The extremely diverse and conflicting views currently in vogue about the nature and characteristics of Kundalini, and the lack of a concise and reasonable theory on which to build an investigation, have recently led to a tremendous amount of experiences in the past leave no doubt that we are dealing with a phenomenon which is very real. But the almost total lack of recognition given it by modern medicine has served to heighten the confusion and fear in the minds of those who are going through these all too real experiences.

The growing number of cases of people who are having what has been termed 'spiritual crises' and the many accounts of those who have had similar scientific advances has only served to heighten the confusion and fear in the minds of those who are going through these all too real experiences.

Since we are dealing here with a subject which is concerned in part with non-physical aspects of creation, such as life-energies and consciousness, the scientific methods that have led to such tremendous progress in the material realm are of only limited use in studying these phenomena. On the other hand, the written material that has come down to us from the spiritual traditions and Yoga systems of the past, although obviously written by men and women who had a thorough understanding of the effects of Kundalini, was recorded without the knowledge we currently have of physiology, biology, neurology, physics, chemistry, etc. It is for this reason that this valuable body of material has been largely dismissed by many modern investigators as the product of primitive superstition.

The crux of the problem lies in the fact that reality, as represented by these ancient philosophies and reality as it is postulated by modern science are radically different in nature. Whereas the modern view is based on the assumption that matter is the primary basis of existence and that consciousness is an epi-phenomenon stemming from it, the ancient spiritual philosophies hold exactly the reverse view. But, as modern science has been sadly deficient in answering very basic questions regarding the nature of mind, life, consciousness and the origin of our existence, the conclusion may be readily drawn that the scope of creation is radically beyond what modern science currently can comprehend.

Thus, the solution to the problem of what direction a modern investigation into the nature of Kundalini should take may best be found in a re-examination of the vast body of ancient material on the subject with a scientifically based but philosophically flexible attitude. It would have to be kept in mind by those doing such an investigation that the relevant information is there in an allegorical form, recorded in a cryptic terminology that would have to be painstakingly deciphered, eliminating what does not stand up to modern scrutiny. But such a study would doubtless uncover a tremendous body of knowledge which would be invaluable as a guide to the direction for more quantitative forms of research.

Let us make a beginning, then, by taking a brief survey of the views taken by the ancient spiritual philosophies.
and Yoga systems to see if they form a logically consistent picture which could be used as a basis for an investigation into that mysterious process taking place in the human body called Kundalini.

The Indian Tradition

Knowledge of the mechanism of Kundalini is very ancient. It dates back at least to the time of the Indus Valley civilization which flourished in what is now present-day India and Pakistan from about 3,000 B.C. onwards. Excavations indicate that this culture may have attained a degree of development which has rarely been surpassed until the last few hundred years. Ancient seals from this time depicting a three-faced God, sitting on a throne in a crossed-legged Yoga posture on a deerskin, surrounded by a tiger, buffalo and rhinoceros are almost without doubt representations of the God Shiva of later Indian philosophies. The fact that the male God depicted on the seals is shown in Yoga posture with erect phallus demonstrates a definite knowledge of the intimate connection that Kundalini has with the reproductive system.

The Vedas in India are the oldest recorded major scriptures known to exist and it is even held that they were transmitted orally for centuries prior to being written down. Following them, at a much later time, were the Upanishads, held to be the product of a number of great illuminaries. After that came the Vedanta, Shaiva, Vaishnava, Buddhist and Tantric philosophies, to name a few of the primary ones. Thus, there was literally a continuous development of the science of Yoga for millennia during which time the disciplines which led to the awakening of Kundalini were developed and refined to an extent that has been unmatched in any other known culture in the world. The following is a brief description of the essence of these philosophies and how it relates to an investigation into Kundalini.

The ultimate reality behind the phenomenal universe, according to the Upanishads, is referred to as Brahman. The difficulty with understanding Brahman lies in that it is said to be attributeless—that is, it has none of the physical characteristics by which we normally make identification. It has no size, no shape, no color, no taste, no smell nor form. Brahman is held to be infinite, unbounded by time or space, the source of all. It is a unity, with no degrees or differences or sub-divisions. Being infinite and formless, it is therefore unknowable by the intellect.

The Maitri Upanishad (VI-17) says "Verily, in the beginning, this world was Brahman, the Infinite One. Infinite in the south, infinite in the west, infinite in the north, and above and below, infinite in every direction. For Him, indeed, east and the other directions exist not, nor across, nor below nor above. Incomprehensible is the Supreme Self, unlimited, unborn, not to be reasoned about, unthinkable. He whose Self is space. At the dissolution of all, He alone remains awake. Thus from that space, He awakes this world which consists of thought only. By Him alone is all this meditated on and in Him it is dissolved."

The Bhagavad Gita, referring to it as The Unmanifested, says (8-18) "All the manifested stream forth at the coming of day; at the coming of night they dissolve even in That, called the Unmanifested."

But this view of reality is certainly not limited to the Indian traditions alone. Plotinus, in his Enniads (VI-9.3), expresses a strikingly similar viewpoint. He says "The One is the engender of the All. It can itself be none of the things in the All, that is, It is not a thing. It does not possess quality or quantity. It is not an Intellectual Principle, not a soul. It is not in motion and not at rest, not in space, not in time: It is essentially of a unique form, or rather of no form, since It is prior to form, as It is prior to movement and rest: All these categories hold only in the realm of existence and constitute the multiplicity characteristic of that lower realm."

Perhaps the only characteristic by which we can comprehend Brahman is that it is an infinite unbounded superconscious Intelligence. The description of God in the Christian tradition as being Omnipotent, Omniscient and Omnipresent—that is all-powerful, all-knowing and existing everywhere—is thus not radically different from the Indian concept of Brahman.
For the benefit of our limited, sense-bound intellect, the Indian philosophies have subdivided Brahman into two complementary aspects. This consists of an unchanging Conscious Principle which is in turn completed by an infinite Creative Energy. The conscious principle has been designated as Atman, or Shiva and the creative energy as Shakti. These may, in a general sense, be thought of as the static and kinetic aspects of creation.

Sir John Woodroffe, in his comprehensive book The Serpent Power, says (Page 26) "The ultimate or irreducible reality is `Spirit' in the sense of Pure Consciousness . . . from out of which and by its Power (Shakti) Mind and Matter proceed. Spirit is one. There are no degrees or differences in Spirit . . . . Atma is unchanged and inactive. Its Power (Shakti) is active and changes in the form of Mind and Matter." He describes Shiva and Shakti as Power-Holder and Power, pointing out that one cannot exist without the other. Shakti is "the Mahadevi who conceives, bears and nourishes the universe sprung from her Womb."

The ancient Sanskrit work Panchastavi, written around 1000 A.D., whose author remains unknown, reflects a similar viewpoint about Shakti. It says (V-31) "That which has gone before, that which is to come after, that which is within and that without, the unbounded and the limited, the most gross and the most subtle, the manifested and the unmanifested, the open and the secret, the near and the distant, being and non-being, in these and other forms Thou art perennially seen as the Universe. It is the movement (creative activity) born of Thee at Thy command which brings the (infinitely varied) Cosmos into being."

Shakti, or Para-Shakti as it is known in its cosmic form, is said to be the power which creates, maintains and destroys the entire phenomenal universe. This concept of an infinite intelligence, coupled with a creative power, is at the heart of most of the Indian systems of philosophy but has had little acceptance in the west. The main reason for this is that it is a radical step for the intellect to accept the existence of an intelligence so vastly superior to it. It is even harder for a scientific mind that is steeped in a philosophy which discounts as non-existent anything that it cannot measure quantitatively to accept such a proposition. But it is exactly this concept of a super-intelligent creative energy which must be accepted before the phenomenon of Kundalini can be understood.

According to Gopi Krishna, in the seventh chapter of his autobiography Kundalini--The Evolutionary Energy in Man, this Cosmic Shakti operates in the phenomenal world in two primary ways. It functions in inanimate matter by manifesting the elements, atoms and molecules of the physical world and the four (at this time) known forces which bind them together. It also functions in the animate or living world as a subtle immaterial essence pervading all life forms, governing all biological processes within them. This form of Shakti is termed Prana-Shakti or just Prana.

As Gopi Krishna remarks (page 107), "In order to explain the phenomenon of terrestrial life there is no alternative but to accept the existence of an intelligent vital medium which, using the elements and compounds of the material world as bricks and mortar, acts as the architect of organic structures. All show evidence of extraordinary intelligence and purpose, built with such amazing skill and produced in such profusion and in so many diverse forms as to falsify any idea of spontaneous generation or chance. The existence of this medium cannot be proved empirically; human ingenuity and skill have not yet reached the perfection where one can experiment with media of such subtlety."

In The Dawn of a New Science (page 216), he comments on the biological aspect of Prana. "In its cosmic form Prana is a highly diffused intelligent energy spread everywhere. But in the individual it takes a specific form as the bio-plasma or individual Prana composed of an extremely subtle organic essence drawn from the elements and compounds forming the body. It is this essence which, transformed into psychic energy, becomes the fuel for thought. The bio-plasma, sustained by the cosmic ocean of Prana, permeates each and every cell of an organism."

He refers to Prana at another point as the "medium for the activity of thought and transference of sensations and impulses in living organisms," which controls the vital functions of all sentient life. It is held that this energy...
becomes directly perceptible to the mind when some degree of true success is achieved in Yoga. In the Bhagavad Gita, Krishna, revealing his Universal Form to Arjuna says, "But surely you cannot see Me with your physical eyes. Therefore I vouchsafe to you the Divine Eye with which you can behold my supreme form as the Lord of Yoga."

Prana is considered to be the basic vital life force which, disappearing at death, leads to the separation of the physical body from the Infinite Conscious Principle that had been linked to it. Prana has a range or 'spectrum', as Gopi Krishna termed it, which varies from individual to individual and from species to species. It is this spectrum which is the source of the human aura that is described by psychics and clairvoyants and detected by Kirlian photography.

**Prana and the Birth Process**

Although the existence of Prana cannot be empirically verified at this time, its activity in the body is quite evident in many ways. Perhaps the most striking of these is the process of development of the fetus in the womb of its mother. In the space of nine short months, a single solitary cell, too small for the naked eye to see, divides, develops and grows into a living thinking, breathing human being, composed of tens or hundreds of billions of cells of thousands of different types, organized in a way which is nothing short of miraculous.

By the time of birth, the brain is fully formed and, within a few short months, it is functioning at an amazing level. In a recent article on neural networks and computers, Time Magazine of August 15, 1988 remarks, "The more time scientists spend designing computers, the more they marvel at the human brain. Tasks that stump the most advanced supercomputer--recognizing a face, reading a handwritten note--are child's play for the 3-lb. organ. Most important, unlike any conventional computer, the brain can learn from its mistakes." How can it possibly be that an absolute miracle of creative intelligence, the human brain, can develop from a single cell to the most complex entity known to exist, without the guidance and control of some super-intelligent agency?

This control and guidance is also evident in the experiments done with developing animal embryos in which the removal or substitution of tissue, if done at an early enough stage, does not result in a totally deformed final form but rather in a smaller or modified, but still complete form. If the process of development were strictly a mechanical one, this would certainly not be the result. One logical explanation for this phenomenon is the existence of a controlling field, such as the Pranic spectrum, which has a pre-determined form towards which it is guiding the development of the organism via the growth processes.

The accounts of those who have had pronounced symptoms of Kundalini awakening also confirm that a purposeful, intelligent energy is working within them to bring about changes in their metabolism. The parallels between this form of activity and that present in the womb of a mother-to-be indicate that it may be the same energy working in both cases but with a different end result. Thus the term 'rebirth', used by those who have had a spiritual awakening, may be more appropriate than has previously been supposed.

**Prana and the Immune System**

The second major area in which the activity of this super-intelligent vital energy can be seen at work in the human body is the immune system. A recent article in Time Magazine of May 23, 1988 made the following remarks:

'As they probe the intricate workings of the immune system, scientists are awestruck. "It is an enormous edifice, like a cathedral," says Nobel Laureate Baruj Benacerraf . . . .The immune system is compared favorably with the
most complex organ of them all, the brain. "The immune system has a phenomenal ability for dealing with information, for learning and memory, for creating and storing and using information," explains immunologist William Paul. . . . Declares Dr. Stephen Sherwin, Director of Clinical Research at Genentech, "It's an incredible system. It recognizes molecules that have never been in the body before. It can differentiate between what belongs there and what doesn't."

The article goes on to remark, "The B-cell genes that dictate the production of antibodies occur in distinct segments. These pieces, like cards in the hands of a Las Vegas dealer, are constantly and speedily shuffled into different combinations." The obvious question then arises--what agency is doing the `shuffling' to produce the correct antibody needed to fight the infection?

And lest it be assumed that a simple mechanical process is at work, the article further states 'Thus within the slowly evolving human being, the immune system is undergoing a rapid internal evolution of its own. And a good thing too. "If all we had to meet the microorganisms (with) was true evolution," says NIH's William Paul, "We'd long ago have disappeared from the face of the earth." How can a system with these amazing characteristics possibly exist without the control and guidance of some remarkable agency such as Prana?

A similar process occurs when we physically damage our bodies and the healing process takes over, completely beyond our control or understanding, repairing bones, organs and tissues. The fact that these processes work much more quickly when we are asleep--in a totally unconscious state--again indicates the operation of an intelligent agency present in our bodies but separate from and undetected by our normal consciousness.

Perhaps one of the most amazing aspects of Prana is that it carries on all its intricate, complex and far-reaching activities in the human body without being in any way directly perceptible to us in our normal state of consciousness. Day after day we behold the miracles of conception and birth, healing, recovery from disease, regeneration during sleep, and for the most part do not even begin to suspect the possibility of a stupendous intelligence behind it all.

And not only must this super-intelligence know intimately every aspect of our physical being, but almost certainly our mental and emotional natures too. It is for this reason that those who awakened the Serpent Power in the past referred to it as a 'Goddess'--an all-knowing Intelligence which knew every aspect of their being. The implications of this are far-reaching both for the individual seeker after enlightenment and the scientist trying to uncover the secrets of Kundalini.

Modern Theories

Given that an agency such as Prana exists, and that it is the basis for the processes which result from Kundalini activity, how then do some of the modern ideas about Kundalini compare with the traditional ones from the Indian systems.

The more recent interpretations have tended to depict it as a phenomenal energy in the body which can be aroused and manipulated through meditation and breathing exercises to rise up the spine into the brain. It is often pictured as being a form of subtle electricity, powering the chakras, leading to states of cosmic consciousness.

It is also a commonly held belief that a moderate amount of meditation, if practiced for a period of time, will probably result in the awakening of Kundalini and the experience of higher consciousness. Some modern proponents even advertise that their system will have the desired result within weeks--guaranteed or your money back!

Several obvious discrepancies between the traditional concepts about Kundalini and the modern ones are immediately apparent. In the traditional view, the energy is regarded as an all-powerful, super-intelligent agency...
which cannot be controlled or manipulated but must rather be approached with reverence, respect and great caution after many years of intense training and self-discipline. In the modern views, though, it is often presented as something that can be controlled and manipulated according to desire, without fear of any serious consequences. This latter view has resulted because the energy is thought of as being similar to the known physical forces and its super-intelligent aspect is never taken into consideration.

Also, the traditional Yoga systems have always regarded the awakening of Kundalini for the attainment of higher consciousness as an arduous life-long undertaking, suitable for only a few, where the chances of complete success were very limited. The Bhagavad Gita is quite explicit on this point when Krishna remarks to Arjuna, "Out of thousands, only one seeks me. And out of thousands who seek me, only one is successful." Current concepts about Kundalini which suggest that higher consciousness can be attained with a minimum of effort in a short span of time have lead to a very distorted picture of the entire process in the minds of both the spiritual seeker and the serious investigator.

**Prana and Yoga**

Since the nervous system in the human body is the basis for all feeling, movement, muscle control, information transmission and coordination, it is almost certain that Prana's activity in the body is intimately connected with this system. This aspect of the energy is of great concern in Yoga theory and a brief summary of the philosophy of Hatha Yoga (the most physically oriented of the disciplines) may give us some relevant information.

As Sir John Woodroffe remarks in The Serpent Power, (page 198), the term Hatha Yoga is a compound of the two Sanskrit words Ha and Tha, which mean the 'Sun' and the 'Moon'. They represent the two basic polarities of Prana-Shakti, termed Prana and Apana, which are said to function in the nervous system producing a heating or cooling effect respectively. They correspond to the two channels or nadas named Pingala and Ida on the right and left sides of the spinal cord. Gopi Krishna, in his autobiography (page 105) says, "Prana . . . assumes different aspects to discharge different functions in the body and circulates in the system in two separate streams, one with fervid and the other with frigid effect . . . Prana and Apana exist side by side in the system in every tissue and every cell, the two flowing through the higher nerves and their tiny ramifications as two distinct currents, though their passage is never felt in the normal state of consciousness . . ."

The discipline of Hatha Yoga has as one of its primary objectives the ability to enhance the production, purification and control of Prana in the practitioner and thereby to stimulate into heightened activity the mechanism of Kundalini. The term pranayama, which is sometimes mistaken to mean simply the control of the breath, in actual fact denotes the control of this vital energy. It is primarily through the medium of the respiratory system that Prana is absorbed into the body from the surrounding air to replenish the store of vital energy which circulates in all parts of the body.

The primary active element in both air and water is oxygen and it is probably the most crucial element to the functioning of life that we know of. It may be possible, as Gopi Krishna has theorized, that Prana uses this unique element as the major vehicle for its activity in the body. The nervous system, then, would be the channel by which the Pranic energy stored in the cells of the body is collected and transmitted to the brain.

**Conclusion**

A thorough, open-minded examination of the ancient literature on the subject of higher consciousness would be invaluable as a preliminary step in the investigation of Kundalini. The next stage of such an investigation would
be to develop empirical methods for the detection, measurement and modification of Prana to the degree that is possible from a physical standpoint.

The ramifications of the discovery of such methods are without doubt enormous. The affect that they would have just on the process of understanding and treating mental illness alone would make the undertaking totally worthwhile. But beyond that, the proof of the existence of such an energy would have an impact on our political, social, economic and education systems that can hardly even be imagined at this time.

The discovery of methods by which Prana may be detected will require a tremendous amount of hard work and ingenuity. But the existence of such processes as Kirlian photography indicate that we probably do not have too far to go before some concrete results would be achieved. The major step is for those who have the resources and the skills to accept the possibility that creation is not limited only to the physical universe and that the modern scientific method must be expanded in its scope in order to make progress in the exploration of these non-physical realms.

Also, it will be vitally important for those who are serious about undertaking this research to realize that there is almost certainly a limit to which the physical methods of modern science will be effective in studying this energy. Beyond that point, the investigation of these subtler realms of creation may only be possible through the agency of their own consciousness, as it was done by the great illuminaries of the past.

The techniques, methods, problems and solutions relating to this vast and amazing subject have to a large degree already been put down in basic form over the centuries by many who have experienced directly the awakening of Kundalini. We would do well to make the best use of this priceless body of information so that no further time may be lost in this far-reaching endeavor.

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