back to the question posed at the very start of this paper. If we are creating technology that has greater and greater potential to destroy all life on Earth, are we really being and acting with intelligence? While a human ear grafted on a mouse does

not pose a dangerous threat in and of itself, it does raise the question as to whether or not we know where our actions are leading us.

We are in a day and age where technological advances have been increasing at exponential rates (Russell, 1983). If you look at this globally and in energetic terms, you could say that, overall, people are becoming more and more able to manipulate energies in living systems. This is what bioengineering is essentially all about. It also explains the increasing interest in Eastern practices that focus on the manipulation of internal human energies. All of this speaks of wonderful potential. It also speaks of a great potential catastrophe. The real question laid before us, therefore, is what nature of ends do we (meaning individuals, humanity, and the planet as a whole) need to move towards in order to realize this evolutionary potential and thus likewise avoid a potential catastrophe?

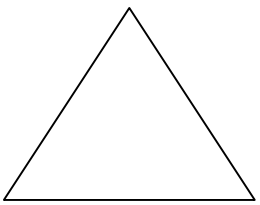
Peter Russell (1983), a British physicist, argues the point that our current global crisis has to do with the fact that our technology has evolved to such a level beyond our consciousness that we are destroying things at a systems-wide level. Perhaps it is more accurate to say that the current levels of intelligence at which we as humans collectively operate do not sufficiently enable us to deal with the complexities of the technological and social world we now live in. To deal with our current world crises effectively, we must therefore be able to collectively move ourselves to a higher order of intelligence. This order of intelligence has to do with seeing the aims of things. It has to do with the capacity to envision where our actions will lead us and to ascertain those actions that will ultimately generate greater value for our collective lives and for our world. It is a matter of creating the future for our grandchildren and their grandchildren to follow. It is this order of work that can be called sixth chakra work (Krone, 2000-2001).

To see and work on the aims of things, a person needs to move beyond the order of developing self (fourth chakra) and beyond the order of developing systems and self (fifth chakra), to that of working on the very evolution of the systems of which he is a part. This is the work of choosing the appropriate aims toward which a system as a whole then moves.

With our rapid advancement of potentially devastating technology, I believe it is time that we ask ourselves, not the question of what ends we are currently moving toward as a society (which may give us a dismal outlook), but rather what greater ends we can potentially be moving toward. I believe a wholistic answer to this question would look something like that posed by Charles Krone (2001, February 15):

> A Three-fold Aim for Humanity:
>
> We need to discover how to bring about an ordered evolution in our systems—
>
> in a way that is, first of all, spiritually uplifting, secondly, regenerative of the potentiality of our planet to continuously bring forth life of new and higher order and greater intelligence, and thirdly, lifts up the potentiality of humanity by enabling people to live in open systems that support rather than block their inherent drive for potentiality—
>
> so that those aspects of humanity that at the present point in time are living in a sense of continuous depletion and degeneration can engage in a process of regeneration. (p. 2)

Making Life More Spiritual



Regenerating the Potentialities of Our Planet

Elevating the Potentialities of Humanity[iii]

What are the developmental requirements posed in pursuing such an aim? First of all, we must redefine our understanding of what it means to be human. This requires making the shift from a personal to a transpersonal point of view, to viewing humans and what we are about from a more systemic and less anthropomorphic perspective. From this light, we can then begin to see ourselves in terms of the roles we serve and have the potential for serving within the greater planetary and universal systems of which we are a part.

Secondly, to pursue this aim we, as collective members of humanity, would have to create a more unified picture of the higher order being that we can become. Man as he is today cannot accomplish this higher order aim. Most of the systems we live in today are driven primarily by the head-mind, and it is largely because of this that we find ourselves in the dilemma we are in today. What is needed is a picture of man as he can potentially become. This is what Ouspensky (1973) referred to as "the psychology of man's possible evolution," as opposed to our current psychology and its primary concern with "man as he is." This is not an act of fantasy, of envisioning what is non-existent in man. Rather, it is an act of looking at what is "pre-existent" in man and, therefore, what potentially can exist.

Underlying all of this, and what would make possible these developmental advances, is an intelligence that looks at the inner potential in things rather than at the current state of things. It is an intelligence that works with energies and the internal processing of energies rather than with things and the manipulation of things. This is an intelligence of the body-mind.

This does not mean that head-mind intelligence is not useful or will not continue to be useful. What it means is that head-mind intelligence in and of itself is blind as to where it leads us. It is a workhorse, that when guided, can be put to great use and benefit. Leave it

without a guide, however, and we end up putting human ears on the backs of mice. And this, of course, is one of the more benign scenarios that a guide-less head-mind can lead to.

The challenge we face today is that man-made systems themselves are both built from and reinforcers of our existing systems of thought. Without the continued guidance of our body-minds, these artificial systems (Simon, 1981) can easily become more and more disconnected and discordant with the natural systems they are a part of. This results in increasingly closed systems that, in accord with laws of physics, become increasingly entropic (either by creating increasing internal disorder or, through the act of dispersion, creating increasing disorder to its environment) (Prigogine, 1980). This concept of exporting entropy into our environment helps explain why we face the environmental dilemmas we have today (Capra, 1982; Russell, 1983).

To extricate ourselves from this current dilemma and potential future crises, we must first return to the intelligence of the body-mind. It is a matter of employing our intuitive mind to guide our thinking rather than the reverse. It is through this nature of intelligence that we can then begin the work now required of us, of not only actualizing ourselves, but also the systems of which we are a part.

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Appendix

Acknowledgements

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Footnotes

[i] This quote was found on the website: WilliamJames.com. Lacking further documentation, I have refrained from citing it as a reference.

[ii] All translated copies of Dr. Calligaris's written work are currently out of print and those copies that do remain are not widely circulated. Until such time as I can locate a copy, I must resort to citing Dr. Calligaris's work, if I am to cite his work at all, through secondary sources.

[iii] This framework is used with permission from C. G. Krone and members of the Institute for Developmental Processes, appearing in Curriculum, unpublished transcriptions of lectures and dialogues by members of the Institute for Developmental Processes, 2001, February 15th, p. 3.