Ancient Wisdom and Modern Science

Edited by Stanislav Grof

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East and West: Ancient Wisdom and Modern Science

Science and technology have become dominant forces in the modern world, and Western civilization, pioneering in technological development, is commonly seen as a symbol of progress and enlightenment. A tendency to glorify progress and evolution and to look down upon the past as a time of infancy and immaturity is associated with the view that the ideological and cultural differences between East and West are absolute and unbridgeable. This view was most succinctly expressed by Rudyard Kipling in his famous "East is East and West is West/ and never the twain shall meet."

A major reason for the incompatibility of the ancient and the modern, as well as the Eastern and the Western, has been fundamental difference in their dominant world-views and philosophies. Western scientific disciplines have described the universe as an infinitely complex mechanical system of interacting, discrete particles and separate objects. In this context, matter appears to be solid, inert, passive and unconscious; life, consciousness and creative intelligence are seen as insignificant accidents and derivatives of material development. They emerged after billions of years of random mechanical evolution of matter and only in a negligible section of an immense universe.

In contrast, the spiritual philosophies of the great ancient and

Eastern cultures—or "perennial philosophy"[1] as Aldous Huxley referred to them—describe consciousness and creative intelligence as primary attributes of existence, both transcendent and immanent in the phenomenal world. Western science recognizes as real only those phenomena that can be objectively observed and measured; perennial philosophy acknowledges an entire hierarchy of realities—some of them manifest, others hidden under ordinary circumstances and directly observable only in certain special states of consciousness.

Materialistic science and perennial philosophy differ most in their images of human nature. Western science portrays human beings as highly developed animals and thinking biological machines who have a fleeting, insignificant role in the overall scheme of things. Perennial philosophy sees humans as essentially commensurate with the entire universe and ultimately divine. Western science offers psychological and psychopharmacological assistance to people who have difficulties adjusting to the miserable predicament of human life. (Sigmund Freud, the founder of psychoanalysis, described the goal of successful psychotherapy as "changing the extreme suffering of the neurotic into the normal misery of human existence."[2] But perennial philosophy offers a rich spectrum of spiritual techniques through which it is possible to recognize and experience one's own divinity and achieve liberation from suffering.

Materialistic science has developed effective means of alleviating the most obvious forms of suffering—diseases, poverty and starvation—but has done very little for inner fulfillment and genuine emotional satisfaction. Increased material affluence has been associated with a dramatic increase of mental disorders, alcoholism, suicide rates, crime, and violence. On the other hand, perennial philosophy has offered inner liberation to a select few, but has failed to offer solutions for the urgent practical problems of everyday existence or to improve the external conditions of human life. These differences invite us to wonder if Western science and perennial wisdom could be reconciled in a way that would combine their advantages and avoid their drawbacks. Since it is not possible to change the ancient and perennial, any attempt at such synthesis must involve changes in the philosophy of Western science. But is it possible to change the basic assumptions of science while preserving its formidable pragmatic power? Do not the everyday triumphs of mechanistic science consti-

tute a clear proof of the accuracy of its basic philosophical assumptions?

One of the most important achievements of Western philosophy of science is the recognition that scientific theories are but conceptual models organizing the data about reality available at the time. As useful approximations to reality, they should not be mistaken for correct descriptions of reality itself. The relationship between theory and the reality which it describes is like that between a map and territory in Korzybski's sense;[3] to confuse the two represents a violation of scientific thinking—a serious error in what is called logical typing. American anthropologist and generalist Gregory Bateson said that a person committing logical errors of this kind may one day eat the menu instead of the meal. Since it is always possible to formulate more than one theory accounting for the available data, the problem is to find a theory that would be broad enough to incorporate basic assumptions of perennial philosophy and yet preserve the pragmatic power of mechanistic science.

The concept of a *paradigm* is extremely useful here. Coined by the American physicist and historian of science Thomas Kuhn, author of the ground-breaking book *The Structure of Scientific Revolutions,* the term *paradigm* describes conceptual systems that dominate the thinking of scientific communities during certain specific periods of the evolution of science.[4] Initially each new paradigm has a positive and progressive role. It identifies legitimate scientific problems, offers methodology for conducting scientific experiments, and describes criteria for evaluating the data. A paradigm clearly defines not only what reality is, but also what it is not and cannot possibly be. Once the paradigm is accepted, its basic philosophical assumptions are not questioned and scientists focus their attention and efforts on its further elaboration and articulation. However, continued research inevitably will produce data that are incompatible with the leading paradigm, since reality is always much more complicated than even the most sophisticated and complex scientific theory.

At first, all research challenging the dominant paradigm tends to be suppressed, because the current theories are mistaken for a true and exhaustive description of reality. Scientists who are under the spell of the leading paradigm have a strong conviction about the nature of reality. The scientist who generates controversial data is dis-

counted as inept, accused of cheating, or even labeled mentally ill. When the new data hold in subsequent experiments and are further confirmed by independent research, the discipline in question moves into a serious paradigm crisis that Kuhn calls a period of abnormal science. After attempts to create *ad hoc* hypotheses and conceptual adjustments fail, more and more courageous and fantastic theories are generated, and out of this chaos one of these alternatives finally emerges victorious as the new paradigm. In the history of science, this sequence of events is continuously repeated.

The old and the new paradigm typically represent entirely different and mutually incompatible world-views. Historical examples of major paradigm shifts are the transition from the geocentric astronomy of Ptolemaius to the heliocentric system of Copernicus and Galileo, from the flogiston theory to the modern chemistry of Lavoisier, and, most recently, from the Newtonian mechanics to quantum-relativistic physics.

In the past 300 years, Western science has been dominated by the Newtonian-Cartesian paradigm. As Fritjof Capra outlined them in *The Tao of Physics,* the basic philosophical assumptions of this system of thought are derived from the ideas of Isaac Newton and René Descartes.[5] Newton's mechanistic universe is a universe of solid matter made of fundamental building blocks or atoms, which are by definition indestructible.* They influence each other by forces of gravitation and interact according to fixed and unchangeable laws. Their interaction occurs in absolute space, which is three-dimensional, homogeneous, and independent of the presence of matter. Time in the Newtonian universe is uni-dimensional, flowing evenly from the past through the present to the future.

Newton's universe resembles a gigantic supermachine governed by linear chains of causes and effects. It is strictly deterministic: if we knew all the factors operating at present, we should be able to reconstruct accurately any situation in the past or predict any event in the future. Although this determinism cannot be scientifically proven and the complexity of the universe prevents its practical testing, it constitutes one of the cornerstones of mechanistic science.

To this Newtonian model, the French philosopher René Des-

*The Greek *a-tomos* is composed of the negative prefix *a-* and the verb *temnein*—to cut; it means that which cannot be cut or divided any further.

cartes contributed absolute dichotomy between matter (*res extensa*) and mind (*res cogitans*). According to Descartes, the universe exists objectively in the form in which a human observer would perceive it, but its existence is entirely independent of the process of observation.

These ideas of Isaac Newton and René Descartes became the foundations of Western mechanistic science and became the driving force behind the Scientific and Industrial Revolutions. The mechanistic model of the universe was so successful in its pragmatic technological applications that it became the ideal prototype of all scientific thinking, and was emulated by other disciplines, including psychology, psychiatry, sociology, anthropology, and related fields. Freud was a member of the so-called "Helmholtz Society," whose explicit goal was to introduce into science the principles of Newtonian mechanics. While formulating psychoanalysis, Freud quite consciously and rigorously used the criteria of Newtonian thinking. The extreme example of this thinking is behaviorism—an attempt to eliminate the element of consciousness as a legitimate object of scientific interest and research, and to develop scientific psychology without the use of subjective introspective data.

The various scientific disciplines based on the mechanistic model have created an image of the universe as an infinitely complex assembly of passive, inert and unconscious matter, developing without any participation of creative intelligence. From the "Big Bang," through the initial expansion of the galaxies, to the creation of the solar system and Earth, the cosmic processes were allegedly governed by blind mechanical forces. Organic matter and life were thought to have originated in the primeval ocean by accident through random chemical reactions. Similarly, the cellular organization of organic matter and the Darwinian evolution to higher life forms occurred quite mechanically without the participation of an intelligent principle—through genetic mutations and natural selection that guaranteed survival of the fittest.

Then somewhere very high in the evolutionary pedigree, consciousness emerged as a product of highly developed and organized matter, the central nervous system or brain. At a certain point of its development—not clearly identified by mechanistic science—matter, previously blind and inert, suddenly became aware of itself. Al-

tial instinctual impulses. This image endorses competition and the principle of "survival of the fittest" as natural and essentially healthy tendencies. Contemporary science, blinded by its model of the world as a conglomerate of mechanically interacting separate units, has been unable to recognize the vital importance of cooperation, synergy, and ecological concerns. Technological achievements that have the potential to solve most of the problems plaguing humanity—nuclear energy, lasers, space age rocketry, cybernetics, and the miracles of modern chemistry and bacteriology—have turned into menaces.

In the last decades, the authority of mechanistic science has also been undermined from within. As Fritjof Capra demonstrated in *The Tao of Physics* and *The Turning Point*, developments in the twentieth century physics have questioned and transcended every postulate of the Newtonian-Cartesian model. Astonishing explorations of both the macro-world and the micro-world have created an image of reality which is entirely different from the seventeenth century model used by mechanistic science. The myth of solid and indestructible matter, its central dogma, disintegrated under the impact of experimental and theoretical evidence that the fundamental building blocks of the universe—the atoms—were essentially empty. Subatomic particles showed the same paradoxical nature as light, manifesting either particle properties or wave properties depending on the arrangement of the experiment. The world of substance was replaced by that of process, event, and relation. In subatomic analysis, solid Newtonian matter disappeared. What remained were activity, form, abstract order, and pattern. In the words of the famous mathematician and physicist Sir James Jeans, the universe began to look less like a machine and more like a thought system.[11]

Newton's three-dimensional space and uni-dimensional time were replaced by Einstein's four-dimensional continuum of space-time. In new physics, the objective world cannot be separated from the observer, and linear causality is not the only and mandatory connecting principle in the cosmos. The universe of modern physics is not the gigantic mechanical clockwork of Newton, but a unified network of events and relations. Prominent modern scientists Eugene Wigner, David Bohm, Geoffrey Chew, Edward Walker, Gregory Bateson, Fritjof Capra, and Arthur Young believe that mind, intelli-

gence, and possibly consciousness are integral parts of existence rather than insignificant products of matter.[12]

Although quantum-relativistic physics provides the most convincing and radical critique of the mechanistic world-view, important revisions have been inspired by various avenues of research in other hard sciences. Scientific thinking has also been changed by developments in cybernetics, information theory, systems theory and the theory of logical types. According to Gregory Bateson, thinking in terms of substance and discrete objects represents a serious epistemological mistake—error in logical typing.* In everyday life, we deal not with objects but with their sensory transforms or with messages about differences; in Korzybski's sense, we have access to maps, not the territory. Information, difference, form and pattern that constitute our knowledge of the world are dimensionless entities that cannot be located in space or time. Information flows in circuits that transcend the conventional boundaries of the individual and include the environment. This way of scientific thinking makes it absurd to treat the world in terms of separate objects and entities; to see the individual, family or species as the Darwinian units of survival; to draw distinctions between mind and body; or to identify with the ego-body unit (Alan Watts' "skin-encapsulated ego"). Emphasis has shifted from substance and object to form, pattern and process.†

Systems theory has made it possible to formulate a new definition of the mind. This theory holds that any constellation of events that has the appropriate complexity of closed causal circuits and the appropriate energy relations will show mental characteristics, i. e., respond to difference, process information, and be self-corrective. In this sense, cells, tissues, and organs of the body; a cultural group or

*Most important aspects of this criticism of mechanistic science can be found in Gregory Bateson's *Steps To an Ecology of Mind* and *Mind and Nature: A Necessary Unity*.

†This conceptual conflict between mechanistic science and the modern revolutionary developments represents a replica of the ancient conflict between major schools of Greek philosophy. The Ionic school—Thales of Miletos, Anaximenes, Anaximandros and others—considered the basic philosophical question to be "What is the world made of?", "What is its basic substance?" In contrast, Plato and Pythagoras believed that the critical issue is its form, patterning and order. Modern science is distinctly neo-Platonic and neo-Pythagorean.

nation; an ecological system; or even the ettire planet (Gaia theory) can be said to have mental characteristics. And when we consider a larger mind that integrates all the hierarchies of the lower ones, even a critical and skeptical scientist like Gregory Bateson has to admit that this concept comes close to that of an immanent God.

Another profound criticism of mechanistic science has emerged from the work of the Nobel laureate Ilya Prigogine and his colleagues in Brussels and in Austin, Texas.[13] Traditional science depicts life as a specific, rare, and ultimately futile process—an insignificant and accidental anomaly involved in a Don Quixotean struggle against the absolute dictate of the second law of thermodynamics. This gloomy picture of the universe, dominated by an all-powerful tendency toward increasing randomness and entropy, and moving relentlessly toward a thermal death, belongs now to the history of science. It was dispelled by Prigogine's study of the so-called "dissipative structures"* in certain chemical reactions and his discovery of their underlying principle—"order through fluctuation." Further research revealed that this principle is not limited to chemical processes but represents a basic mechanism of revolution in all domains—from atoms to galaxies, and from individual cells to human beings, and further to societies and cultures.

These observations enable a unified view of evolution in which the unifying principle is not the steady state, but the dynamic conditions of the non-equilibrium systems. Open systems on all levels and in all the domains are carriers of an over-all evolution which ensures that life will continue to ever newer and dynamic complexity. Whenever systems in any domain become stifled by past entropy production, they mutate toward new regimes. The same energy and the same principles thus carry evolution on all the levels, whether it involves matter, vital forces, information, or mental processes. Micro- and macro- cosmos are two aspects of the same unified and unifying evolution. Life is not seen any longer as a phenomenon unfolding in an inanimate universe; the universe itself becomes increasingly alive.

*"Dissipative structures" derive their name from the fact that they maintain continuous entropy production and dissipate the accruing entropy by exchange with the environment. The most famous example is the so-called Belousov-Zhabotinski reaction, which involves oxidation of malonic acid by bromate in a sulphuric acid solution in the presence of cerium, iron, or manganese ions.

Although the simplest level on which self-organization can be studied is the level of dissipative structures which form in self-renewing chemical reaction systems, applying these principles to biological, psychological and socio-cultural phenomena does not involve reductionistic thinking. Unlike the reductionism of mechanistic science, such applications are based on fundamental homology, on the relatedness of the self-organizing dynamics on many levels.

From this point of view, humans are not higher than other living organisms; rather, they live simultaneously on more levels than life forms that appeared earlier in evolution. Here science has rediscovered a truth of perennial philosophy: the evolution of humanity forms an integral and meaningful part of universal evolution. Humans are important agents in this evolution; rather than helpless subjects of evolution, they *are* evolution. Like quantum-relativistic physics, this new science of becoming, replacing the old science of being, shifts emphasis from substance to process. In this context, structure is an incidental product of interacting processes, and, in Erich Jantsch's words, it is no more solid than a standing wave pattern in the confluence of two rivers or the grin of a Cheshire cat.*

The latest serious challenge to mechanistic thinking is the theory of British biologist and biochemist Rupert Sheldrake, expounded in his revolutionary *A New Science of Life.*[14] Sheldrake has offered a brilliant critique of how mechanistic science explains morphogenesis during individual development and evolution of species, genetics, and instinctual and more complex forms of behavior. Mechanistic science considers only the quantitative aspect of phenomena, which Sheldrake calls "energetic causation." It has nothing to say about the qualitative aspect—the development of forms or the "formative causation." According to Sheldrake, living organisms are not just complex biological machines, and life cannot be reduced to chemical reactions. Form, development and behavior of organisms are shaped by morphogenetic fields of a type that at present is not recognized by physics. These fields are molded by the form and behavior of past organisms of the same species through direct connections across both space and time. These fields show cumulative properties; if a certain number of members of a species develop certain organismic

*See Erich Jantsch's *Design For Evolution* (Braziller, New York, 1975) and *The Self-Organizing Universe* (Pergamon Press, New York 1980) for further information.

properties or learn a specific form of behavior, these are automatically acquired by other members of the species, even if there exist no conventional forms of contact between them. The phenomenon of "morphic resonance," as Sheldrake calls it, is not limited to living organisms and can be seen in such elementary phenomena as the growth of crystals.

However implausible and absurd this theory might appear to a mechanistically oriented mind, it is testable. Even at present, in its early stages, it is supported by experiments with rats and observations of monkeys.* Sheldrake is aware that his theory has far-reaching implications for psychology and has discussed its relationship to Jung's concept of the collective unconscious.

Another dramatic revision of the mechanistic world-view is the holonomic theory of the universe formulated by David Bohm, former coworker of Albert Einstein and author of basic texts on both relativity theory and quantum physics. According to Bohm, the phenomenal world that we observe in our ordinary states of consciousness represents only one aspect of reality—the explicate or unfolded order. Its generative matrix—the implicate or enfolded order—exists on another level of reality and cannot be directly observed, except possibly in episodes of non-ordinary consciousness, such as deep meditative, mystical or psychedelic states. Like many other famous physicists, including Niels Bohr, Erwin Schroedinger, Robert Oppenheimer, and Albert Einstein, Bohm finds modern physics compatible with the mystical world-view.[15]

The famous neurosurgeon Karl Pribram has developed a new model of the brain that in the future might converge with Bohm's theory of holomovement.[16] Pribram was able to demonstrate that, in addition to digital processing, the brain also performs parallel processing which involves holographic principles. Pribram's model not only explains a number of otherwise puzzling aspects of the brain function, but opens entirely new perspectives for speculations

*The most famous example is the anecdotal observation reported by Lyall Watson in *Lifetide* (Bantam Books, New York, 1980), and referred to as the "hundredth monkey phenomenon." When a young female Japanese monkey (Macaca fuscata) on the island Koshima learned an entirely new behavior—washing raw sweet potatoes covered with sand and grit—this behavior was not only transmitted to her immediate peers, but appeared in monkeys on neighboring islands when the number of monkeys reached a certain critical number.

digm. He followed developments in quantum-relativistic physics with great interest and was deeply influenced by his personal interactions with Wolfgang Pauli and Albert Einstein.[20]

Several decades of psychedelic research have also generated data of critical importance for the new paradigm. Various cultural groups throughout the world have long used plants with powerful psychedelic properties for ritual and healing purposes. The legendary plant and potion *soma* played a critical role in the development of Vedic religion and philosophy. Pre-Columbian Central American cultures used a broad spectrum of psychedelic plants; the best known of these are the Mexican cactus *peyote*, the sacred mushrooms *teonanacatl*, and the morning glory seeds, or *ololiuqui*. South American Indians of the Amazon have used for centuries decoctions from the jungle liana *yagé* or *ayahuasca*. In Africa, many tribes know the secret of the psychedelic plant *eboga* and ingest it in smaller doses as a stimulant, and in larger amounts as a sacrament in their rituals. The tomb of a shaman found during the excavations of the New Stone Age settlement from the sixth millennium B.C. in Catal Hüyuk in Turkey contained plants that according to pollen analysis were specimens with psychedelic properties. Preparations from several varieties of hemp have been smoked and ingested under various names (hashish, charas, bhang, ganja, kif, marijuana) in the Oriental countries, in Africa, and in the Caribbean area for recreation, pleasure, healing, and ritual purposes. They have been important sacraments for such diverse groups as the Indian Brahmans, several orders of the sufis, African natives, ancient Skythians, and the Jamaican Rastafarians. According to recent research, ergot alkaloids similar to LSD were used in the famous Eleusinian mysteries in ancient Greece. Both Plato and Aristotle were initiates of these mysteries and their systems of thought were deeply influenced by their experiences in them.[21] Swiss chemist Albert Hofmann's sensational discovery of the semi-synthetic psychedelic LSD inspired a wave of interest in psychopharmacology.[22] The alkaloids responsible for the effects of most of the above sacred plants have now been isolated in pure form as mesacaline, psilocybine, psilocin, lysergamid, bufotenin, dimethyltryptamine, tetrahydrocannabinol, harmin, and ibogain.

It has become evident that the Western model of psyche, with its narrow biographical orientation, is inadequate to account for a wide

spectrum of phenomena occurring in psychedelic states. Under the catalyzing influence of these remarkable psychoactive drugs, experimental subjects have experienced not only autobiographical sequences, but also powerful confrontations with birth and death, and an entire gamut of phenomena that have been named "transpersonal." The rediscovery of these experiences and the recognition of their heuristic relevance has been one of the major incentives for the development of a new movement in psychology—the transpersonal orientation.[23]

In the ordinary state of consciousness, a person is expected to identify experientially with his or her body image, to be Alan Watts' "skin-encapsulated ego." It is generally possible to experience with all the sensory qualities only the present moment and the present location. Recall of the past is without the sensory vividness of the present moment, and experiencing the future is considered absurd and impossible in principle. Perception of the here and now is limited by the sensory organs' physical and physiological characteristics.

In transpersonal experiences, one, two, or more of the above limitations appear to be transcended. The sense of one's identity can expand beyond the body image and encompass other people, groups of people, or all of humanity. It can transcend the human boundaries and include animals, plants, or even inanimate objects and processes. Events that occurred in personal, ancestral, racial, phylogenetic, geological or astronomical history, and even future events can be experienced with vividness ordinarily reserved only for the present moment and location. In the extremes, one can experientially identify with the whole planet or the entire cosmos at various points of their development.

Experiences of this kind can bring instant intuitive knowledge that by far exceeds the intellectual capacity and educational background of the individual. While consciously identifying with another person, one can gain access to that person's thoughts, feelings, physical sensations, or memories. During episodes of animal identification, one can have detailed insights into animal psychology, instinctual dynamics, reproductive cycles, or courtship dances of the species involved. Plant experiences can similarly mediate new and accurate insights into botanical processes such as photosynthesis, sprouting of seeds, growth, pollination, or exchange of minerals and water in the

root system. The same is occasionally true for inorganic processes, such as birth and death of stars, subatomic events, and dynamics of cyclones or volcanic eruptions. Racial memories in the Jungian sense or past incarnation experiences are frequently associated with new information about cultures and historical periods, their architecture, costumes, weaponry, religious rituals, or social structure. Similarly, the content of ESP experiences such as precognition, clairvoyance, or astral projection can frequently be independently confirmed as accurately reflecting reality.

It is even more remarkable that experiences accurately portraying various aspects of the phenomenal world can alternate in unusual states of consciousness with experiences that have no basis in what is called in the West "objective reality" such as archetypal visions of deities or demons and mythological sequences from different cultures. Even these experiences can impart entirely new information; they reflect accurately, and frequently in great detail, the mythologies of the cultures involved. The nature and quality of this information is typically far beyond the educational level or even intellectual capacity of the individual involved. Some of the most encompassing transpersonal experiences are of a cosmic and transcendental nature; here belongs identification with the Universal Mind or Cosmic Consciousness (Sacchidananda) or the experience of the Supracosmic and Metacosmic Void (Sunyata).

Transpersonal experiences are not limited to psychedelic states. They occur in new experiential psychotherapies such as neo-Reichian approaches, primal therapy, psychosynthesis, Gestalt practice, marathon sessions, and various forms of rebirthing. They are particularly frequent in the process of holonomic integration developed by my wife Christina and myself.[24] It is a technique that combines controlled breathing with evocative music and focused body work. That many spiritual practices can induce transpersonal experiences is now being confirmed by an increasing number of Westerners who experiment with transcendental meditation, Zen practice, Tibetan psychoenergetic exercises, or forms of yoga.

The new understanding of transpersonal phenomena mediated deep insights into an important subcategory of non-ordinary states of consciousness labeled and treated by Western science as psychotic and thus indicative of mental disease. These can now be interpreted

as "spiritual emergencies" or "transpersonal crises"; if properly treated, they can result in psychosomatic healing, personality transformation, and consciousness evolution. Ancient and Eastern cultures have not only developed elaborate cartographies for these states, but also have powerful techniques to induce them. Various rites of passage of aboriginal cultures, ancient death-rebirth mysteries, spiritual healing ceremonies, shamanic practices and secret initiations are salient examples.[25]

Various transpersonal phenomena have also been described in the context of non-drug laboratory techniques of consciousness alteration such as biofeedback, developed by Elmer and Alyce Green, Barbara Brown, Joe Kamiya and others; sensory isolation and sensory overload; use of various kinaesthetic devices such as the "witches cradle"; use of non-authoritative forms of hypnosis; and the "mind games" developed by Jean Houston and Robert Masters.[26]

Another important source of fascinating data about transpersonal experiences is the young discipline of thanatology, the study of death and dying. Clinical observations of people who are near death and those who have died and been resuscitated confirm essentially the descriptions of death in spiritual literature, particularly from the ancient books of the dead such as *The Tibetan Bardo Thödöl,* the Egyptian *Pert em Hru,* and the European *Ars moriendi* or *Art of Dying.*[27] The original data collected by Karlis Osis in *Death-Bed Observations of Physicians and Nurses,*[28] Raymond Moody in *Life After Life,*[29] and Elisabeth Kübler-Ross are now being confirmed by more systematic studies such as Kenneth Ring's *Life At Death,*[30] and American cardiologist Michael Sabom's *Recollections of Death.*[31] Sabom used a careful scientific approach to re-examine the claims of previous studies and ancient books of the dead that, following clinical death, many people have out-of-the-body experiences in which they accurately perceive near or remote events. He was able to confirm that these people describe in many instances minute details of the circumstances following their deaths, including the use of specific interventions and esoteric gadgets that are not commonly known to laymen. It would be difficult to come up with a more dramatic example of a critical challenge to the Newtonian-Cartesian mechanistic science and its interpretation of the relationship between

consciousness and the brain than a situation involving a clinically dead person, lying on the back with the eyes closed and witnessing accurately the events in the room from the vantage point of the ceiling, or even events occurring in another room of the building, or in a remote location.

The most exciting aspect of all the above revolutionary developments in modern Western science—astronomy, physics, biology, medicine, information and systems theory, depth psychology, parapsychology and consciousness research—is the fact that the new image of the universe and of human nature increasingly resembles that of the ancient and Eastern spiritual philosophies—the different systems of yoga, the Tibetan Vajrayana, Kashmir Shaivism, Zen Buddhism, Taoism, Kabbalah, Christian mysticism, or gnosticism. It seems that we are approaching a phenomenal synthesis of the ancient and the modern and a far-reaching integration of the great achievements of the East and the West that might have profound consequences for the life on this planet.

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2

Frances Vaughan The Transpersonal Perspective

It is said that when Robert Oppenheimer, who was credited with the invention of the atomic bomb, witnessed the first nuclear explosion, what flashed through his mind were two lines from the Bhagavad Gita in which God speaks: "I am become death, the shatterer of worlds;/ Waiting that hour that ripens to their doom."[1]

In the past, we believed Kipling's refrain that "East is East and West is West/ And never the twain shall meet." But today we think more of the next two lines: " 'Till earth and sky stand presently/ At God's great Judgment Seat." Kipling's "presently" has arrived with the nuclear age, and it is human beings who now have the power of judgment and the power to shatter the world. It has now become our responsibility to find the wisdom that will enable us to step back from the brink of destruction and to create a viable global society.

Will we be able to find that wisdom? Only in joining our efforts, in joining East and West, can we hope to turn this time of fear into a time of transformation. We will never, however, be able to build a desirable human society on an inadequate picture of human nature. So we must pay attention to the ancient wisdom and attempt to incorporate into our lives what we have learned from the ancient traditions.

The transpersonal perspective is a meta-perspective, an attempt to

learn from all different perspectives. It does not attempt to impose a new belief system or a new metaphysics, but rather to see the relationship between existing world views, in order to create something that can be truly transformational in our world. The transpersonal perspective is what has been emerging from the needed integration of ancient wisdom and modern science. Science without wisdom can destroy the world; wisdom without science remains ineffectual. The transpersonal perspective sees the eastern and western approaches as complementary, and recognizes the transcendental mystical unity of all religions. Mystical teachings all agree that the source of wisdom is within. We need to have access to this source of wisdom if we are going to turn the tide of destruction in this time and age. Each tradition has a different way of saying this. In Christianity, it is: "The Kingdom of God is within." In Buddhism, enlightenment is the discovery of our own true nature. In Hinduism, the inner search culminates in Self-realization as Atman. In psychology, we speak of the Transpersonal Self as that part of us which has access to the perennial wisdom.

We need to recognize that there comes a time when we can no longer rely on external teachings and teachers to tell us what to do. The transpersonal movement is unique in that it has no charismatic leader. Rather, it is an organic movement that has grown by networking, a movement that has drawn people to it who share a concern, a purpose, and a vision of what is possible for humanity. It is a movement in which all are equal participants, all equal co-creators of our realities. It is an organic, interrelated form of working in which considerable emphasis is placed on self-determination, self-actualization, self-realization, and self-transcendence. It is cross-cultural and interdisciplinary: though it has roots in the ancient perennial philosophy, it makes use of modern science because science, like mysticism, is a search for truth. It is simply a different way of looking.

I like to think of wisdom as a blending of consciousness and love. The Dalai Lama often speaks of our need for compassion in the world, and Mother Theresa speaks about our need for love. We discover this not from any outside picture, but only in our direct experience, when we are willing to remove the obstacles to awareness of love's presence in our lives. We can then become participants in our

personal transformation and in the transformation of society. We all need to find the source of wisdom in our own inner experience, and then join together to share it with each other. My own experience of the transpersonal movement is that it has been empowering.

Part of the transpersonal purpose is to evoke the higher potential in human beings. It aims at the wise use of technology and resources, recognizing that the human mind is one of our greatest, inexhaustible resources, and it attempts to understand the transformational process so that it can be facilitated and encouraged. It sees the possibility of growth towards wholeness, and that means growing beyond ego. It does not mean moving into transcendence instead of ego, but sees ego development as a stage along the way. We can use the ego strength that we develop in normal, healthy adult development, and go beyond it, seeing ego development as midpoint on the great chain of being. As conscious beings emerging out of the pre-personal, less conscious aspect of our lives, we move through ego development—and all of the alienation that is associated with being indentified with ego—into a transpersonal awareness which extends beyond the personal goals of ego development. The transpersonal orientation recognizes that we all exist in a web of mutually conditioned relationships based on awareness of our interdependence with each other and with the environment. We see that we are not only shaped by our environment, but that we are also the shapers of that environment.

It is important to emphasize the difference between pre-personal and transpersonal states, because not all non-ego states are transpersonal. Charles Tart defines higher states of consciousness as those states in which attributes and functions in addition to all those of the normal waking state are available.[2] These higher states should not be confused with altered or sub-optimal states. Transpersonal development is development beyond ego, not a substitute for ego or regression to pre-egoic states.

Transpersonal psychology has attempted to expand the field of inquiry to include the spiritual dimension of our lives. The term "transpersonal" means, literally, "beyond the personal," or "beyond the personality." We recognize, therefore, that who and what we are is not limited to personality, and that when we are identified solely with the body, the ego, or the personality, we have a limited, constricted view of ourselves. Transpersonal psychology seeks to bring

about a balance of inner and outer experience and awareness, recognizing that these are two sides of a mutually interdependent reality. Before transpersonal psychology became a separate branch of psychology, the term "transpersonal" had been used by Jungians to describe the underlying ground of ego psychology. It had also been used by Stanislav Grof to describe experiences he observed in research of LSD psychotherapy. In his *Realms of the Human Unconscious,* Grof describes transpersonal experiences as those in which ego boundaries are dissolved and awareness is extended beyond the ordinary confines of time and space.[3]

In the late 1960's Stanislav Grof, Anthony Sutich, and Abraham Maslow, among other psychologists, began to integrate some of their understanding of humanistic psychology with Eastern traditions. Abraham Maslow and Anthony Sutich felt that the term "transpersonal" would be appropriate to this new branch of psychology, and Sutich, editor of the *Journal of Humanistic Psychology,* launched the *Journal of Transpersonal Psychology* in 1969.

Tony Sutich was a remarkable man. When he died in 1976 at 62 years of age, he had lived an amazingly active life in spite of the fact that a baseball injury had totally paralyzed him in his teens, and he had spent the rest of his life flat on his back on a gurney. But he could read and talk, and he talked by telephone with people all over the world. He was active in civil rights and made a living as a psychotherapist. He started both the humanistic psychology movement and the transpersonal psychology movement, not as a charismatic leader, but as a facilitator. Tony knew how to empower others to actualize their potential. When I first met him in 1965, at a seminar on humanistic psychology at Esalen Institute, I had not known that the leader of the workshop I was attending would be totally paralyzed. I was surprised, impressed, and never more inspired than I was at that time. I then decided to go back to school for a Ph.D. to become a psychologist. I learned a lot from Tony and from working on the *Journal* as an associate editor in the early years.

Now under editor Miles Vich, the *Journal* continues to publish original empirical research and theoretical articles that probably would not be published by mainstream journals. It has always sought to build on what has been done before; specifically, to build on both western psychology and on eastern mysticism. I was impressed by the fact that the editors of the *Journal* engaged in very

lively discussion about papers that were submitted. Sometimes editors would have totally opposing viewpoints, and diversity of opinion was encouraged. Everyone was heard, and nobody seemed attached to opinion. All were great friends despite their differences. This was my first experiential contact with the idea of not being attached to an opinion or a point of view, seeing how powerful that kind of diversity could be, how much love came out of it, and how an organization could work with cooperation and caring.

Perhaps the leading theoretician in the field of transpersonal psychology is Ken Wilber, whose remarkable work compares with Jung's, Freud's and William James'. His first book, *The Spectrum of Consciousness,* compares the transpersonal with other views of consciousness. His second book, *The Atman Project,* is a transpersonal view of human development from infancy to Self-realization, as Atman. His most recent publication, *Up From Eden,* is a transpersonal view of human evolution. It is useful to make a distinction, as Ken Wilber has, between the different realms of knowledge: the empirical or sensory realm; the mental or rational realm, which is concerned with values and meaning; and the spiritual or transcendent realm, which is concerned with insight and truth. Each realm of knowledge has its own way of acquiring information; each has its own rules for validation. We make a category error if we attempt to reduce one to the other, and attempt to interpret the findings of one in terms of the other. For example, we need to recognize that we can never find empirical validation for the truth of mathematical theorems or values such as meaning and purpose and love in the world. Likewise, we can never hope to appreciate the spiritual insights of those people who have undertaken the rigorous disciplines of contemplation and meditation merely by an intellectual understanding of what they have attempted. These different realms of knowledge can only be understood in and of themselves. To attain any of them requires training. Most of us would not dream of visiting a physics lab and pretending to evaluate what is being done there if we are not trained as physicists; yet we are all quite happy to evaluate spiritual teachers without having done any homework at all. We need to acknowledge that each realm of learning requires training if we want to really delve into what it has to offer us.

In the realm of empirical research in transpersonal psychology,

people feel disturbed by transpersonal experiences which have happened spontaneously, as the result of meditative practice, or as the result of unsupervised use of psychedelics. Whatever the cause, therapists who have some understanding and knowledge of the transpersonal dimension are increasingly needed. People who are experiencing a spiritual emergency do not feel adequately cared for by therapists who have not explored their own spirituality and who are not prepared to deal with it in their practice.

It should be emphasized that the transpersonal perspective is open-ended, and that it is in process—not fixed, finished or done with. Each one of us is participating in a process that is unfolding, an evolution of consciousness. The holonomic theory is a wonderful metaphor because it implies that all exists in each of us, and each exists in all of it. We only imagine that we are separate from all that is. This is the illusion. When we wake up to who and what we really are, we discover that we are all in it together. Each of us has an important part to play, and each of us has to learn to discover what our unique part will be. We find that sometimes under the guidance of teachers, but finally we find it in turning inward and getting in touch with our inner guidance. Our teachers tell us that, too. Our gurus remind us that we need to contact the universal Self within our hearts in order to find the wisdom that will guide our personal growth as well as our social transformation.

None of our leaders has any source of wisdom that is not available to each one of us. They, too, must look within, to find access to that universal source. We all need to take responsibility for our own lives and relationships.In the words of the great Indian teacher, Gautama Buddha:

> Do not believe in what you have heard. Do not believe in traditions because they have been handed down for many generations. Do not believe anything because it is rumored and spoken of by many. Do not believe merely because the written statement of some old sage is produced. Do not believe in conjectures. Do not believe merely in the authority of your teachers and elders. After observation and analysis, when it agrees with reason and it is conducive to the good and benefit of one and all, then accept it, and live up to it.
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> Kalamas Sutra[6]

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Part II

ANCIENT SPIRITUAL TRADITIONS

3

Swami Muktananda

Understanding Your Own Mind

Many psychologists, psychiatrists, scientists, and philosophers have come from all over the world to attend this conference. You are all interested in the mind, and the mind is the subject which I have been given for my talk. If you understand your own mind through psychology, if you come to know the nature of the mind, then you also come to know the Truth. Once you know that Truth, you see the same Truth in everyone, and you welcome everyone with great love. Bearing this in mind, I welcome you all.

The mind is a great gift from God. Without the mind, you are not a human being. You are called a human being only because you have a mind. Therefore, through your own mind, understand your own value. The mind is so strong. Understand its power. Allow the mind to become one-pointed, because when the mind is concentrated, it turns within and taps the source of serenity and tranquility. When the mind becomes peaceful, it is able to give that peace to the world. That serenity prevails everywhere and is able to help other people.

In order to strengthen the mind and to help other people, a psychologist should meditate. He should make his own mind very clean and very pure. In this way, he should identify with his own inner power and should become very strong from within. When a psychol-

thinks endlessly. The mind is so active. In this world there is no human being who has escaped his mind. The mind harasses even the highest yogis until they reach the nirvikalpa state, the state free from thoughts. The mind is so tricky, so treacherous. You never know how the mind will torture you, how the mind will trick you, how the mind will make you fall into any pit. The *Bhagavad Gita* says that when the mind pursues the senses, which continually bring in information from outside, a person becomes like a ship which is driven everywhere by the storm of his own mind. Eventually, the mind makes him sink.

It is said that a human being is what he thinks. Whatever he feels and thinks is what he becomes. We are so careful about so many things in our lives. We take care of all our files; we have so many counselors; we receive so much advice of all kinds. Yet we do not think about our own minds. We never try to keep our minds under our control. If you allow your mind to run free without reins, then it becomes totally immersed in your negative feelings. It becomes filled with anger, shame, and all kinds of petty feelings, and you identify yourself with that pettiness. Whatever thought you entertain, whatever thought you harbor, is what you become. If you think of yoga, you become a great yogi. If you think about the psychology of the mind, you become a great psychologist. If you have inferior thoughts all the time, then you fall into that pettiness. So be very vigilant regarding your thoughts. A great being, Tukaram Maharaj, said, "It does not matter whether you are among multitudes or in solitude, you will receive the fruits of whatever thoughts are in your mind." God dwelled in Tukaram's mind, and for this reason he saw only God everywhere. In a very beautiful poem, he said, "O Lord, I offer my salutations to everybody with the understanding that everybody is You." Tukaram had this kind of experience because of the power of his own mind. He said, "I have given up all feelings of difference, all distinctions. I have not done this because I am whimsical, but because I want to experience the Truth. This Truth was proclaimed by all the scriptures, all the Vedas. These scriptures were not man-made: they emanated from God." Due to the power of his own thought and of his constant contemplation, Tukaram attained the awareness that God pervades everywhere. A person always attains what he constantly contemplates.

This reminds me of a story. Once Sheik Nasrudin had a neighbor who was taking care of a buffalo. The buffalo had two beautifully curved horns. Every day Sheik Nasrudin watched the buffalo. He admired its strength and beauty, and he particularly admired its beautiful horns. He began to think, "If I were to sit on the buffalo's forehead right between its two horns, I would feel as though I were sitting on the throne of Delhi!" Day after day Nasrudin thought about this. His obsession grew more and more intense. He thought about the buffalo's forehead even in his dreams. As luck would have it, one day the buffalo went and sat down in Nasrudin's courtyard. Immediately, Nasrudin jumped on the buffalo's forehead. He sat there and held on to the horns. Immediately the buffalo stood up, shook itself and threw Nasrudin off. Nasrudin fell to the ground and broke his back. He began to scream for his beloved wife. He cried, "O my beloved, I am so hurt. Please take me inside and give me a massage." Nasrudin's wife Fatima helped him inside and began to give him a warm towel treatment. As she was treating him, she talked to him. She said, "Darling, why didn't you think before you sat on the forehead of that buffalo?"

"O my dull-witted wife," replied Nasrudin, "I have been thinking about sitting on that buffalo's forehead for a whole year!"

This is how the mind affects your life. You think and think, and then you get the fruits of your thoughts. The mind is the source of all calamities, of all pain and all pleasure. You have bad thoughts and you have good thoughts. Sometimes you see what is bad as good and what is good as bad. You continually revel in the movements of the mind. You can control the mind only by knowing the mind. You will know the mind when you know the source of the mind, when you discover how the mind has come into existence.

What is the source of the mind? The philosophers of Kashmir Shaivism say, "Do not think that the mind is a material substance. The mind is simply a contracted form of the universal consciousness." This universal consciousness has given rise to the splendid world full of sentient beings and insentient objects. Consciousness has not used any external materials to create this cosmos. It has created it out of its own being upon its own screen. It is this same universal consciousness which has become the mind. In the *Bhagavad Gita* the Lord says, "This entire world is the product of My own

mind." Therefore, know the mind. Know the value of the mind; know the worthiness of the mind; know the sublimity of the mind. If you understand your own mind completely, then you are not just a human being: you yourself are God.

The sages who knew the Truth said, "Every human being is nothing but God." Nevertheless, this is not our experience. Our experience is that we are limited. And our sense of limitation is because of the mind. The *Katha Upanishad* says that the Self becomes the limited experiencer when it is equipped with the senses and the mind. The sages of Kashmir Shaivism explain this very well. Kashmir Shaivism states that when the supremely free consciousness, in the process of creating the world, descends from its lofty and sublime state it becomes more and more limited, and takes the form of the objects of perception. Operating through the senses of perception, it considers itself an individual experiencer. Operating through the organs of action, it considers itself an individual doer. When it is in this limited form, it is called the mind. So the human mind is nothing but consciousness in a contracted form. When that contracted consciousness separates itself from outer objects and turns inside through meditation, then it again becomes pure consciousness. This is the true greatness and power of the mind.

In its limited state, the mind is plagued by all kinds of feelings, thoughts, and imaginings. These are called *vikalpas*. From one thought, many thoughts arise, and from one thought, all thoughts are destroyed. *Vikalpas* are the source of all kinds of feelings and emotions, such as attachment, aversion, envy, hatred, jealousy, and greed. They make a person believe that what is true is false and what is false is true. However, if you use the power of the mind to create positive thoughts, to create within yourself the understanding that your true nature is consciousness, then your own mind can lead you towards the truth. When you make your mind pure through right understanding, you can attain the thought-free state. And then you will experience your own inner power. The great sage Maharishi Patanjali, who was also a great psychologist, said in his *Yoga Sutras: yogash chitta-vritti nirodaha*—"Yoga is the stilling of the modifications of the mind." When the mind is controlled through meditation and right understanding, then the inner Self which is the source of the mind reveals itself on its own.

For this reason the Upanishads say that the same mind which is the cause of bondage is also the cause of liberation. The mind gives birth to so many kinds of suffering. However, if you free the mind from thoughts, you perceive this world as a paradise. To free your mind from thoughts, turn within and meditate. Through the power of thought you can become a great scholar and give many lectures. You can read many books, and you can also write many books. But to give your mind its true power, you should maintain the stability of your mind through meditation. If you maintain the strength of your mind, then you can really help many people; other people will benefit from the power of your mind. If a psychologist maintains the stability of his mind, he becomes a treasured gift to the world.

Ancient Wisdom Modern Science

Edited by Stanislav Grof,
with the assistance of Marjorie Livingston Valier

Recent advances in a variety of scientific disciplines have revealed the limitations of the Newtonian-Cartesian model of the universe. One of the interesting aspects of this development is the increasing convergence of science and the "perennial philosophy." The new research has led to a critical revaluation of ancient spiritual systems long ignored or rejected because of their assumed incompatibility with science.

Here are Swami Muktananda on the mind, Swami Prajnananda on Karma, Swami Kripananda on the Kundalini, Ajit Mookerjee on the Kundalini, Joseph Chilton Pearce on spiritual development, Mother Theresa on love and service, Jack Kornfield on Buddhism for Americans, Fritjof Capra on the new paradigms, Rupert Sheldrake on morphic resonance, Karl Pribram on the holographic model, Claudio Naranjo on meditation, and more.

Stanislav Grof is Chief of Psychiatric Research at the Maryland Psychiatric Research Center and assistant professor of psychiatry at Johns Hopkins University School of Medicine. He is currently scholar in residence at the Esalen Institute. His publications include *Realms of Human Unconscious, LSD Psychotherapy,* and *Beyond Death* (with Christina Grof).

The papers in this book were presented at the seventh Conference of the International Transpersonal Conference held in Bombay. The ITA is a non-profit organization that brings together individuals of different nationalities, professions, and philosophical or spiritual preferences who share in the view that there is a fundamental unity underlying all of humanity and the material world.

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