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MIND-BODY ENERGY

The greatest bugaboo of what we call science is the unexplained phenomenon. Unless an observed event can be fitted into an existing theory arrived at by using the so-called scientific method, one of three things must happen -- (1) an existing theory must be changed so as to explain the event, (2) a new theory must be formed to explain it, or (3) the existence of the event must be denied. A changed theory or a new theory can sometimes be formulated by use of Bacon's inductive method of scientific discovery. Never mind that Dr. Karl Popper has shown that this method is wrong at every point; nearly all members of the scientific "establishment" still insist that it is the only truly scientific method. But occasionally such an unexplained observation cannot be fitted into any existing or new theory by a member of this establishment; and in such a case, its existence must be denied. This is usually accomplished by attacking the validity of the observation and/or the character of the observer.

Some nonconforming facts are simply too outrageous to be tolerated and some scientists ridicule them out of existence. This has been especially true in the field of parapsychology. These self-appointed "scientific purists" claim that the best explanation for well validated parapsychological phenomena is trickery. Experimenters in this field are treated as heretics and are often threatened with loss of livelihood and reputation. In fact, as Dr. Eugene Condon, former head of the National Bureau of Standards put it, "Flying saucers and astrology

are not the only pseudosciences which have a considerable following among us -- There continues to be perception, psychokinesis, and a host of others. In my view, publishers who publish or teachers who teach any of the pseudosciences should, on being found guilty be publicly horsewhipped."

In the face of such wild abuse, it is not surprising that a good many scientists are deterred from conducting experiments, or at least publishing results, which tend to explain these "unexplainable" phenomena. Nevertheless, some scientists have seriously investigated a number of the phenomena since the late 1800's and this field of study has grown rapidly in recent years. More and more, serious and reputable investigators are willing to defy the barbs and slanders of the members of the scientific "establishment" and the establishment itself is very slowly beginning to accept the investigators as reputable scientists rather than as charlatans. Perhaps some of you read in the Courier Journal about 10 days ago that experiments in mental telepathy conducted by scientists at Stanford involving Uri Geller were published in the reputable British science magazine, Nature, even though it editorially damned the experiments with faint praise.

One of the areas of parapsychology which is potentially most useful, and which has recently been the subject of scientific investigation, is the control of the autonomic nervous system. This is the portion of our nervous system which regulates the body's organs and through which most psychosomatic (mind-body) diseases are developed. As more than one-half of human diseases are psychosomatic, that is, they result from the body's reaction to psychological

stress, it is clear that a method of control of the autonomic nervous system/could help prevent or cure such diseases that would be extremely valuable.

Until fairly recently, it was thought that this autonomic nervous system could not be consciously controlled to any appreciable degree. Recent evidence demonstrates, however, that human beings can develop voluntary, or conscious, control of the autonomic nervous system, apparently by learning to control normally unconscious parts of the mind. This kind of learning usually requires visual or audible feedback, such as a flashing light or a buzzer, to let the subject know whether or not he is controlling the desired portion of his unconscious mind.

We usually believe that there is a rather definite line between the conscious and the unconscious, or the voluntary and involuntary, nervous systems. But this line can apparently shift back and forth. For example, when we learn to drive a car we focus conscious attention to every detail -- manipulating steering wheel, gas pedal and brakes according to what we see on the road ahead of us. From this visual feedback, we learn conscious control of the voluntary muscles, making such corrections in our driving as are necessary. After a lot of experience, however, driving becomes automatic. We sometimes drive long distances while thinking about something else, and can hardly recall later a single detail of our driving. When this happens, processes normally controlled by the conscious have temporarily shifted to the unconscious. Conversely, when through feedback, voluntary control is exerted over so-called involuntary processes, such as dilating or contracting muscles that control blood flow, the shift is from the unconscious.

Some ten years ago, a research project to test this conscious control of the unconscious was begun at the Menninger Foundation in Topeka, Kansas. Equipment was set up to measure the skin temperature, breathing rates, blood flow in the hands, brain waves and heart rates of the subjects, who tried by autogenic (self regulated) means to raise the temperature of one hand by increasing the blood flow into that hand. Monitoring equipment providing visual or audible signals for feedback were installed; and after a considerable amount of this "autogenic biofeedback training", most of the subjects gained quite a bit of voluntary control over certain involuntary processes. In the short time since then, voluntary controls research has grown greatly and has begun to show positive results in alleviating a number of medical complaints such as migraine headaches, high blood pressure and unconscious muscle tension.

This extension of conscious control over involuntary systems has far-reaching implications for psychology and medicine, even though at first glance it may appear to be little more than a simple medical advance. For one thing, it strongly suggests that human beings are not biological robots, controlled entirely by genes and the conditioning experiences. When migraine, which is at least partly genetic in origin is brought under voluntary control through autogenic feedback training, the patient is apparently overcoming a true genetic predisposition. And, in addition, when people learn to control physiological problems by this method, they often find themselves relieved of some emotional and mental symptoms at the same time.

But now we come to some really "mind-bending" (no pun intended) results of recent investigations into the self-

regulation of mind-body energy by...conscious control of normally unconscious functions. Such energy may for the purpose of discussion be divided into two separate but related areas -- Mind-body energy inside the skin, and mind-body energy outside the skin. In both areas, experiments involving an Indian yogi named Swami Rama recorded some remarkable results. These experiments were conducted under strict laboratory conditions by scientific researchers of unquestioned integrity. After being wired for precise measurement of brain waves, heart behavior, respiration, skin resistance and potential, muscle tension, blood flow in hands and hand temperature, he first made the temperature of the little-finger side of his right palm become 10° F. warmer than the temperature of the thumb side. He apparently did this by controlling the flow of blood in the large radial and ulnar arteries of this wrist. Without moving or using muscle tension, he "turned on" one of them and "turned off" the other. Later, the Swami demonstrated that, by conscious control of the unconscious, he could actually stop his heart from pumping blood momentarily and could produce specific brain wave patterns on demand. When asked how he could do this, he explained that they were possible because "all the body is in the mind. But", he added, "not all of the mind is in the body." In other words, each part of the energy structure called the body is literally a part of the energy structure called the mind, although the reverse is not altogether true."

Two of the most interesting concepts of the raja yoga school of philosophy relating to inside mind-body energy are (1) that every part of the body is represented in the unconscious, and (2) that every part of the body represents the unconscious. If they are valid, they mean that when we

extend conscious control over a specific part of the unconscious, as in autogenic feedback training, the associated physiological processes can be brought under voluntary control. And the abovementioned experiments with Swami Rama certainly seem to indicate that these theories are at least partially valid.

According to yogic theory, the mind is not merely a person's perception of involuntary electrochemical changes in the body. On the contrary, the body is only the densest section of a "field of energy" that includes both mind and body. Our bodies, like everything else in the universe, are electromagnetic fields with swarms of what we call "particles" as dense portions. We are almost entirely empty space, although we see ourselves and everything else as solid matter because that is the way we were constructed by evolution to see.

Yogis believe that, without exception, all body processes are mind processes. The mind handles all energy inside our bodies because it is such energy, although that is not all it is. For mind is an energy structure, and all matter, physiological or otherwise, is a matrix of energy that is somehow related to mind. We are part of the general field of energy in every cell and in every thought; but we are not normally aware of this because we are not conscious of our own unconscious.

Another belief of raja yoga is that the mind, which is another name for consciousness, is for practical purposes divided into three levels. The first level is the conscious mind, which is brought about by the discharge of psychic energy through the central nervous system. It governs organs

and senses up to a certain extent, such as voluntary muscles, some bodily functions and the senses of taste, touch, smell, sight and hearing. It tries to follow reality in life, but it faces great difficulties in doing so. It uses forces of induction and deduction, analysis and synthesis; logic and philosophy; science and art; and attempts to become master over both matter and spirit. It has full freedom to select the divine or the demonic, and the power to accept or reject any path, idea, proposition or suggestion at its own disposal. It is the mind through which we perform our daily work. The second level is the subconscious mind, which is brought about by the discharge of psychic energy through the autonomic nervous system, which has its center in the central nervous system. All involuntary functions of the body are governed by the subconscious mind, such as the involuntary muscles, functions of the heart, lungs, digestive system, kidneys, etc. The subconscious mind works constantly; is the eternal storehouse of all memories and experiences; has absolute control over all functions and sensations in the body; and will react according to the intensity, amount and degree of suggestion. The third level is the superconscious mind, which can be obtained by man only when psychic energy is transformed into higher energy through meditation, contemplation and concentration. In the state of the superconscious, one perceives an infinite magnetic current around and within one's self and sees inexpressible peace and happiness. One obtains unbelievable powers. The superconscious mind has eternal existence, eternal knowledge, eternal consciousness and eternal electromagnetic influence and control over all minds. It is the manifestation of Universal Consciousness.

I realize that these concepts may sound to you as if they are purely those of classical Eastern philosophy, with little or no connection with Western scientific thought. Certainly, they have not all been substantiated by Western scientific experiments. But let's keep them in mind as we look at the results of further experiments involving mind-body energy both inside and outside our bodies.

Jack Schwartz is definitely not a product of Eastern culture. He was born and raised in Holland, and lived there until 1957 when he came to the United States at the age of 32. He has lived in this country since that time, now residing in Salem, Oregon. He has known of his ability to control pain ever since he was a child; and a few years ago he submitted to scientific investigation of this ability. He was wired in much the same way as was Swami Rama. Then he produced a 6-inch darning needle, rolled it in the dirt on the floor and pushed it through the biceps of his left arm. It penetrated the skin, muscle and a vein. He then pulled it out and the wound bled for about 15 seconds. Then he said, "Now it stops." The bleeding continued for two seconds, then stopped. In a second demonstration, there was no bleeding at all. At no time did he appear to be in any pain.

But even more intriguing, the monitoring equipment showed that he was under no unusual stress at any time during the experiment. His heart rate stayed essentially the same. The thermistors attached to his fingers showed a rising temperature -- a sign of relaxation -- and his brain-wave patterns showed a state of alert detachment.

When asked how he controls his body functions in this way, Schwartz said that such control depends on cooperation

from the "subconscious". He does not force the phenomena to take place, but asks his subconscious if it is willing. He also gives his "paraconscious" time to consider the situation. He described this level of mind as "wiser" than either the conscious or subconscious -- a kind of intuitional guide. This doesn't sound too different from yogic theory, does it?

And when it comes to mind-body energy operating outside the human body, so much data has been collected over the last century that many scientists believe that the subject can no longer be ignored. The American Association for the Advancement of Science, the American Psychological Association and the American Psychiatric Association now all recognize the need for serious scientific inquiry into the field of parapsychology. Parapsychology is the study of several kinds of phenomena, including clairvoyance (seeing without using the eyes), clairsaudience (hearing without using the ears), precognition (knowing of future events with no known source of information) and psychokinesis (the movement of physical matter by mind alone).

This last type of phenomena, psychokinesis, seems most likely to yield scientific data that are beyond the need for statistical support. One of the earliest scientific investigations in this area was conducted by Sir William Crookes, who was a chemist and a physicist and a president of the Royal Society of London. After years of research, he announced that he had observed psychokinetic events under strict laboratory conditions. But he could not account for the facts and could offer no suitable theory to explain these phenomena. And, of course, he had no color movies,

videotapes or polygraphs to record information. So the evidence he reported convinced only those who observed the events directly. Sir William's less-charitable colleagues thought he had lost his mind.

Some of us can remember the next major effort to investigate possible psychokinetic effects, when Dr. Joseph B. Rhine and his wife, Louisa, conducted extensive experiments at Duke University in the 1930's and 1940's. They tested whether subjects could influence the roll of dice by thought, whether thoughts could be externally transmitted to another person using cards with various symbols on them, and by the use of playing cards. Literally thousands upon thousands of such experiments were conducted, and the statistical evidence which was amassed from them showed that the probability that chance alone could account for the experimental results was less than one in several trillion. Yet, without personal experience, most scientists and many laymen remain unconvinced.

However, a recent experiment involving none other than our old friend, Swami Rama, might be more convincing. He was fitted with a plastic mask that covered his nose and mouth, breathing through a foam-rubber insert that was covered by a plexiglass shield to deflect any "air currents" down to the sides. Then, while seven researchers watched, the Swami caused a 14-inch aluminum knitting needle mounted horizontally on a verticle shaft 5 feet away from him, to rotate toward him through 19 degrees of arc. Even with this, one of the observers was convinced that he had used some method explainable by some known physical law!

As far as can now be determined, no one has yet been able to detect the "energy" associated with such psycho-

kinetic phenomena. But it seems only a matter of time until a satisfactory energy detector is developed and the field of psychokinesis will be opened for further studies. Of course, we cannot now predict just what these experiments will show or just what theories might be developed to explain the results. But both Jack Schwartz and Swami Rama, whose background cultures are very different, have the same theory to explain the psychokinetic phenomena which they have observed and have helped demonstrate.

According to their theory, not only is all of the body in the mind, but all of nature is a "field of mind". Magnetic, electrostatic, electromagnetic, gravitational and other fields surround the planet and are special parts of this normally unconscious field, and mind-body energy outside our bodies can be controlled when we become conscious of the extrapersonal extension of our unconscious. Since this is a generalization of the theory that explains voluntary control of inside mind-body energy, we can control such energy, both inside and outside, after we become conscious of our unconscious and learn methods of control. Psychokinesis, and all other parapsychological phenomena, as well as control of physiological processes, are included in this field of mind theory. And this, too, doesn't sound too different from Yogic theory, does it? Of course, it may be entirely wrong, but no one has yet come up with a better theory ~~one~~ that I know of. Do you?